

Summary of Scientific Committee recommendations directed at the Scientific Committee identified for intersessional period 2017/18 (From the Plenary Report)

Item	Task	SC Rep Item	Responsibility
Revised Management Procedure			
General issues	<p>The Committee recommends that the author of SC/67a/RMP/02 continue to assess whether it is possible to represent the trajectories from the IBEM using the emulator model; compare the yield curves from the IBEM with those from the emulator model; and develop guidelines for how to use an emulator model as the basis for a multi-stock, multi-area population dynamics model and how such a model could be conditioned given available data.</p> <p>The Committee recommends that the guidelines provided in Annex D, Appendix 2 are followed when reporting (or reviewing evaluations of) the effects of special permit catches on stocks.</p>	5.1	SC
Implementation related matters	<p>The Committee endorses the report of the workshop on the Implementation Review of North Atlantic common minke whales (SC/67a/Rep05), thanks Donovan for chairing it and the participants for their work during it and subsequently.</p> <p>The Committee endorses these changes to the trials specifications for the North Atlantic common minke whale Implementation Review (see Annex D; Appendix 6 for the final trial specifications) and table X2 for the list of trials. The Committee agrees that the remaining trials have been satisfactorily conditioned.</p> <p>After reviewing the results of the Implementation Simulation Trials, the Committee agrees that variants 1,3,4 and 5 are acceptable in terms of conservation performance for North Atlantic common minke whales (see Fig. 1 for the sub-areas): (1) Sub-areas CIC, CM, CG, CIP, EN, EB, ESW+ESE and EW are Small Areas, with the catch limits for these Small Areas based on catch cascading from the C and E Combination Areas. The catch from the ESW+ESE Small Area is all taken in sub-area ESE. The catch limits set for the CM, CG and CIP Small Areas are not taken (except that the aboriginal catch is taken from CG); (2) Sub-areas CIC, CM, CG, CIP, EN, ESW+ESE, and EB+EW are Small Areas, with the catch limits for these Small Areas based on catch cascading from the C and E Combination Areas. The catch from the EB+ EW Small Area is all taken in sub-area EW and the catch from the ESW+ESE Small Area is taken in the ESE sub-area. The catch limits set for the CM, CG and CIP Small Areas are not taken (except that the aboriginal catch is taken from CG); (3) As for variant 1, except that sub-areas CIC+CIP+CM are a single Small Area and all of the catches from this Small Area are taken in sub-area CIC. The catch limits set for the CG Small Area are not taken (except that the aboriginal catch is taken); and (4) Sub-areas CIP+CIC+CG+CM, EN, EB, ESW+ESE and EW are Small Areas, with the catch limits for the E Small Areas based on catch cascading from the E Combination Area. All the catches from CIP+CIC+CG+CM Small Area are taken in sub-area CIC (after taking the Aboriginal catch from CG) and those for the ESW+ESE Small Area are taken in sub-area ESE. Of these, variant 5 has the best catch performance.</p> <p>The Committee has completed the Implementation Review of North Atlantic common minke whales. Based on the results of the Implementation Simulation Trials, the Committee agrees that variants 1, 3, 4 and 5 (see Item 6.1.2) are acceptable in terms of conservation performance. Of those, variant 5 achieves the best performance in terms of catch.</p> <p>Much progress on complex topics such as addressing stock structure uncertainty can be accomplished during focused workshops. The Committee therefore recommends that a preparatory workshop be held prior to SC67b focused on stock structure for western North Pacific minke whales. For practical and cost reasons, this meeting can be held immediately before or after the Second Intersessional Workshop for the western North Pacific Bryde's whales (see Item 6.3).</p> <p>The Committee endorses the report of the workshop on the Implementation Review of western North Pacific Bryde's whales (SC/67a/Rep05), thanks Donovan for chairing it and the participants for their work during it and subsequently (and see Item 6.3.2 with respect to updated trials).</p> <p>The Implementation Review for western North Pacific Bryde's whales is progressing well, but the ambitious workplan established at the March 2017 workshop could not be achieved in the limited time available. The Committee therefore recommends that an intersessional workshop takes place to facilitate completing the implementation Review.</p>	6.1.1 6.1.2.1 6.1.2.2 6.1.3 6.2.2 6.3.1 6.3.3	SC SC SC SC; C-A SC; C-A SC SC
Aboriginal Subsistence whaling Management Procedure			
SLA development for the Greenland hunts	The Commission requires advice on new ASW quotas at the 2018 Scientific Committee meeting. This advice is best provided using long-term SLAs. Considerable intersessional work is required to complete the SLA for the Greenland hunt of fin whales. The Committee advises the Commission that its intersessional workplan should allow it to recommend a West Greenland fin whales SLA at its 2018 Annual Meeting. To achieve that goal the Committee recommends that: (1) the tasks outline in this report should be completed intersessionally under the auspices of the AWMP Steering Group prior to the AWMP workshop in late October (see Item 25); and (2) the workshop should: (a) review the new trials exploring the implications of SLAs that disregard low abundance estimates; and (b) review the final trial results and complete the selection of an SLA for West Greenland fin whales.	7.1.1	SC; C-A; ASW

	The Commission requires advice on new ASW quotas at the 2018 Scientific Committee meeting. This advice is best provided using long-term SLAs. Considerable intersessional work is required to complete the SLA for the Greenland hunt of common minke whales. The Committee advises the Commission that its intersessional workplan should allow it to recommend a common minke whale SLA at its 2018 Annual Meeting. To achieve that goal the Committee recommends that: (1) two intersessional workshops are held in Copenhagen, one in autumn 2017 and one in spring 2018; (2) financial support is given for genetic analyses using additional samples.	7.1.2	SC; C-A; ASW
	Following the results of the simulation exercise in SC/67a/AWMP/04, the Committee agrees: (1) to set the number of replicates for Evaluation Trials to 400 for the West Greenland bowhead whale case (the number of replicates for other development cases will be determined on a case-specific basis) since there is Monte Carlo error in the estimates of the performance statistics and recognising the diminishing returns in precision obtained as the number of replicates increase; and (2) that Allison and Brandão should rerun a selection of the trials with 400 replicates to verify the original trial conclusions and the results should be presented at the intersessional workshop in autumn.	7.1.3	SC
Aboriginal Whaling Management Scheme	The Committee agrees that: (1) the interim allowance strategy is acceptable for the WG Humpback SLA; (2) testing for West Greenland bowhead whales should occur intersessionally; (3) testing for West Greenland fin and common whales should be undertaken once those SLAs have been developed; and (4) testing the interim allowance strategy for the SLA for eastern north Pacific gray whales should occur during the next Implementation Review.	7.2	SC; C-A; ASW; G
	The concept of carryover is an essential component of the Aboriginal Whaling Management Scheme. The Committee's role is to provide scientific advice on any carryover provisions that meet the conservation objectives of the Commission whilst providing adequate flexibility to the hunts. The Committee: (1) reiterates its previous agreement that that SLAs are robust with respect to a 50% inter-annual variability within blocks and to the same 50% allowance between the last year of one block and the first year of the next; (2) recognises that are strengths and weakness in the options it is considering and agrees that these should continue to be considered and developed intersessionally; (3) recommends that: (a) Donovan should raise the issue of carryover with the Commission's ASW-WG which will meet in the intersessional period, summarising the work the Committee has done so far and noting its willingness to review any options referred to it at the 2018 Scientific Committee meeting; and (b) members of the Committee who are from countries with subsistence hunts should also draw attention to the willingness of the Committee to review any options referred to it at the 2018 Scientific Committee meeting. (4) advises that whatever approach is adopted, it is important to establish an initialisation year for the carryover calculations to begin; (5) recognises that choosing an initialisation year is a matter for the Commission but agrees that from a scientific perspective, it is acceptable to go back up to 3-4 blocks (unless there had been a quota reduction during the period).	7.2	SC; C-A; ASW; G
Review Implementation Review schedule for next six years	The Committee agrees that at present, there is no information that suggests that the situation for the BCB bowhead stock is outside the tested parameter space. Given that, it agrees that: (1) it should be possible to complete the Implementation Review at the 2018 Annual Meeting; (2) the Steering Group (Table X) established to prepare for the Review should ensure that the appropriate Data Availability Guidelines are publicised and met; and (3) that the necessary information to complete the Review is presented.	7.3	SC, CG-A
<i>Stocks Subject to Aboriginal Subsistence Whaling Including Management Advice (AWMP)</i>			
Eastern Canada/West Greenland bowhead whales	Information from Canada is important for the provision of management advice for the Greenland hunt. Last year, the Committee received two draft abundance estimates for eastern Canada: a line transect abundance estimate for 2013 (Doniol-Valcroze et al., 2015) and a genetic mark-recapture of abundance for the period of 2008 to 2012 (Frasier et al., 2015). The Committee: (1) recommends that the authors of those papers are invited to the next Annual Meeting with a view to the Committee reviewing and endorsing the new abundance estimates; and (2) recommends continuation of the Greenlandic large-scale biopsy sampling programme and encourages continued collaboration with Canada on genetic and other work related to stock structure and abundance.	8.1.1	SC; G; CG-A
North Pacific gray whales	The Committee welcomes the information on Russian studies of gray whales and recommends the continued collection of photo-id of live and harvested whales, and genetic samples and biological observations of harvested whales. (1) As in previous years, the Committee agrees that the Gray Whale SLA remains the appropriate tool to provide management advice for eastern North Pacific gray whales. The Committee advises that the present block quota is in accord with the SLA and will not harm the stock. In addition, it confirmed that a six-year block quota beginning in 2019 of up to 815 strikes would not harm the stock. (2) Weller reported that the US Government is currently reviewing a revised whaling management plan for the Makah hunt in Washington State. The Committee encourages the USA to provide the Committee with any revised plans as early as possible to allow consideration of the revised hunt management plan to occur intersessionally, such that, should they be deemed necessary, there is time for additional trials to be developed and run before the Annual Meeting in 2018. An Implementation Review for gray whales is currently planned in 2019.	8.2.1 8.2.2	SC; G; CG-A C-A; SC; CG-A
BCB bowhead whales	The Committee welcomes the report on the health status of BCB bowhead whales which it hopes can be generated every other year. It encourages other aboriginal whaling groups and researchers to collect similar data which in many cases does not require specialist equipment. This would allow assessment of differences in parameters such as prevalence of killer whale scarring in different ecosystems or to identify health parameters that differ between healthy, growing populations such as BCB bowhead whales, and those with conservation concerns.	8.3.1	SC; G; CG-A

