

Scientific Committee: Draft Agenda & biennial work plan 2017-2018

DOCUMENT PREPARED BY THE SCIENTIFIC COMMITTEE CHAIR, VICE CHAIR AND HEAD OF SCIENCE

1. BACKGROUND

This document summarises the Scientific Committee agenda and work plan for the biennium 2017-2018. It is based upon the priority topics and draft timetables developed at SC66b. As indicated at that meeting and during the subsequent Convenors' meeting, the Chair, Vice-Chair and Head of Science would work to develop a consolidated draft incorporating some reorganisation of SC sub-groups with a view to make better use of the biennium as working period and to take into account comments and developments made during IWC66. The draft, which will be fully discussed and agreed with all SC convenors before the Committee agenda is finalised, is also intended to help the Committee delivery of advice to the Commission, providing a framework that will produce clearer and more focused recommendations to the Commission and other IWC bodies (see discussion in IWC/66/CC25 "Analysis of Scientific Committee Recommendations of direct Relevance to the Conservation Committee"). Acronyms of the Scientific Committee groups are given in Table 1, which also outlines a new working group (CMP) and revises the scope of some existing ones (NH, ASI and DB).

Table 1
Draft sub-committees and working groups for the 2017-2018
Scientific Committee Plenary, SC
Revised Management Procedure, RMP
Aboriginal Subsistence Whaling, ASW
Northern Hemisphere whale stocks, NH
In-depth Assessment, IA
Southern Hemisphere whale stocks, SH
Conservation Management Plans, CMP
Abundance estimates, stock status and International collaborative cruises, ASI
Stock Definition and DNA testing, SD
Non-deliberate Human-Induced Mortality of cetaceans, HIM
Environmental Concerns, E
Scientific Committee Plenary/Special Permits, SC/SP
Ecosystem Modelling, EM
Small Cetaceans, SM
Whalewatching, WW
DNA Testing, DNA
Sanctuaries, SAN
Working group on Databases & catalogues, DB

2. BROAD SCIENTIFIC COMMITTEE AGENDA ITEMS FOR THE NEXT TWO YEARS

The broad Scientific Committee Agenda for the next two years is summarised below. Specific topics, items and emphasis each year will take into account the two-year workplan (see Item 4)

ITEMS 1-3 INTRODUCTORY ITEMS (SC)

This will include the usual introductory items: Chair's welcome and opening remarks; appointment of rapporteurs; meeting procedures and time schedule; establishment of sub-committees and working groups; computing arrangements; adoption of Agenda; review of available data, documents and reports (including documents submitted, National Progress Reports on research, data collection, storage and manipulation i.e. catch data and other statistical material, progress of data coding projects, progress on program verification projects).

ITEM 4. COOPERATION WITH OTHER ORGANISATIONS (SC)

This will include a summary of the IWC observer reports at other meetings. Specific issues will be dealt with under the relevant agenda items. The importance of collaboration is well recognised and encouraged on many issues including bycatch and environmental concerns, small cetaceans, ecosystem modelling etc.

ITEM 5. GENERAL ASSESSMENT ISSUES (RMP)

This will include, but not be restricted to, issues generated from the Revised Management Procedure (RMP), including relationship between $MSYR_{mat}$ and $MSYR_{1+}$: requirements and guidelines for conducting surveys: model based abundance estimates, implications of ISTs for consideration of 'status'.

ITEM 6. WHALE STOCKS SUBJECT TO RMP IMPLEMENTATION REVIEWS OR SCIENTIFIC PERMITS (RMP)

This will include ongoing *Implementation Reviews* (North Atlantic common minke whales, Western North Pacific Bryde's whales), preparation of new *Implementation Reviews* (e.g. North Pacific common minke whales) and consideration of the effect of catches by special permits (not using the RMP itself but using a similar 'uncertainty' framework as necessary).

ITEM 7. NON-DELIBERATE HUMAN-INDUCED MORTALITY OF CETACEANS (HIM)

including Entanglement of large whales, Ship strikes and Approaches for addressing the bycatch issue in small cetaceans (*and review the information submitted in National Progress Reports and evaluate its adequacy*)

ITEM 8. ABORIGINAL SUBSISTENCE WHALING (ASW)

This will include: (1) Aboriginal Subsistence Whaling Management Procedure (completion of *SLA* development for the Greenlandic hunts, Aboriginal whaling management scheme, preparation for the gray whale *Implementation Review*); and (2) annual advice on stocks subject to ASW hunts - Greenland hunts for common minke, fin, humpback and bowhead whales, Chukotkan hunt for gray whales, Alaska hunt for bowhead whale, St. Vincent and The Grenadines hunt for humpback whales.

ITEM 9. WHALE STOCKS NOT SUBJECT TO TAKES OR OTHER MANAGEMENT PROCEDURES (IA, SH, NH)

These stocks will include (1) those in the process of (or final preparations for) an in-depth assessment (North Pacific sei whales (IA), and North Pacific humpback whales (IA)); (2) Southern Hemisphere stocks for which a recent in-depth assessment has occurred or for which data are being assembled to see if an in-depth assessment is feasible (humpback, fin and blue whales (SH)); (3) Northern Hemisphere stocks for which a recent in-depth assessment has occurred or for which data are being assembled to see if an in-depth assessment is feasible (North Pacific blue whales (NH), North Atlantic right whales (NH), North Pacific right whales (NH), North Atlantic bowhead whales (NH), North Pacific bowhead whales (NH), Sperm whales (IA).

ITEM 10. CETACEAN STOCKS SUBJECT OF CONSERVATION MANAGEMENT PLANS (CMP)

This will include consideration of stocks (including progress with scientific aspects) that are the subject of existing CMPs (e.g. southeast Pacific and South Atlantic right whales, North Pacific gray whales) or are likely candidates for a CMP (e.g. Arabian Sea humpback whales, franciscana).

ITEM 11. COMPILATION OF ABUNDANCE ESTIMATES AND POPULATION STATUS (AEPS)

This will include: (1) development of a biennial document compiling agreed abundance estimates (including the review of new abundance estimates) and information on the status of stocks; and (2) consideration of the design and analyses of IWC research projects related to abundance estimation including relevant IWC-SORP projects, IWC-POWER cruises in the North Pacific and progress on IWC-SOWER related work.

ITEM 12. STOCK DEFINITION AND DNA TESTING (SD/DNA)

This will include: (1) guidelines for ensuring DNA data quality and for analyses of genetic data; (2) statistical and other issues related to stock structure matters using a suite of data and techniques; (3) terminology appropriate to stock definition, unit-to- conserve and 'viable' population; and (4) use of population models to test spatial stock structure models. It will also review: (1) genetic methods for species, stock and individual identification; (2) results of the 'amendments' of sequences deposited in GenBank; (3) collection and archiving of tissue samples from catches and bycatches; and (4) reference databases and standards for diagnostic DNA registries.

ITEM 13. ENVIRONMENTAL CONCERNS (E)

This will include: the State of the Cetacean Environment Report (SOCER); effects of a variety of potential threats to cetaceans (e.g. chemical pollution; oil spills; anthropogenic sound; climate change; marine litter); Cetacean Diseases of Concern (CDoC); environmental aspects of Arctic issues; relevant aspects of strandings and mortality events.

ITEM 14. ECOSYSTEM MODELLING (EM)

This will include a review of issues relevant to ecosystem modelling within the Committee, including progress with Joint IWC-CCAMLR work, spatial modelling using environmental covariates, review of ecosystem modelling developments outside the IWC.

ITEM 15. SMALL CETACEANS (SM)

This will include: focus on the annual priority topic, consideration of the status of the Voluntary Fund for Small Cetacean Conservation Research, review progress on previous recommendations where new information is available, review takes of small cetaceans, update on progress made on the topic of 'poorly documented hunts of small cetaceans for food, bait or cash'

ITEM 16. WHALEWATCHING (WW)

This will focus on scientific aspects of whalewatching especially the impact of whalewatching on cetaceans (Modelling and Assessment of Whalewatching Impact, MAWI; data collection and analytical techniques including use of platform of opportunity data; emerging concerns). It will also cover progress on the Commission's 5-year strategic plan and joint work with Conservation Committee (Online handbook and Regulations and guidelines).

ITEM 17. DATABASES & CATALOGUES (DB)

The IWC is increasingly acting as a repository of data (including genetic samples). These include: the IWC catch database; the IWC sightings database (IWC-DESS) which holds sightings and effort data from the IWC IDCR, SOWER and POWER cruises as well as data submitted under the RMP; the IWC photographic archive for the IWC IDCR, SOWER and POWER cruises; a number of photo-identification catalogues (e.g. Southern Hemisphere blue whales, Antarctic humpback whales, various species from IWC-POWER etc.); the global ship strikes database and possibly a future global entanglement database. This item will address: common guidelines and principles for IWC databases including data availability; design issues; provide a summary of holdings. Information and analyses using data will continue to be discussed under the relevant items.