	The Committee encourages efforts to try to ensure that an ice-based census of bowhead whales off Point Barrow can be completed, noting that the methodology has produced some of the best series of estimates available for cetaceans. It recommends that funding is made available to complete such a survey. The Committee noted that it is unlikely that a survey will be completed in 2018 due to the need to prepare for the Implementation Review.	8.3.1	SC; G; CG-A
Common minke whales off East Greenland	The Committee encourages the continued collection of samples of common minke whales landed off East Greenland and a collaborative approach to analyses.	8.4.1	SC; G; CG-A
Common minke whales off West Greenland	The Committee encourages the continued collection of samples of common minke whales landed off West Greenland and the collaborative approach to analyses. It stresses the importance of comparative analyses with Canadian samples.	8.5.1	SC; G; CG-A
Fin Whales off West Greenland	The Committee encourages the continued collection of samples of fin whales landed off West Greenland and a collaborative North Atlantic approach to analyses.	8.6.1	SC; G; CG-A
	Noting that an SLA for fin whales off West Greenland is expected at the Scientific Committee meeting next year, the Committee advises, as last year, that an annual strike limit of 19 whales will not harm the stock.	8.6.2	C-A
Humpback whales off West Greenland	With respect to West Greenland humpback whales, the Committee: (1) reiterates the importance of collecting genetic samples and photographs of the flukes from humpback whales landed off West Greenland and a collaborative approach to analyses; and (2) welcomes the news that the Greenland authorities obtained IWC disentanglement training in 2016 and that they successfully disentangled one humpback whale.	8.7.1	SC; G; CG-A
Humpback whales off St. Vincent and The Grenadines	With respect to humpback whales off St. Vincent and The Grenadines, the Committee: (1) recommends that the status and disposition of genetic samples collected from past harvested whales be determined and reported next year; (2) reiterates the recommendation that photographs for photo-id and genetic samples are collected from all whales landed in future hunts; (3) requests that a scientific representative from the St Vincent and The Grenadines attends next year's Scientific Committee meeting, especially since next year the Commission will review aboriginal whaling quotas; and (4) recommends that the USA (NOAA, NMFS) provides a paper to the next meeting that will allow the Committee to properly review this abundance estimate and, if appropriate, adopt it as an estimate suitable for providing management advice.	8.8.1	SC; G; CG-A
Whale Stocks not Subject to Directed Takes			
In-Depth Assessments - North Pacific humpback whales (Annex G)	The Committee thanks Donovan and the Workshop participants, commending them for the progress that has been made. It established an intersessional steering group under Clapham (Annex X), tasked with ensuring progress with the recommendations made at the workshop with respect to: (a) refining and prioritising the stock structure hypotheses developed at the workshop and develop draft mixing matrices; (b) facilitate the additional work on abundance estimates and any other model inputs; and (c) finalising plans for a second workshop in 2019.	9.1.1.4	SC
In-Depth Assessments - North Pacific sei whales (Annex G)	The Committee agrees to proceed with assessment modelling for North Pacific sei whales based on two alternative hypotheses – a single stock and 5-stocks using the model described in SC/67a/IA2. To facilitate the completion of this assessment under the intersessional steering group (Annex X), it: (1) authorises the ISG to modify proposed boundaries, if necessary, to facilitate the divisions of data into sub-regions; (2) agrees that the ISG will not attempt to assign relative plausibilities to the alternative hypotheses at this stage of the assessment; (3) agrees that the ISG should produce a table of inputs to the assessment model including those for abundance, uncertain species and sex were made. (4) recognises that new estimates or existing estimates that have not been formally categorised for use in assessments will need to be examined by the working group on abundance estimates (see Item 12); and (5) requests Allison to identify any remaining needed adjustments to the catch series for North Pacific sei whales that may be necessary, and to refer them to the ISG for endorsement.	9.1.2.3	SC; S
In-Depth Assessments - SH blue whales (Annex G)	The Committee encourages the continuance of the Southern Hemisphere Blue Whale Catalogue, and recommends a priority focus on matching photographs within regions to estimate regional abundance of pygmy blue whales.	9.2.2.1	SC
	In order that assessment of the suitability of Australian photographs for estimating regional abundance can be conducted, the Committee recommends: (1) Australian research groups submit this date and location information to the Southern Hemisphere Blue Whale Catalogue; and (2) Quality Control analysis of the Australian component of the Catalogue.	9.2.2.2	SC; G
	The distribution, population isolation and abundance of Madagascar-type blue whales is unknown. The Committee encourages additional offshore surveys and data collection (e.g., acoustics, genetics and photo-identifications) by regional scientists to further assess the composition of this northwest Madagascar aggregation.	9.2.2.3	SC; G
	The New Zealand population of blue whales is poorly understood. The Committee: (1) commends the exceptional work detailed in SC/67a/SH02; (2) encourages further data gathering and analysis to obtain a mark recapture abundance estimate; (3) recommends that the photo-identifications are combined with others within the Southern Hemisphere Blue Whale Catalogue to measure regional abundance and connectivity; (4) encourages further acoustic monitoring at sites close to New Zealand; (5) encourages acoustic data collection from other sites in the southwest Pacific, given the low differentiation between New Zealand and Australia, and the need to understand the level of seasonal overlap of New Zealand and Australia blue whale song types.	9.2.2.4	SC; G

	To proceed to an assessment, there is need to better establish the genetic identity, habitat use and abundance of southeast Pacific blue whales. The Committee: (1) encourages further effort to collect genetic samples from Peru and Ecuador; (2) recommends predicting southeast Pacific blue whale habitat following Redfern et al. (2017), and assessing the results using southeast Pacific sightings and effort data; (3) welcomes progress towards combining blue whale catalogues in the region; (4) strongly encourages Chilean researchers to reconcile their catalogues internally and upload them to the Southern Hemisphere Blue Whale Catalogue to allow estimation of regional abundance.	9.2.2.5	SC; G
	Given the importance of bone and baleen collections for documenting the loss of genetic diversity and shifts in population structure, the Committee: (1) encourages collection and analyses efforts to continue; and (2) requests the Secretariat to write a letter of support to CITES to assist with collection of whalebones from the Antarctic.	9.2.3.1	SC; G; S
	The Committee welcomes the significant new results on Antarctic blue whale distribution and seasonal movements, and encourages: (1) the IWC-SORP Acoustic Trends project to develop methods for abundance estimation of fin and blue whales using acoustics, noting the importance of this to IWC assessment work; (2) the collection of Antarctic blue whale biopsy samples and photo-identifications from lower latitudes to better understand blue whale population structuring (and see Items 9.2.2.5 and 9.2.3.1); (3) the continuation of acoustic monitoring to document blue whale seasonal movements.	9.2.3.3	SG; G
In-Depth Assessments - SH fin whales (Annex G)	Knowledge of population structure is essential to future efforts to assess Southern Hemisphere fin whales. To determine the longitudinal differentiation and potential subspecies structure among fin whales the Committee encourages using: (1) strategic collection of skin biopsy and bone samples for genetic and isotope analysis; (2) satellite telemetry to discern seasonal movements; and (3) photo-identification to understand site fidelity and residency patterns and linkages between high- and low-latitude grounds. The Committee also recommends that the Secretariat provide a letter of support for a study examining the evidence for <i>B. patachonica</i> , which requires access to the holotype for this species from the Buenos Aires Museum.	9.2.4.1	SC; G; S
	With respect to obtaining information on the distribution, movements and abundance of Southern Hemisphere fin whales for use in an assessment, the Committee recommends that: (1) telemetry studies, photo-identification and biopsy sampling be continued; and (2) de la Mare incorporate newly available Soviet fin whaling data into his catch density model to derive the fullest possible picture of past fin whale aggregation patterns.	9.2.4.2	SG; G
	The Committee encourages further acoustic analysis of fin whale calls to discern population structure and distribution patterns. The Committee also encourages data sharing between acoustic studies to provide a more comprehensive view of fin whale seasonal occurrence and distribution.	9.2.4.4	SC; G
	To allow for a possible future assessment of fin whales, the Committee agrees that considerably more co-ordinated research is needed. It recommends the following goals (from SC/67a/SH07) for the western Antarctic Peninsula region, recognising that this will be a long-term plan: (1) characterise the whales in the aggregations acoustically and genetically to determine the population identity of whales using this area (a single breeding stock vs. multiple stocks mixing); (2) explore the spatio-temporal extent of the aggregations and estimate density and abundance of aggregating fin whales; (3) investigate the feeding ecology and prey dependencies, identifying vulnerabilities; (4) track movements and habitat use of fin whales in the area; (5) identify migration routes and destinations.	9.2.4.5	SC; G
In-Depth Assessments - North Atlantic right whales (Annex G)	The Committee reiterates its previous recommendation for the submission of a comprehensive update on the status of North Atlantic right whales (IWC 2017, Item 10.9 p40), which are endangered. It stresses the importance of this being submitted to the 2018 meeting of the Committee to enable an initial review of status. This will allow time, if necessary, for explanations or additional analyses to be undertaken before the proposed 2018 workshop on the Comparative Biology, Health, Status and Future of North Atlantic Right Whales: Insights from Comparisons with other Balaenid Populations. The Committee agrees that the Steering Committee (Annex X) should continue its work to plan the workshop.	9.2.6	CG-A SC; G
In-Depth Assessments - North Pacific right whales (Annex G)	The Committee made several research recommendations that will improve its ability to assess the status of right whales in the North Pacific (for details see Annex I): (1) development of an abundance estimate from the Japanese cruises; (2) a comparison of photo-identification catalogues from Japan, Russian, the USA and Canada; (3) a genetic comparison of samples from Japan, Russian, the USA and Canada. It encourages that this work is completed as soon as possible and the results reported to the Committee.	9.2.7	SC; G; CG-A
In-Depth Assessments - Omura's whale (Annex G)	The Committee welcomes the substantial new information presented on the poorly known Omura's whale. It encourages further work throughout range, particularly in areas where research similar to that being conducted off Madagascar can be conducted. The Madagascar studies have made a substantial contribution to knowledge of this species and the Committee recommends that this work to be continued and expanded.	9.3.2.1	G
In-Depth Assessments - North Atlantic Bryde's whales (Annex G)	The Committee agrees that the small population of Bryde's whales in the Gulf of Mexico (which ranks as at least a separate subspecies and possibly a species) is the world's most critically endangered baleen whale and there is grave concern for its continued survival. It recommends that US authorities use all available legal and regulatory tools to provide the maximum protection for this population. The necessary actions are detailed in Annex G, item 9 and include: the continued exclusion of seismic surveys from the eastern Gulf of Mexico; the design and conduct of targeted research programmes and restoration projects; measures to reduce the risk of ship strikes and entanglement; collaborative studies by Mexican and US scientists in the southwestern Gulf where American whalers encountered what were likely Bryde's whales in the late 18th and 19th centuries. The Committee requests that the Secretariat (a) transmits the concerns in Annex G, item 9 to the range states and (b) to IMO with respect to ship strike mitigation.	9.3.3	CG-A; S

North Pacific bowhead whales not subject to aboriginal subsistence whaling	The Committee expressed concern at the small population size of the Okhotsk Sea bowhead whales. It noted that there was some evidence that this population may be in decline. Additional data are required to understand the status of this population. The Committee recommends that fieldwork resume in 2018 and be repeated at least every 2nd year thereafter.	9.3.7	SC; G
Other stocks - Northern Indian Ocean sperm whales	The Committee encourages analysis of genetic samples from Northern Indian Ocean sperm whales to better assess the level of differentiation and diversity of this poorly understood population.	9.3.9	SC; G
Southern Hemisphere humpback whales	Obtaining a reliable estimate of absolute abundance for humpback whale Breeding Stock D (west Australia) is a priority for any future in-depth assessment. The Committee recommends an evaluation of abundance survey feasibility be carried out for this population, focusing in particular on the study conducted by du Fresne et al. (2014), with a view to implementing a new survey of this population in the future.	9.4.2.1	SC; G; CG-R
Southern Hemisphere right whales not the subject of CMPs	The Committee is concerned that the future of this exemplary long-term monitoring programme of right whales in South African waters remains uncertain. The Committee: (1) strongly recommends continuation of the survey and the use of IWC funds to allow the survey to take place as a one-off extraordinary measure (see Item 6.1.3 of Annex H); (2) requests the Commission to urge South Africa to do all it can to ensure the long-term future of this vital monitoring programme; and (3) encourages South African scientists to investigate the offshore movements and locations of southern right whales with future surveys.	9.4.3.1	SC; G; C-A; CG-A
	With respect to right whales in southeast Australia, the Committee: (1) expresses concern that abundance remains low despite this area having been a significant historic calving ground; and (2) recommends that an assessment of the likely effects of fish farms and other developments in hindering population recovery in this region.	9.4.3.2	SC; G; CC; CG-A
Southern Hemisphere Bryde's whales	Bryde's whales in the South American waters are poorly understood. The Committee welcomes these new contributions (Pastene et al., 2015 and SC/67a/SH15). It encourages genetic studies to confirm the identity of Bryde's whales in Ecuadorean and Peruvian waters, given the possible presence of two Bryde's whale forms in the region (<i>B. b. edeni</i> and <i>B. b. brydei</i>).	9.4.6	SC; G
North Pacific gray whales	The Committee recognises the importance of the rangewide review of the status of North Pacific gray whales to the updating of the CMP and to the provision of advice on aboriginal subsistence whaling. The Committee: (1) thanks the convenors and participants of the rangewide workshop on North Pacific gray whales, welcomes the progress made and endorses the report of the Workshop and its recommendations; and (2) recommends that a 5th workshop be undertaken with a goal of completing the rangewide review at the 2018 Annual Meeting.	10.1.3.1	SC; CC
	The Committee commends the ongoing work on gray whales in the Russian Federation. The Committee: (1) recommends that studies in the Kamchatka area resume as they can provide valuable information for analyses regarding stock structure and status; (2) recognises the importance of the work of the Russian Gray Whale Project to the assessment of the animals feeding of Sakhalin and recommends that it continues; (3) in light of previous recommendations that the two groups working off Sakhalin (the Russia Gray Whale Project and the Joint Programme of Sakhalin Energy and ENL) work together to develop a single, publicly available photo-identification catalogue, encourages Donovan to work with the various data holders to facilitate the development of a single, reconciled catalogue and database; and (4) encourages the Russian Federation to continue to collect photo-identification data (including from Chukotka) and recommends that any technical obstacles (e.g. lack of small boats) be overcome to collect biopsy samples from areas where there are few samples for rangewide genetic analyses.	10.1.3.2	SC; S
Franciscana	The franciscana CMP is the first for a small cetacean species and the Committee welcomes the development of more small cetacean CMPs as appropriate. The Committee: (1) commends the breadth of work that has been undertaken towards franciscana research and conservation; (2) commends efforts being made to coordinate research across international boundaries; (3) recommends that this collaboration continue and expands, whilst recognising the difficulties involved; (4) recommends that a review of franciscana be conducted as soon as possible that incorporates new estimates of franciscana mortality (as previously recommended by the Committee); and (5) recommends that the use of pingers be further investigated in the range of the coastal environment of this species.	10.1.4.2	CC; SC