ITEM 18. SPECIAL PERMITS (SC)

This item will include: planning for Expert Panel workshops and review of reports from them in accordance with Annex P (new, ongoing or final); reviewing progress with recommendations made by Panels and the Committee; short review of

updates from ongoing programmes; review Annex P when necessary. Detailed technical review of analyses/papers from special permits will occur in the relevant sub-groups of the Committee.

ITEM 19. WHALE SANCTUARIES (SAN)

This will include review of new Sanctuary proposals, scheduled reviews of existing Sanctuaries and responses to requests from the Commission.

ITEM 20. IWC LIST OF RECOGNISED SPECIES (SC)

This will include synchronisation of the IWC list with that of the Society for Marine Mammalogy

ITEM 21. REVIEW OF COMMITTEE PRIORITIES AND INITIAL AGENDAS FOR THE 2017-2018 MEETINGS (SC)

This will include progress with the previous biennial workplan and development of a new biennial workplan in the light of Commission priorities.

ITEM 22. SCIENTIFIC COMMITTEE BUDGET (SC)

This will review the status of previously funded research and workshop proposals; progress with a and the development of a new biennial budget in the light of the workplan and Commission priorities

ITEM 23. WORKING METHODS OF THE COMMITTEE (SC)

As it has for many years, the Committee will continue to review its working methods including its Rules of Procedure, Handbook and guidelines.

ITEM 24. PUBLICATIONS

This will include consideration of the IWC peer-review journal and supplement and IWC special issues.

ITEMS 25FF

This will include other business, election of officers and adoption of report.

3. TRANSLATION OF THE WHALE STOCKS COMPONENT OF THE SCIENTIFIC COMMITTEE AGENDA INTO SUB-COMMITTEES AND WORKING GROUPS

The Scientific Committee Agenda is handled in Plenary and through sub-committees and working groups sessions (see Table 1) who report to Plenary.

The Scientific Committee agenda is based upon instructions for broad topics provided by the Commission over the years ranging from RMP, AWMP and in-depth ('comprehensive') assessments through to environmental concerns, DNA, whalewatching, small cetaceans and Conservation Management Plans (see Scientific Committee Rules of Procedure).

With respect to whale stocks, the approaches differ depending on the nature of actual or potential direct exploitation and indirect exploitation. The objective for aboriginal subsistence whaling is for *Strike Limit Algorithms* to be developed for all stocks by 2018 (this work is on track with two *SLAs* left to be completed for the Greenlandic hunts). There is a system of regular (5-6 year) *Implementation Reviews* with established guidelines. Similarly, those stocks that might be subject to whaling under the RMP follow a formally documented approach with established Requirements and Guidelines (*pre-Implementation Assessment*¹, *Implementation*, *Implementation Review* every 5-6 years). The Committee has no formal guidelines for assessing the effect of special permit catches on stocks but has agreed that it should normally follow a similar modelling approach to that used for AWMP and RMP with respect to modelling potential effects in light of uncertainty.

For stocks not subjected to direct hunting now, the Committee has followed an in-depth assessment approach. This is less formal and takes into account the available information and using modelling to establish the status of the population(s) i.e. where the population is now compared to its pre-exploitation state and what are the current trends are – this follows a similar approach of a pre-assessment evaluation of the available information to see if it is sufficient to carry out an in-depth assessment – once an assessment is completed it is revisited when sufficient new information is available to warrant it.

At its next meeting the Committee will:

- (a) receive a document that more formally outlines the in-depth assessment approach with suggested guidelines (including a timeframe) at its next meeting for consideration;
- (b) develop a draft timetable to complete in-depth assessments at its next meeting to allow a better focus on priorities, noting the stocks for which assessments have not been completed in the last ten years;
- (c) develop an approach to provide a simple statement of status for those stocks subject to the RMP/AWMP approaches.

Table 2 below provides a short summary of the Committee's work on whale stocks. In addition, the franciscana is being considered for a Conservation Management Plan. A similar table will be constructed for small cetaceans during the next biennial period.

¹ The *pre-Implementation Assessment* for new species/populations is usually preceded by an in-depth assessment.