Progress with identified priorities: Humpack whales in the Northern Indian Ocean	<p>The Committee welcomes the new information from the region on this critically endangered population and commends the researchers for their initiative, who are sometimes working in difficult conditions with a low level of funding. In light of the information presented, the Committee: (1) recommends that additional systematic research be conducted within the Persian Gulf area to characterise the residency of whales reported in this area; (2) commends the initiation of the 2012 observer programme in Pakistani waters, work which produced considerable data where previously there was none - and recommends that it continue and be replicated, where possible, throughout the region, especially where it is not feasible to conduct systematic cetacean surveys; (3) welcomes the new records of humpbacks from the Indian coast of the Arabian Sea, recognising the importance of the research efforts - and recommends that further emphasis be placed on using acoustics to document cetaceans in these and other areas of the region; (4) recommends that all entanglements be reported to the IWC and ship strikes entered into the IWC data base; (5) recommends that an enhanced effort be made to archive any tissue samples that are or become available in a central repository; (6) expresses its appreciation to the Government of India, Maharashtra Forest Department and the local office of the United Nations Development Programme for their support of the work reported in SC/67a/CMP03; (7) recommends that the satellite-telemetry work in Oman (SC/67a/CMP12) as much remains to be learned about whales in this area and where sources of potential anthropogenic mortality appear to be increasing; (8) recommends that the collaborative efforts with industry to minimise risks to cetaceans in the port of Duqm be adopted in other ports and harbours in the region; (9) welcomes the extensive ensemble niche modelling work (SC/67a/CMP15) to predict humpback whale habitat throughout the Arabian Sea and recommends that the modelling be expanded to (a) include data reported from Pakistan and India and be used to inform future research efforts and (b) be used to examine potential threats from shipping using AIS/Vessel traffic data and fishing using any available data on fishing effort in the region.</p>	10.2.1.1	SC; G; C-R; CC
	<p>The Committee reiterates its serious concern about the status of the critically endangered Arabian Sea humpback whale population and the anthropogenic threats it faces. It stresses the value of regional initiatives and encourages range states to explore the possibility of future collaboration. The Committee therefore: (1) commends the work performed by researchers in the Arabian Sea, noting the expansion of research topics and recognising the difficulty of establishing and maintaining such a network, which it recognises as important for the conservation and management of this highly endangered humpback population; (2) encourages range states to explore the possibility of future collaboration either through a CMP and/or CMS 'Concerted Action' and encourages IWC co-operation in these initiatives. (3) recommends further development of the online regional data archiving platform to facilitate regional analyses and the comparison of data between study sites and the identification of locations conducive to passive acoustic monitoring to inform directed effort for documenting basin-wide distributions; (4) recommends that the IWC Secretariat communicate the Committee's endorsement of the online data archiving platform to the relevant range states; (5) reiterates last year's recommendation to collect tissue sample where possible to facilitate studies on the genetic identity of Arabian Sea humpbacks; and (6) recommends continuation and expansion of all work that improves the knowledge of Arabian Sea humpback whales to inform conservation and mitigation measures.</p>	10.2.1.2	C-A; S; SWG-CMP; CC
STOCK DEFINITION AND DNA TESTING			
DNA testing	<p>The Committee welcomes the opportunity to review papers that used Single Nucleotide Polymorphisms (SNPs) to look at population or species-level questions. The comparison of SNP data produced in different laboratories and over time is more straightforward than in microsatellites (traditionally the most commonly used nuclear markers) and thus facilitates the collaboration and data sharing that is often important in addressing questions of relevance to the Committee.</p>	11.1.1	SC; G
	<p>The Committee encourages continued efforts to work with GenBank staff to identify a mechanism to allow annotation of GenBank sequences by interested parties to note taxonomic mis-assignment, questions about the source of the organism involved, or locus misidentification. The Committee agrees that a section discussing the precautions that should be used when including GenBank sequences in a study should be added to the IWC DNA quality guidelines.</p>	11.1.2	SC; G
	<p>During this year's discussion of the Norwegian minke whale DNA register, the Committee was informed that mtDNA analysis on Norwegian samples had been discontinued and that microsatellite typing would eventually be replaced by SNP analysis. The Committee expresses concern regarding the comparability of the DNA registers in the future and reiterates the recommendation from last year that additional technical details of Norway's plan be provided at future meetings (IWC, 2017, p71). The Committee encourages coordination of all DNA registers so that they are based on comparable genetic markers, while also acknowledging that DNA registries are maintained on a voluntary basis.</p>	11.1.4	SC; CG-A
Guidelines for DNA data quality and genetic analyses	<p>The Committee emphasises the importance of keeping its guidelines related to genetic data quality and analyses up to date. It therefore reiterates the need to update these guidelines to incorporate discussion of data quality measures used for Next Generation Sequencing data. The intersessional working group established last year and convened under Tiedemann (Annex X) will continue its work to address this issue (see Item 12.5).</p>	11.2.1	SC
New statistical and genetic issues concerning stock definition	<p>In reviewing the result of kinship-based analyses of North Pacific common minke whales, the Committee: (1) agrees that this work provides a good example of the value of increasing the number of loci in analysis of kinship in reducing False Discovery Rate and increasing statistical power; (2) recognises the value of having biological data associated with the individuals used in kinship-based analyses, which allowed the plausibility of genetically inferred Parent-Offspring pairs to be verified; (3) encourages the inclusion of such biological data when available.</p>	11.3.1	SC

	With respect to genetic studies of western North Pacific common minke whales presented in SC/67a/SDDNA05, the Committee: (1) welcomes the typing of additional loci in the subset of samples and recognised the logistical constraints inherent in genotyping additional samples; and (2) advises that an assignment test analysis in which the additional loci were genotyped in samples collected from a broader region would be a more appropriate than using only a subset of samples from certain areas.	11.3.1	SC
	Although questions about the stock structure of minke whales in the western North Pacific may not be fully resolved, particularly in the absence of knowledge about the location of breeding grounds, the Committee noted the importance of evaluating the evidence at hand with respect to the stock structure hypotheses under consideration. As such, the Committee agrees that the results of the kinship analysis are inconsistent with the mixing matrices associated with Hypothesis C as currently implemented in the RMP trials (isolation between sub-areas 7CS-7CN, 8 and 9). The Committee thanks the authors of SC/67a/SDDNA01 and 05 for their work to address the recommendations of the Expert Panel and the Committee.	11.3.1	SC
	The Committee acknowledges the presented analyses of stock structure in North Pacific Bryde's whales and did not provide any additional recommendations for further analysis. The Committee re-iterates the utility of ordination methods in stock structure inference (IWC, 2017, item 12.2.1, p48).	11.3.2	SC
	Epigenetic ageing is particularly valuable in the context of estimating abundance with the close-kin mark-recapture approach, as it can increase precision in such estimates by allowing the parent to be distinguished from the offspring. It may further be informative in the context of RMP Implementations or Implementation Reviews. The Committee agrees that learning more about the applicability of epigenetic aging to the work of the Committee is a priority and encourages the submission of papers relevant to this topic next year (see Item 11.4).	11.3.5	SC
CETACEAN ABUNDANCE ESTIMATES, STOCK STATUS (ASI)			
Summary of abundance estimates and update of IWC consolidated table	New abundance estimates endorsed by the Committee for inclusion in the IWC consolidated table are presented in Table 18. The Committee recommends these estimates are incorporated into the table of already agreed abundance estimates and uploaded to the IWC website. The Committee also recommends that the table continue to be updated intersessionally through the intersessional correspondence group (Annex X).	12.1	SC; S; C-A
	The Committee recommends that draft guidance be developed intersessionally (see Annex X) for review at 67b on: (1) a process to facilitate the review of abundance estimates in a timely fashion prior or during the annual meetings; (2) minimum requirements for presentation and review of abundance estimates for inclusion in the IWC consolidated table; (3) a process to validate non-standard software, non-standard methods and how to consider estimates computed from population models; (4) a process to evaluate abundance estimates already included in the IWC consolidated table, but not yet reviewed by the SC; and (5) estimates of abundance relevant to the work of the Committee that were available but not reviewed during this annual meeting.	12.1	SC
Methodological issues	The Committee recommends that draft amendments to the Requirements and Guidelines for Conducting Surveys and Analysing Data within the Revised Management Scheme be developed intersessionally to incorporate methods to compute abundance estimates not yet considered by the Guidelines, for review at SC67b.	12.2.1	SC
Consideration of the status of stocks	The Committee recommends that the 'Guidelines for Conducting Implementations and Implementation Reviews' (IWC, 2012) be updated and that the control programs used for Implementation Simulation Trials be modified by the Secretariat to report three measures of status: current depletion, current 1+ abundance and 1+abundance in 2050 on an Ocean basin or Medium Area basis. In addition, the results for all stocks should be calculated and made available to the Commission where considered appropriate, but not included in the primary summary.	12.3	SC; S
BYCATCH			
	In light of information the scope and scale of cetacean bycatch in the Western, Central and Northern Indian Ocean and the considerable data gaps associated with intensive and extensive gillnet fisheries, the Committee recommends that: (1) bycatch in the region be included in the work plan for the 2018 meeting; and (2) the Secretariat writes to the Indian Ocean Tuna Commission to offer help and advice from the Committee in efforts to implement cetacean bycatch data collection and reporting protocols.	13.4	SC; S
	Given the large number of stranded common dolphins reported at the beginning of 2017 along the French Atlantic coast that these raise serious concerns, the Committee recommends that an expert group (see Annex X) be established to evaluate the methods used in Peltier et al. (2016) to estimate total bycatches from strandings data in the Bay of Biscay.	13.4	SC; CG-A
SHIP STRIKES			
	The recent reported cases of baleen whale mortalities from ship strikes in Southern Chile raises concerns about this threat and the need to take actions to reduce the risk of ship strikes. The Committee recommends that modelling work (c.f. Redfern et al., 2017) to identify high risk zones for ship strikes in southern Chile be undertaken so that possible mitigation options might be evaluated.	14.2.1	G; SC; CG-A
	The Committee agrees that IWC could play a valuable role in coordinating data requests of scientists to AIS data holders for work agreed useful by the Committee. It recommends that the Secretariat and the HIM Convenor explore ways in which this can be achieved, including the developing a memorandum of understanding between IWC and a data provider.	14.2.1	SC; S