Table 2

Current assessment/management status of large whale stocks and SC sub-groups responsible

Species	Region	Assessment/Management Status	Sub-Group
Blue whale	North Pacific	Pre In-Depth Assessment	NH
	North Atlantic	No assessment plans at present. Receive new information	NH
	Southern Hemisphere	Antarctic wide in-depth assessment completed. Investigation to see if smaller scale in-depth assessment feasible	SH
Sei whale	North Pacific	Subject to <i>In-Depth Assessment</i> and Special Permit whaling	IA (SP)
	North Atlantic	Request for <i>Implementation</i> postponed. Receive new information	NH
	Southern Hemisphere	No assessment plans. Receive new information.	SH
Fin whale	North Pacific	No assessment plans. Receive new information.	NH
	North Atlantic	Subject to <i>Implementation Review</i> and Whaling under reservation	RMP
	West Greenland hunt	Subject to Aboriginal Subsistence Whaling	ASW
	Southern Hemisphere	Examining feasibility of assessment. Receive new information.	SH
Gray whale	North Pacific	Rangewide review in progress	CMP
	western	Subject of Conservation Management Plan	CMP
	Chukotkan, Makah hunts	Subject to Aboriginal Subsistence Whaling	ASW
Common minke whale	North Pacific	Other than outlined below, no assessment plans. Receive new information.	NH
	western	Subject to <i>Implementation Review</i> and special permit catches	RMP/SP
	North Atlantic	Other than outlined below, no assessment plans. Receive new information.	NH
	central and eastern	Subject to <i>Implementation Review</i> and Whaling under reservation/objection	RMP
	East Greenland	Subject to Aboriginal Subsistence Whaling	AWS
	West Greenland	Subject to Aboriginal Subsistence Whaling	AWS
	Southern Hemisphere	No assessment plans for dwarf minke whales. Receive new information	SH
Antarctic minke whale	Southern Hemisphere	Assessment recently completed. Subject to Special Permit whaling	IA/SP
Bryde's whales	North Pacific	Other than outlined below, no assessment plans. Receive new information especially from IWC-POWER	NH
	western	Subject to <i>Implementation Review</i> and Special Permits	RMP/SP
	North Atlantic	No assessment plans. Receive new information.	NH
	Southern Hemisphere	No assessment plans. Receive new information.	SH
Right whale	North Pacific	No assessment plans. Receive new information.	NH
	North Atlantic	Other than outlined below, no assessment plans. Receive new information.	NH
	western	New assessment required.	IA
	Southern Hemisphere	Assessment recently completed. Receive new information	SH
	SE Pacific, South Atlantic	Two populations subject of Conservation Management Plans	CMP
Bowhead whale	North Atlantic	Other than outlined below, no assessment plans. Receive new information.	NH
	Greenland hunt (and Canada)	Subject to Aboriginal Subsistence Whaling	ASW
	North Pacific		
	Bering-Chukchi-Beaufort Seas	Subject to Aboriginal Subsistence Whaling	AWS
	Okhotsk Sea	No assessment plans. Receive new information	NH
Humpback whale	North Pacific	Subject to <i>In-Depth Assessment</i> (P-IA)	IA
	North Atlantic	Apart from below, due a new assessment. Receive new information.	NH
	West Greenland hunt	Subject to Aboriginal Subsistence Whaling	ASW
	St. Vincent and The Grenadines	Subject to Aboriginal Subsistence Whaling	ASW
	Southern Hemisphere	Assessment recently completed. Receive new information	SH
	Arabian Sea	Proposed for Conservation Management Plan	CMP
Sperm whale	Sperm whales worldwide	Reviewing assessment plans. Receive new information	IA

4. REVISED WORK PLAN OF THE SCIENTIFIC COMMITTEE FOR THE BIENNIUM 2017-2018

An updated work plan for the Scientific Committee for the biennium 2017-2018 is presented in the following tables. These tables specify both intersessional and annual meetings activities related to Plenary matters and each of the other sub-committees and working groups. These tables contain all agreed topics by the Committee at the last meeting, for the biennium 2017-2018. Tentative changes were introduced by the Chair, vice chair and Head of Science in terms of timing of the discussion and taking into account the Committee internal reorganisation (i.e. a new group and revised scope of others). Any revised workplan will take into account discussions at the Commission meeting.

Group	Topic	Intersessional	During the 2017 meeting	Intersessional	During the 2018 meeting	
Scientific Committee - Plenary (SC)	SC organisation	<i>Introductory items 1-3</i>	<ul style="list-style-type: none"> Draft agenda Improve meeting procedures and time schedule Establishment of sub-groups Identify rapporteurs Check submitted documents Report from intersessional WG on Committee working group on streamlining data entry within National Progress Reports 	<ul style="list-style-type: none"> Opening remarks; Adoption of the Agenda; Review of available data, documents and reports, including documents submitted, National Progress Reports on research data collection, storage and manipulation (i.e. catch data and other statistical material, progress of data coding projects, progress on program verification projects. Review progress from the National Progress Reports IWG 	<ul style="list-style-type: none"> Draft agenda Improve meeting procedures and time schedule Establishment of sub-committees and working groups Identify rapporteurs Check submitted documents 	<ul style="list-style-type: none"> Opening remarks; Adoption of the Agenda; Review of available data, documents and reports, including documents submitted, National Progress Reports on research data collection, storage and manipulation (i.e. catch data and other statistical material, progress of data coding projects, progress on program verification projects.
		Follow-up from recommendations relevant to the work of all groups (SC02)	<ul style="list-style-type: none"> Discuss proposals on necessary actions to follow up previous recommendations 	Introduce new necessary activities in the Agenda	<ul style="list-style-type: none"> Discuss proposals on necessary actions to follow up previous recommendations 	Introduce new necessary activities in the Agenda
		<i>Cooperation with other Organisations</i>	<ul style="list-style-type: none"> IWC observers Intersessional work on: <ol style="list-style-type: none"> Ship-strikes Marine debris 	<ul style="list-style-type: none"> Receive reports from IWC observers 	<ul style="list-style-type: none"> IWC observers 	Receive reports from IWC observers
		<i>Review of Committee priorities and initial agendas for the 2017-2018 meetings</i>	Finalise SC, sub-committees and working groups agendas	<ul style="list-style-type: none"> Adopt agendas for the current meeting Develop tentative agendas for next annual meeting 	Finalise SC, sub-committees and working groups agendas	<ul style="list-style-type: none"> Adopt agendas for the current meeting Develop tentative agendas for next biennium 2019-20
		<i>Scientific committee budget for the biennium 2017-2018</i>	<ul style="list-style-type: none"> Identify IPs (SC01) Oversee correct dispersion of 2017 funds Discuss potential/necessary changes to the 2017 project assignment 	<ul style="list-style-type: none"> Status of previously funded research and workshops (concluded and ongoing) Status of funded proposals for the current biennium 2017-2018 Funding adjustments for the biennium 2017-2018 	<ul style="list-style-type: none"> Identify IPs (SC01) Oversee correct dispersion of 2018 funds Evaluate reassignment of funds left over from 2017 concluded activities 	<ul style="list-style-type: none"> Status of previously funded research and workshops (concluded and ongoing) Funded proposals for the biennium 2019-20 Data processing and computing needs for the biennium 2019-20 Funding requirements for the biennium 2019-20
		<i>Working methods of the committee</i>	If necessary, proposed changes to SC working methods and Rules of Procedure of the Committee may be developed	Review and adopt changes if required	If necessary, proposed changes to SC working methods and Rules of Procedure of the Committee may be developed	Review and adopt changes if required
		<i>Improve reporting to Commission</i>	Convenors group working on: <ul style="list-style-type: none"> Ensure effective transmission of advice Improve annual SC report and 2-year SC summary report 	Review and adopt changes	Convenors group working on: <ul style="list-style-type: none"> Evaluation of adopted formats 	Deliver reports according to the agreed new format
		<i>Election of officers</i>		Consultations on potential new SC vice-chair	Consultations on potential new SC vice-chair	Election of the new SC vice Chair (and Chair)
	Scientific Permits (SP)	<i>New Special Permits programmes</i>	Expert Panel workshop on North Pacific (SP01)	Review report Expert Panel workshop and advise Commission		Review progress on recommendations and advise to Commission
		<i>Ongoing Special Permits programmes</i>	Advisory group to assist to allow a satisfactory response to the SP Panel's Antarctic Recommendations (1 and 26)	<ul style="list-style-type: none"> Review of new information on ongoing programmes Review progress on previous recommendations 		<ul style="list-style-type: none"> Review of new information on ongoing programmes Review progress on previous recommendations
		<i>Annex P</i>	Intersessional working group on improved procedures, if required	Review progress and make amendments, when necessary	Intersessional working group on improved procedures, if required	Review progress and make amendments, when necessary
	Other	<i>Satellite tagging best practices</i>	<ul style="list-style-type: none"> Joint workshop with ONR (BRG04) 	Review report if needed and make recommendations		Review report if needed and make recommendations
		<i>IWC list of recognised species</i>		Update IWC list if required		Update IWC list if required
		<i>Publications</i>	<ul style="list-style-type: none"> IDCR/SOWER Commemorative Volume Editorial Group 	Review and assist if required	Volume completed. Review other proposals if required	Review and assist if required