	<p>Both the IWC Scientific Committee and the Commission's Standing Working Group on Ship Strikes (SSWG) have recognised that the IUCN IMMA (Important Marine Mammal Areas) process may be of value to IWC work, most immediately in assisting to identify potential 'high risk' areas for ship strikes. Following the SSWG strategic plan, the Committee recommends: (1) continuation of the effort to identify IMMAs; and in particular (2) the establishment of a joint IWC-IUCN TF group to identify those IMMAs which could be taken forward to the IMO in the context of ship strikes, starting with the Mediterranean Sea.</p>	14.2.2	SC; CC
	<p>The Committee recognises the importance of being able to provide scientific advice on cetaceans with respect to routing and other shipping measures in response to requests to the IWC. Recognising that this is a substantial undertaking and that an appropriate process needs to be developed, the Committee recommends: (1) that information on known cetacean densities and migratory routes in the Arctic and Southern Ocean, including appropriate models of distribution patterns, should be compiled and reviewed by the Committee and made available in an appropriate form to assist the Polar states, IMO, and Arctic Council in the implementation of the IMO Polar Code's marine mammal avoidance provision; (2) that information regarding cetaceans in the Western Arctic and Bering Strait migratory routes should also be collated and presented to the United States Coast Guard (USCG) and the Arctic Waterways Safety Committee (AWSC) to support their development of mitigation measures in those waters. To develop this advice and a general process for responding to such requests, the Committee establishes an intersessional correspondence group (see Annex X) to: (a) consider how best to respond to requests for advice on routeing measures; (b) consider how to collate information regarding cetaceans in the Western Arctic and Bering Strait migratory routes; and (c) provide input into the IMMA process related to shipping.</p>	14.3	SC; S; CC
ENVIRONMENTAL CONCERN			
Pollution 2020	<p>The Committee recognises the important contribution of the Pollution 2020 programme to its ability to provide the Commission with advice on contaminants. The Committee: (1) thanks Hall for her continued improvements to the contaminant mapping tool and the modelling modifications; (2) recommends these tools be made available to the public; and (3) recommends that the proposed model modifications and the population half-life of POPs objectives be progressed next year (SC/67b). In addition, the Committee draws the attention of the Commission to issues related to PCBs and cetaceans and especially the results of (a) Jepson et al. (2016) regarding the high levels of PCBs in killer whales and other European cetaceans and (b) SC/67A/E/09rev1 and the high levels in the Adriatic Sea. The Committee therefore: (1) endorses international efforts to reduce PCBs in the environment; and (2) recommends that the work of Genov and colleagues in the Adriatic continues, and that their data are integrated into the modelling and mapping work described under Item 15.1.1</p>	15.1.1	G; C-A
	<p>In response to the Commission's Resolution 2016-4 at this stage, the Committee: (1) draws the attention of the Commission to the preliminary review (SC/67a/E/04) of data on mercury in cetacean species that have been reported globally since the first reports in the 1970s; (2) recommends that a more in-depth synthesis of available data be undertaken and that experts in mercury cycling and mercury toxicology in cetaceans participate in providing further information with the objective of completing a report for the Commission by SC/67b; and (3) recommends that the mercury and selenium levels provided in the presented review, and solicited from additional technical experts, be added to the contaminant mapping tool.</p>	15.1.2	C-A; SC; G
Oil spill impacts	<p>The Committee draws the attention of the Commission to the importance of understanding the risks to cetaceans caused by transport of heavy fuel oil in the Arctic and recognises the ongoing valuable work taking place in the Arctic Council, Circumpolar Biodiversity Monitoring Program. To complement this, the Committee: (1) encourages submissions to future meetings of the Committee under the Item on Pollution 2020 on the impact of heavy fuel oils on cetaceans and on possible mitigation measures; and (2) recommends the collection of baseline data on health and contaminant levels for cetaceans in the Arctic, including standardisation of assessment measures among studies of bowhead whales and white whales.</p>	15.2.2	G; CG-A
Cumulative impacts	<p>The problem of assessing cumulative and synergistic stressors on cetaceans is long standing. To assist in this effort, the Committee: (1) recommends the holding of a workshop on cumulative effects (see Item 25); and (2) endorses the recommendation from NAS (2017) that future research should focus on efforts to develop case studies that apply the Population Consequences of Multiple Stressors (PCoMS) framework to actual marine mammal populations and that this should be a component of the workshop.</p>	15.3.1	SC; G
Harmful algal blooms	<p>The Committee agrees that the global distribution and increasing ubiquity of Harmful Algal Blooms (HABs) and their toxins has resulted in an increasing risk to cetacean health at the individual and population levels. The Committee cautions that the documented HAB-related mortalities reflect only a small proportion of those that are occurring. The Committee endorses the recommendations of the HAB workshop as follows, recognising that some are long-term projects: (1) cetacean biologists should link with GlobalHAB, ICES, PICES, SCOR and other HAB groups to facilitate information exchange; (2) efforts to investigate data that could improve understanding of dose-response functions should be pursued; (3) toxins in cetacean prey be monitored; and (4) HAB toxin detection methods be standardised and research into appropriate biomarkers of exposure and response be pursued by researchers in the field. In addition, the Committee advises IWC member governments to support efforts to: (1) control nutrient input including reducing use of nitrogen and phosphorous; (2) support best aquaculture practices and relevant international agreements, initiatives and standards set out by FAO's Fisheries and Aquaculture Department; and (3) prioritise HAB impacts in their monitoring and research plans as well as capacity building for stranding response and post-mortem investigation of unusual cetacean events.</p>	15.4.3	CG-A; G

Diseases of concern	The Committee recognises the importance of the content on the CDoC website, thanks Simeone for her efforts in improving the design of the CDoC website and updating the website content and notes the potential synergy between CDoC and the Strandings Initiative, especially with respect to Hot Topics, Laboratory List, and reporting portal. The Committee recommends that: (1) the CDoC intersessional steering group include members of the Strandings Initiative to evaluate potential overlapping tasks; (2) the current content of the CDoC site is reviewed by the intersessional steering group so that content be made available to users as soon as possible; (3) HAB experts review the relevant site content, and that the list of international HAB organisations be shared on the CDoC site; and (4) that the intersessional steering group suggests a mechanism to provide relevant disease information to interested parties on a quarterly basis.	15.6.1	SC
	Despite questions of cost and access to images, the Committee agrees that: (1) the use of VHR satellite imagery to identify and count stranded whales shows promise in areas where clear satellite images can be obtained (e.g. satellite images will not work for areas where carcasses will be obscured such as mangroves); (2) serial images would further illuminate issues with the timing of whale deposition especially in remote locations where carcasses persistence is unknown; and (3) continued refinement of this method should occur to fully evaluate its potential, especially for remote areas.	15.7.2	G; SC
Noise	The Committee has repeatedly expressed concern about the potential impacts of noise on cetaceans. The Committee reiterates this concern and: (1) welcomes the update on international efforts to develop noise guidelines and acoustic standards; (2) encourages expanded international coordination regarding assessment and protection of acoustic habitat quality; (3) recognises the commonalities identified among recommendations from recent ocean noise workshops and planning documents (e.g. Annex K, Appendix 3) and agrees to continue to identify synergies and develop priorities for actions to reduce exposure of cetaceans to anthropogenic noise. With respect to seismic surveys, the Committee: (1) reiterates its previous recommendations on seismic survey noise reduction guidelines since 2004 (IWC SC/56, IWC SC/57, IWC SC/58, IWC SC/59, IWC SC/62, and IWC SC/66); (2) recognises the recommendations from Reyes Reyes et al., 2016 and reiterates the need for international guidelines; and (3) recommends as a matter of urgency that member countries should collaborate regarding implementation of best available practices for minimising the negative impacts of seismic survey exploration on marine mammals and their acoustic habitats, and to promote collaborative efforts among industry partners to reduce the need for multiple surveys within the same habitats.	15.8.3	CG-A; CG-R; SC
	With respect to the development of a paper for submission to the IMO Marine Environment Protection Committee (MEPC), the Committee recommends that: (1) intersessional correspondence group (Annex X) provides the Secretariat with a summary of the relevant material and discussions in the form of a paper that could be presented to MEPC 72 with a focus made on the 2016 recommendations and rationale; and (2) that the Secretariat or an expert from the Scientific Committee attends MEPC 71 to offer a technical paper for MEPC 72. This work should be completed by March 2018.	15.8.3	S
Climate change	With respect to climate change, the Committee agrees that: (1) the impact of climate change should be considered in an integrated manner highlighted when it is a specific driver within the topics being covered; and (2) that the intersessional correspondence group (Annex X) refine ideas for a future workshop and identify relevant climate change issues, noting the discussions under Item 15.10.1.	15.9.2	SC; C-A
Arctic issues	The Committee agrees that the thematic and focus topics of the Standing Working Group on Environmental Concerns are all occurring in the context of climate change, as are all other topics considered in several subcommittees of the Committee (e.g. SM, EM). Therefore, the Standing Working Group on Environmental Concerns recommends that Climate Change better integrated in the work of the full Committee. The Committee agrees that Arctic Issues will no longer be a standing topic in the Standing Working Group on Environmental Concerns agenda and papers would be addressed under the most appropriate agenda items for the issue being presented.	15.10.1	SC
ECOSYSTEM MODELLING			
Cooperation with CCAMLR	The Committee recommends that collaboration between IWC-SC/SC-CAMLR continues, and that the revised plan for the workshops on multispecies modelling be implemented (Annex L, Appendix 5).	16.1.3	SC
Effects of long-term environmental variability on whale populations	The Committee agrees to keep the item on the effects of long-term environmental variability on whale populations on its agenda, to be discussed if new analyses are forthcoming. It suggests that efforts be made to include effects of environmental variability in population models, including the individual-based energetic models that are being developed (see Item 5.1).	16.3	SC
Update on body condition analyses for the Antarctic minke whales	The Committee agrees that the estimation of changes in body condition data over time is more complex than had originally been assumed. Nevertheless, there was no clear majority opinion to change the conclusion reached by the Scientific Committee in 2014 that there had been a 'decline in blubber thickness and in fat weight that was statistically significant at the 5% level had occurred during the JARPA period.' (IWC, 2015d, p.46).	16.5	SC
Other	The Committee agrees that its Working Group on Ecosystem Modelling is the proper place to bring forward work focused on biological hypotheses relevant to IWC Resolution 2016-3, 'Cetaceans and Their Contribution to Ecosystem Functioning'. An intersessional correspondence group was established (Annex X) to further develop proposals for a way forward in SC/67b, and how to best integrate this stream of work into the Scientific Committee.	16.6.3	SC; CC
SMALL CETACEANS			

Review of taxonomy and population structure of bottlenose dolphins (<i>tursiops</i> spp.) In the east pacific and western north pacific oceans	So that the taxonomic status of the different bottlenose dolphin morphotypes in the eastern Pacific can be better resolved, the Committee recommends that a wide range of data (morphological, genetic and other) from the northern and southern regions be compared so that the ranges of any potential taxonomic units in the eastern Pacific can be fully explored.	17.1.4	SC; G
A Review of Small Cetaceans in Rivers, Estuaries and Restricted Coastal Habitats in Asia, <i>Platanista</i> Spp., <i>Orcaella</i> Spp. and <i>Neophocaena</i> Spp.	<p>Given the poor level of information available to evaluate the status of the Indo-Pacific finless porpoise, the Committee recommends that: (1) surveys for (relative) abundance, habitat use and distribution of Indo-Pacific finless porpoise be carried out with emphasis on areas where the least is known (e.g. India, Indo-Malay Archipelago, Arabian/Persian Gulf); and (2) efforts be made to improve bycatch monitoring (ideally with onboard observer programmes, and at a minimum with stranding notification, investigation, sampling and reporting) in all areas of known overlap between finless porpoise occurrence and fishing activity (especially gillnetting).</p> <p>The Committee has expressed its great concern over the status of this critically endangered subspecies and welcomed the new information presented at this meeting. The Committee: (1) welcomes the information that a fishery ban in the entire Yangtze basin by 2020 has been proposed and agrees that, at a minimum, enforcement of a fishing ban at least throughout all finless porpoise reserves is required; (2) notes that the program for translocating finless porpoise appears to be effective, and commends the Chinese Government, Wang Ding and his colleagues for the progress they have made in this regard; (3) agrees that a few areas of particularly high-quality habitat (e.g. oxbows along the main channel of the Yangtze) should be identified, and that the suitability of such areas as ex situ reserves be carefully assessed prior to any porpoise being introduced; and (4) re-iterates its previous recommendation that primary conservation actions should focus on restoring and maintaining suitable habitat for porpoise throughout the Yangtze River and associated lakes - this includes maintaining a network of in situ reserves, making efforts to ensure that genetic diversity is preserved and limiting harmful human activities.</p> <p>The Committee is greatly concerned at the status of riverine populations of Irrawaddy dolphins and welcomes the report of the 2017 international expert workshop (WWF and FiA 2017) and endorses its principal conclusions, summarised below. The Committee: (1) agrees that gillnets continue to represent a primary and ongoing threat and therefore, continued implementation of a suite of measures to address this threat is required; (2) is concerned that the construction of dams on the Mekong poses a serious threat to the survival of Mekong dolphins through population fragmentation, habitat destruction, limitation of prey availability, and changes in water levels; (3) agrees that if the proposed construction of large hydropower projects on the Mekong mainstem in Cambodia proceeds, almost all of the dolphins' habitat in the Mekong will be modified or eliminated and the risk of extinction will be greatly increased; (4) recommends that the IWC Secretariat write to the Cambodian Council of Ministers and relevant Cambodian Ministries expressing the Committee's grave concerns regarding the impacts on Mekong dolphins of the proposed multiple dam construction; and (5) recommends that any effort to assess the conservation value and feasibility of translocating these individuals to another social group of dolphins downstream in Cambodia include consideration of the likely social and genetic consequences of such a move for the overall population (this includes determination of the age and sex of each dolphin in the transboundary pool through available information and tools, e.g. analysis of existing photo-id data, genetic analyses of skin samples collected by biopsy, and photogrammetry).</p> <p>The Committee is concerned over the status of the Indus River dolphin (Annex M, item 7.3.6) The Committee recommends that: (1) the Pakistan Government and NGOs that are involved in Indus River dolphin monitoring, research and conservation in Pakistan to strengthen and scale-up the dolphin monitoring and rescue network with the involvement of local communities and local authorities so that it covers the entire range of the subspecies; (2) the aims of this work should be the collection of information on habitat loss, fishing-induced mortality, illegal hunting, and strandings and the support of the program of rescuing dolphins that have become trapped in canals; (3) a programme of focussed research should be developed on dolphin movements through barrages including collection of tissue samples from canal-entrapped animals to assess population structure and genetic connectivity of Indus dolphin subpopulations.</p> <p>The Committee continues to have grave concerns over the status of the Ganges River dolphin. (1) For India, the Committee: (a) encourages further systematic monitoring of underwater noise in the dolphins' habitat, (b) notes with concern the evidence of local population decline in areas of dredging, and (c) urges further, larger-scale efforts to monitor the impacts of such development. (2) For Nepal, the Committee recommends: (a) urgent action and communication of recent research findings to the Government of Nepal, mainly to prioritise maintenance of ecological flow regimes, river restoration and community-based fishery regulations to prevent further habitat degradation and bycatch of the remaining small populations upstream of river barrages on and near the India-Nepal border (b) trans-boundary surveys by India and Nepal to assess threats to the meta-populations of which Nepal's sub-populations are a part.</p>	17.2.1 17.2.2 17.2.3.4 17.2.4 17.2.5.2	SC SC; CG-A S; SC; CG-A SC; CC; CG-R; G SC; CC

	With respect to the coastal populations of Irrawaddy dolphins, the Committee recommends: (1) continued dedicated surveys to monitor distribution, habitat use, threats and population trends in areas such as Sarawak and Chilika lagoon - survey effort should be extended to cover gap areas, such as other coastlines in the Indo-Malay Archipelago, the Sunderbans of West Bengal, and the coast of Orissa and West Bengal in India. Passive acoustics and or photo-identification should be used where feasible; and (2) heightened cooperation between local authorities, researchers, and the tourist industry at Chilika lagoon, India, - dolphin protection should be strengthened through better documentation of dolphin occurrence and movements, training of dolphin watch operators on dolphin watch guidelines, as well as management efforts to address the impact of fishing on the dolphins.	17.2.6	SC; CC
	The Committee encourages several research and other actions for the Australian snubfin dolphin, including: (a) dedicated multi-year studies on the distribution, abundance and habitat use; (b) an expansion of current biopsy sampling efforts; (c) the collection of samples from stranded carcasses; (d) organisational and nation-wide collaborations for the timely retrieval and necropsy of stranded and by-caught specimens; (e) capacity building and partnerships with Australian and PNG Indigenous communities; and (f) an evaluation of the efficacy and safety of tag attachment procedures for snubfin dolphins and once determined to be effective and safe, the use of satellite tagging to determine movements, home range and habitat preferences. The Committee recommends that baseline surveys be conducted of specific areas (judged to be ecologically similar to areas known to be inhabited by the species in Australia and southern PNG) around New Guinea and the eastern Indonesian Archipelago (particularly Sulawesi, Maluku and Nusa Tenggara) and northern Timor-Leste to determine the extent of occurrence of snubfin dolphins.	17.2.7	SC; CC
	The Committee recognises that fisheries bycatch, particularly in gillnets, continues to compromise the survival of cetaceans in freshwater, estuaries and restricted coastal habitats. In addition, for freshwater cetaceans, waterways development projects, such as the construction of dams, barrages and waterways, can lead to fragmentation, degradation or destruction of their habitat. The Committee expresses deep concern that the continuation and projected increases of these threats will likely lead to regional decline and extirpation of some Asian cetacean populations. The Committee recommends that targeted conservation actions be directed toward reducing the impact of fisheries bycatch and water development projects on Asian freshwater, estuarine, and coastal cetaceans to ensure their long-term survival. The Committee encourages integrated research on habitat loss, stranding in irrigation canals, fisheries bycatch mortality, and possible combined impacts of these threats. It also encourages collection of specimens and samples from stranded or bycaught animals for taxonomic studies and population structure. This Committee further encourages increased liaison with other committees, such as E, to determine what additional samples may be of interest to their work.	17.2.8	SC; CC
Poorly documented hunts of small cetaceans for food, bait or cash and changing patterns of use	The Committee agrees that an intersessional group would work, with the input of the GDR Convenor, to consider the possibility of a cetacean wild meat database in line with the guidelines and pro forma for IWC databases considered under Item 22 for discussion at SC67a. Further to last year's recommendation that working relationships between the IWC and other international bodies be pursued, the Committee agrees to provide updates on this issue to the Aquatic Working Group of the Convention on Migratory Species, who also works on wild meat and related issues.	17.3	SC; CC
Review takes of small cetaceans	The Committee reiterates its long-standing recommendation that no small cetacean removals (live capture or directed harvest) should be authorised until a full assessment has been made of their sustainability. This is especially important for killer whales because populations are generally small and have strong social bonds and removals have unknown effects on their demographic structure. The Committee expresses concern that removals of Okhotsk Sea killer whales have continued from this population since it received its last update on this situation (IWC, 2015). With regard to killer whales in Russia, the Committee recommends that (a) the two ecotypes of killer whales should be recognised and (b) they are managed as distinct units.	17.6.1.2	C-A; CG-A
Progress on previous recommendations	The Committee notes that no new management action regarding the Māui dolphin has been enacted since 2013. It therefore concludes, as it has repeatedly in the past, that existing management measures in relation to bycatch mitigation fall short of what has been recommended previously and expresses continued grave concern over the status of this small, severely depleted subspecies. The human-caused death of even one individual would increase the extinction risk. In addition, the Committee: (1) welcomes the update on research on Maui dolphins provided and looks forward to receiving the final report on the updated marine mammal risk assessment in 2018; (2) notes with interest the reported fishing industry initiatives to reduce the use of potentially entangling gear in the range of Māui dolphins which are discussed in the SC/67a/HIM12; (3) re-emphasises that the critically endangered status of this subspecies and the inherent and irresolvable uncertainty surrounding information on most small populations point to the need for precautionary management; (4) reiterates its previous recommendation that highest priority should be assigned to immediate management actions to eliminate bycatch of Māui dolphins including closures of any fisheries within the range of Māui dolphins that are known to pose a risk of bycatch to dolphins (i.e. set net and trawl fisheries); (5) notes that the confirmed current range extends from Maunganui Bluff in the north to Whanganui in the south, offshore to 20 n. miles, and it includes harbours - within this defined area, fishing methods other than set nets and trawling should be used; and (6) respectfully urges the New Zealand Government to commit to specific population increase targets and timelines for Māui dolphin conservation, and again respectfully requests that reports be provided annually on progress towards the conservation and recovery goals.	17.7.1	SC; CC; G-A

	The Committee expresses its disappointment and frustration that, despite almost two decades of repeated warnings and the significant efforts made to protect vaquitas, the species continues to be on a rapid path towards extinction. The Committee is gravely concerned about the estimate that only 30 individuals remained as of November 2016, the news that 5 dead vaquitas were recovered during March/April 2017, and the fact that conservation measures have been ineffective and insufficient. Therefore, the Committee repeats the recommendations it made in 2016 and unreservedly endorses and adopts the recommendations made in the CIRVA-8 and CIRVA-9 reports (see SC/67A/SM/11 and SC/67A/SM/14). Given the extreme urgency of the situation, and the immediate extinction risk to the vaquita, the Committee: (1) recommends that the Government of Mexico ensures that the current ban on gillnets in the northern Gulf of California does not lapse, is effectively enforced and is made permanent, and that this ban is extended to include the possession and sale of gillnets throughout the immediate area; (2) recommends that the appropriate authority in Mexico further develop and permit the use of 'vaquita safe' fishing gears as a matter of urgency, and provide incentives for their immediate and full uptake; (3) commends the Government of Mexico for its attention and response to the CIRVA findings and respectfully requests that reports continue to be provided annually to the IWC Scientific Committee on actions and progress towards conservation and recovery goals for the vaquita; (4) requests that the Secretariat write to all IWC Commissioners to: (a) provide an update on the vaquita situation (including describing the species' status based on information reviewed by the SC at SC67a); (b) re-emphasise the commitments made under IWC Resolution 2016-5; (c) summarise the recommendations made by the SC over the last 20 years; and (d) urge them to raise this issue as a matter of urgency through the appropriate diplomatic channels; (5) recommends that members liaise with their Governments to raise the profile of the vaquita and identify and pursue wider international engagement opportunities such as through efforts to achieve the UN Sustainable Development Goals (SDG14); (6) noting that the demise of the vaquita is being driven by the high demand for totoaba swim bladders in international markets, requests that the IWC Secretariat send a written appeal to the CITES Secretariat to facilitate immediate action in addressing the illegal international trade in swim bladders from totoaba, an Appendix I species, as a matter of utmost urgency.	17.2.2	S; SC; CG-A; CG-R; C-A; C-R
	The continued decline of the vaquita raises fundamental questions on how the recommendations of the Scientific Committee are communicated. The Committee recommends that the joint Conservation Committee/Scientific Committee Working Group considers the challenges associated with effectively communicating and implementing urgent conservation recommendations, particularly with respect to vaquita.	17.7.2	SC; CC
	The Committee has previously expressed concern over the increased use of dolphins from the Amazon River (botos and tucuxis) as bait for the piracatinga fishery in the Amazon Basin. This year, the Committee: (1) thanks the Brazilian Government for the update on their efforts to combat the use of Amazon riverine dolphins as bait for the piracatinga fishery; (2) welcomes the update provided by the Brazilian Government on the newly initiated Evaluation Monitoring Plan (EMP) which includes the identification of sustainable fishing methods for the piracatinga fishery, inspection and control strategies, and efforts to understand and curtail the international market demand for piracatinga; (3) respectfully requests that Brazil provides detailed information to the next meeting of the Scientific Committee on the implementation of all five elements of the EMP; (4) encourages collaborative efforts among the states in which the dolphins occur; (5) respectfully requests information from Bolivia, Colombia, Ecuador, Peru and Venezuela in line with its recommendation last year (IWC, 2017); and (6) endorses the proposal for an intersessional workshop in Brazil in 2018.	17.7.3	SC; CC; CG-A
WHALEWATCHING			
Assess the impacts of whalewatching on cetaceans	The Committee reiterates that the definition of 'high speed' in relation to whalewatching vessels is 13 knots or greater – this definition should be used when referring to high speed vessels within the framework of MAWI and subsequent Committee discussions.	18.1.2	SC; CC
	Vail (2016) identified negative impacts on dolphins, including fatalities, that may have arisen indirectly from whalewatching activities and cetacean habituation to humans. Given the potential management implications, the Committee recommends: (1) that the paper be brought to the attention of the Conservation Committee and that its Standing Working Group on Whalewatching should include the potential for these types of injurious and fatal interactions in its discussion about management actions; (2) that the paper should also be brought to the attention of the Working Group on Whale Killing Methods and Welfare Issues; and (3) that the issue of cetacean habituation (and sensitisation, a related condition), especially as it relates to whalewatching, should be considered at SC/67b based upon the work of an intersessional correspondence group (see Table Y).	18.1.3	CC; WKM&WI; SC
	The Committee welcomes the substantial progress outlined in SC/67a/WW03 with regards the whalewatching activities in Oman targeting endangered Arabian Sea humpback whales that was responsive to previous Committee requests and recommendations (e.g., IWC, 2017, p. 395; IWC, 2016, p. 68). It also expresses appreciation to the Commission for providing funding for the initiatives described in the update. The Committee also: (1) recommends that the update is forwarded to the Conservation Committee's Standing Working Group on Whalewatching; and (2) endorses the authors' recommendations, given in Annex N, Item 2.3; and (3) agrees that this area and species should be included in the upcoming MAWI workshop (see Item 18.1.1).	18.1.3	C-A; CC; CG-R; SC

Five-year strategic plan and joint work with the Conservation Committee	The Committee agrees that topics related to the science of whalewatching (e.g., impacts of cetaceans, assessments and effectiveness of mitigation measures) should remain within its remit, noting the opportunities also to invite outside experts and the use of joint workshops with the Conservation Committee to address topics of common interest. The Committee recognises that some issues and studies addressing management and mitigation of impacts of whalewatching will be within the realm of the social sciences, because whalewatching involves people. Therefore, the Committee recommends: (1) pursuing periodic joint intersessional workshops with the Conservation Committee's Standing Working Group on Whalewatching, to which social scientists would be invited to participate in discussions about relevant topics; (2) that the Committee should begin planning and pursuing an initial workshop of this nature within two years.	18.2.1	C-A; C-R, SC
	The Committee recommends that a joint (Scientific Committee and the Standing Working Group on Whalewatching) intersessional meeting be held well in advance of SC/67b, to discuss and draft structured and specific recommendations and advice on any revisions for the 2018-2024 Five Year Strategic Plan for Whalewatching. These draft recommendations would form the basis of discussions at SC/67b so that the Committee's recommendations can be submitted to the Joint Meeting of the Conservation and Scientific Committees to be held directly after SC/67b. The budget request for this meeting is considered under Item 25.	18.2.1.2	C-R; SC; CC
	The Committee agrees to seek comment from the Joint Meeting of the Conservation and Scientific Committees on the draft ToR.	18.2.1.6	SC; C-A
Progress on scientific recommendations	Given the increasing prominence of the topic of swimming with large whales, the Committee recommends that: (1) it should be added as an agenda item for SC/67b; (2) the intersessional correspondence group (Annex X) on this topic (a) increases its efforts to obtain a higher response rate to its questionnaire survey (b) obtains updates from the World Cetacean Alliance on its survey and (c) reviews progress on field research on the impacts of swim-with activities on large whales from sites in Australia; (3) funding be made available from the Voluntary Conservation Fund for pursuing well-designed impact studies by qualified researchers on swim-with-whale programs; and (4) it works closely with the developer of the online Whalewatching Handbook to ensure co-ordination of all IWC outreach efforts to whalewatching operators and other parties regarding the questionnaire survey.	18.4.1	SC; C-R; CC
	The Committee agrees: (1) that it should receive at least biennial reports on the progress of previous recommendations and the utility of the IWC Guiding Principles on whalewatching. Parsons will provide an updated report to SC/67b; (2) that the Secretariat investigate ways to update the Compilation of Worldwide Whalewatching Guidelines and Regulations; (3) that it should form a joint intersessional correspondence group with the Conservation Committee to discuss and develop better methods for disseminating recommendations and advice on whalewatching (Annex X).	18.5.2	SC; CC; S
SPECIAL PERMITS			
General considerations on improving the evaluation process	Whilst the Committee agrees that it is not reasonable to 'accept' either a general assertion that there will be benefits to management from a research programme or to 'require' a formal demonstration with 100% certainty that there will be an improvement, it recognises from the discussions of the papers at this meeting that developing consensus on what constitutes 'sufficient' information will be difficult. It therefore: (1) agrees that the topic should be given priority at next year's meeting and (2) encourages members to develop discussion documents (and where possible to draft potential guidelines) to address this issue and submit them for consideration well in advance of next year's meeting.	19.1	SC
	The Committee recommends that future Panel Reports separate out more clearly: (1) 'recommendations' which comprise either (a) tasks that the Panel considers need to be completed (and reviewed where necessary) before the lethal component of a programme is initiated or (b) tasks required for non-lethal components of the programme to be better achieved; and (2) 'suggestions' which comprise tasks that are desirable to enhance the value of the research, but are not considered essential for the programme.	19.1	SC
NEWREP-A	The Committee welcomes the proposed multi-disciplinary surveys on cetaceans, krill, and oceanographic conditions, which will also conduct biopsy and tagging experiments. The Committee endorses the proponents' approach (see SC/67a/EM/09) including discussion with outside experts (e.g. CCAMLR). Tamura indicated that he will act as the focal point for receiving suggestions.	19.2	SC
JARPN II	The Committee recognises that advice on the feasibility of biopsy sampling common minke whales (regardless of stocks and research areas) was of general scientific as well as specific interest in the context of special permit programmes and comparisons with lethal sampling approaches. It agrees to establish an Advisory Group under the Chair (see Annex X) to provide advice on developing an experimental protocol for ascertaining whether it is possible to reliably biopsy common minke whales and, if so, under what circumstances (experience, vessel type, equipment, environmental conditions, etc.). The Group could use as its starting point the advice provided by the Expert Panel (SC/67a/Rep01).	19.3	SC
	The Committee agrees that the results of the kinship analysis presented in SC/67a/SDDNA1 are inconsistent with the mixing matrices associated with Hypothesis C as currently implemented (IWC, 2014, pp.112-88) in the Implementation Simulation Trials (isolation between sub-areas 7CS-7CN and 8-9) for western North Pacific common minke whales.	19.3	SC

NEWREP-NP	The Committee agrees that, overall, the Expert Panel had conducted a detailed, fair and thorough review of the NEWREP-NP proposal. The Committee endorses the recommendations of the Panel, recognising that it was based on the information available at the time, although the proponents stated that they did not agree with all the recommendations. The proponents also stated that they had provided substantial new information at this meeting in responding to the Panel's report that in their view responded adequately to its recommendations. Several members stated their view that the additional information had responded to the important recommendations of the Panel. The Committee agrees that its advice to the Commission from its consideration of the Panel conclusions will occur at next year's meeting. Nevertheless, there was discussion of several aspects of the Expert Panel's report and the proponent's response as summarised briefly below.	19.4	SC
	The Committee agrees that the analyses address the major concerns the Panel had with the material presented on the effects of catches on the stocks in the proposal presented to the Panel at the review meeting, and as reflected in Panel recommendations 23 and 24 (see Table). With respect to the western North Pacific common minke whales, the Committee: (1) agrees that the analyses based on bycatch data are suggestive of $MSYR1+ > 0.01$ and that the close-kin data suggest that a hypothesis of two O sub-stocks with different breeding grounds is implausible; (2) recognising that there was insufficient time to fully evaluate the technical basis for the former of these analyses, it recommends that the full set of equations on which the analyses in Section 4 of SC/67a/SCSP/13 be provided for review next year and possible use in revised Implementation Simulation Trials; and (3) notes that the poor fits to the bycatch rates by sub-area mentioned in SC/67a/SCSP/13 also support the need to revise the Implementation Simulation Trials for the western North Pacific minke whales. With respect to the North Pacific sei whales, the Committee agrees that the proponents have adequately addressed the recommendations by the Panel and that the proposed catch levels will not harm the stock.	19.4	SC
IWC DATABASES & CATALOGUES			
Guidelines for IWC catalogues and photo-ID databases	The Committee recommends that the 'IWC guidelines for photo-identification catalogues' provided in Annex S are adopted, placed on the IWC website and brought to the attention of the relevant catalogue holders.	22.1	SC; S
Progress with existing or proposed new catalogues (PH)	The Southern Hemisphere photo-identification catalogues for humpback whales and blue whales are potential sources of data for estimating abundances and examining connectivity between feeding and breeding grounds. The Committee: (1) recommends the continuation of these catalogues; (2) requests the Secretariat sends the curators of these catalogues the newly agreed 'IWC guidelines for photo-identification catalogues' (Annex S); and (3) encourages regular communication between curators of the Antarctic Humpback Whale Catalogue and the Committee.	22.2.4.2	SC; S
Progress with existing IWC databases	The Committee recommends that the following activities are high priority (see Table XX): (1) further development of IWC catch databases including documentation of aggregated catch information; (2) amend the National Progress Reporting systems as specified under Item 23.3.2; (3) migration of the Southern Hemisphere Blue Whale Catalogue to an IWC-managed server; and (4) development of the Entanglement Response database.	22.3.1	SC; S; CG
	The Committee recommends that the Secretariat: (1) develops a system to generate PDF files of each report that will include the names of national and regional coordinators for each country as authors to assist national and regional co-ordinators to provide feedback to contributors and to facilitate review of each country's national progress report; (2) develops a system to aggregate data on specific issues such as bycatch and ship strikes - the Commission Bycatch Mitigation Initiative coordinator might also assist with promoting submission of information in National Progress reports; (3) implements changes to the structure and content of National Progress Reports (see Annex R, Table 4) to reduce the workload of data entry while still retaining all the data used by the Committee - the changes include removing the specific sections on sightings, photo-identification, tag deployment, tissue sampling and direct catches of large whales while adding two sections on cetacean databases/archives and systematic surveys; (4) ensures that the data are easily accessible by the Committee including by submitting a document at each meeting summarising catches for the previous year and appending a table of catches to the PDF files of national progress reports.	22.3.2	SC; S; CG
Potential future IWC databases	The Committee recommends: (1) adoption of the pro-forma developed for new database requests and major alterations to existing databases given in Annex R, appendix 2; and (2) that the Secretariat develops formal data availability agreements for external databases that receive funding from the IWC .	22.4.1	S; SC
IWC MULTINATIONAL RESEARCH PROGRAMMES AND NATIONAL RESEACH CRUISES THAT REQUIRE IWC ENDORSEMENT			
IWC-POWER	The Committee reiterates to the Commission the great value of the data contributed by the IWC-POWER cruises which cover many regions of the North Pacific Ocean not surveyed in recent years and so address an important information gap for several large whales. The Committee: (1) thanks those governments, especially Japan who generously supplies the vessel and crew, for their continued support of this IWC programme; (2) agrees that the 2016 cruise was duly conducted following the requirements and guideline of the Committee (IWC, 2012) and looks forward to receiving abundance estimates based on these data; (3) endorses the plans for the 2017 POWER cruise, thanks the USA for providing acoustic equipment and recommends a detailed planning meeting for the 2018 cruise; (4) recommends that the USA and Russia facilitate the proposed research by providing respective permits for their national waters; (5) looks forward to receiving a report from the 2017 survey at the 2018 Committee meeting.	23.1	SC; C-A; CG-R

IWC-SORP	The Committee acknowledges the great value of the IWC-SORP (Southern Ocean Research Partnership) programme to its work. The Committee: (1) encourages the continuation of the Southern Ocean Research Partnership programme; (2) commends the researchers involved who are key to the overall success of the Partnership in IWC-SORP for:(a) the impressive quantity of work carried out across diverse member nations; (b) their contributions to the work of the Committee; and (3) encourages: (a) the continued development, testing and implementation of leading edge technology; and (b) the continued development of collaborations between ships of opportunity and external bodies that can provide platforms for research and/or contribute data, inter alia, photo-identification data, to IWC-SORP and the wider Committee.	23.2	SC; G
National Cruises that require IWC Oversight	The Committee endorses the proposed sighting survey plans (see Annex Q, item 5.3) and encourages submission of abundance estimates from these studies the future. The Committee also agrees to develop a process for the review of cruise reports at future meetings in the context of lessons that they may provide with respect to the design of future surveys or the analysis of the results of those surveys.	23.3	SC; C-A
WORKING METHODS OF THE COMMITTEE			
Interactions between the Scientific Committee and the Conservation Committee	With respect to improved and effective Interactions between the Scientific Committee and the Conservation Committee, the Scientific Committee: (1) recommends that a group is tasked to collate near the end of the Scientific Committee meeting, a draft summary of recommendations and issues related to the Conservation Committee's Strategic Plan, for presentation to the joint Conservation Committee and Scientific Committee Working Group (CC/SC WG) for discussion. This group would meet near the end of the annual Scientific Committee meeting; (2) agrees that a better way is needed to communicate back to it the priorities, issues of concern and activities of the Conservation Committee (and potentially other Commission bodies) - a proposed communication framework is presented in Annex T, fig. 1; (3) requests the joint Conservation Committee and Scientific Committee Working Group to consider meeting for a longer period to consider agenda items related to each priority topic area; and (4) recommends that the membership of the CC/SC WG be expanded so that relevant Chairs of Scientific Committee sub-committees and/or key Scientific Committee members can attend meetings depending on agenda - this will allow Scientific Committee members to offer input and assist discussion under relevant priority items (e.g., whalewatching, bycatch, marine debris, ship strikes).	26.1	SC; CC; C-R
Rules of Procedure of the Scientific Committee	Based on the discussions at this meeting, the Committee agrees that the Chair, Vice-Chair and Head of Science in consultation with the convenors should develop a consolidated draft version of proposed revised RoPs at least one month before the next SC meeting for the Committee's final consideration. It also agrees to update the Scientific Committee Handbook with the material redrafted in Annex V.	26.2	SC
Other matters	The Committee reiterates the importance of the Implementation Review and assessment process to its ability to provide robust management advice with respect to the effects of human activities on cetaceans, especially but not limited to direct removals. It is concerned that efforts be made to ensure that such work can continue to be carried out in the future. The Committee: (1) agrees to look at this issue in the context of medium-, long-term strategic planning on modelling capabilities and Implementation Reviews and assessments in more detail at next year's meeting; (2) establishes an Intersessional Correspondence Group under the Committee's chair (Annex X). to identify a way or ways to address this issue. Donovan will ensure that a subset of this group will meet on the margins of planned RMP and AWMP intersessional meetings to provide the ICG with potential solutions and ideas. The ICG will report back to the next annual meeting with the intention that the Committee will present an action plan to the next Commission meeting.	26.5	SC; C-A