Group	Topic	Intersessional	During the 2017 meeting	Intersessional	During the 2018 meeting
General assessment matters (RMP)	<i>Evaluate the energetics based model and the relationship between MSYR₁₊ and MSYR_{mat}</i>	MSYR (Steering Group) - Continue evaluation: (a) how the model was parameterised; (b) develop emulator models; (c) conduct simulations of the CLA for the model; (d) conduct simulations of the CLA for the emulator models (RMP02)	Review intersessional progress, continue evaluation and consider nature of sensitivity tests	Continue to evaluate the energetics-based model and the relationship between MSYR ₁₊ and MSYR _{mat}	Review intersessional progress
	<i>Implications of ISTs for consideration of status</i>	IST stock status (Steering Group) plus Work undertaken at both AWMP and RMP workshops	Review and if possible agree process and report to ASI sub-group (see below)	Additional work if required	Review and agree process if required
Revised Management Procedure Implementation-related matters (RMP)	<i>North Atlantic fin</i>		Review new information if needed		Review new information if needed
	<i>North Atlantic common minke whales</i>	<ul style="list-style-type: none"> • WS on North Atlantic common minke whale RMP <i>Implementation Review</i> (Dec16) • Review final results of <i>Implementation Simulation Trials</i> 	<ul style="list-style-type: none"> • Review WS report • Complete <i>Implementation Review</i> 		Review new information if needed
	<i>Western North Pacific common minke whales</i>		Review new information if needed		Prepare for <i>Implementation Review</i>
	<i>Western North Pacific Bryde's</i>	Western North Pacific Bryde's whale Implementation Review (Steering Group): <ul style="list-style-type: none"> • 'First' intersessional workshop on Implementation Review (IWC, 2012f; RMP01) • Code the resulting trials and condition them (RMP02) 	Undertake work required for 'First' Annual Meeting (IWC, 2012f)	'Second' Workshop on <i>Implementation Review</i> (IWC, 2012f; RMP01)	Complete <i>implementation Review</i> (IWC, 2012f)
Group	Topic	Intersessional	During the 2017 meeting	Intersessional	During the 2018 meeting
Abundance estimates and Stock status and International Collaborative cruises (ASI)	<i>Compilation of abundance estimate table</i>	Intersessional WG on abundance estimates	Review intersessional progress on compilation of abundance estimates	Intersessional WG on abundance estimates	Finalise summary document for Commission
	<i>Review new survey techniques</i>		e.g. Review new information from NASS survey		Review new survey techniques
	<i>Model-based abundance estimates (and amendments to RMP Guidelines)</i>	Bravington and colleagues to complete guidelines and develop simple-to-use diagnostic software (RMP01_2015 & RMP02_2015)	Pre-meeting workshop to: (a) test proposed new guidelines; (b) demonstrate the proposed diagnostic software	Depends on outcome of 2017 meeting	
	<i>Investigate Chilean blue whale abundance in context of habitat models</i>	Intersessional WG on building regional habitat model and consider options for using abundance estimate on a wider- scale			
	<i>Review new abundance estimates</i>	Intersessional working group on inspect post-CPIII sightings data collected for Antarctic blue whales and fin whales, and Antarctic blue whale photo-IDs, with a view to providing updated abundance/trend estimates. Continue work on developing model-based abundance estimates from IDCR/SOWER data for Blue whales in Areas III and IV	<ul style="list-style-type: none"> • Review new abundance estimates e.g.: • North Atlantic fin whales • WNP common minke whales (new information on g(0) and additional variance) • Review progress on a minimum abundance estimate for humpback Breeding Stock D • Review progress on blue and fin whale estimates for the Antarctic 		Review new abundance estimates e.g. <ul style="list-style-type: none"> • North Atlantic common minke whales • Minimum abundance estimate Breeding stock D (pus improved methods for future) • Estimates for Antarctic blue and fin whales
	<i>Consideration of status of stocks</i>		<ul style="list-style-type: none"> • Develop guidelines to present summary information on the status of stocks • Summarise available information on status to stocks 		Finalise summary document for Commission
	<i>Southern Ocean Research Partnership (SORP)</i>		Discussion on survey designs and planning wrt abundance estimation		
	<i>IWC-POWER cruise</i>	IWC POWER planning and Technical Advisory group meetings (Sept16; IA03)	Review aspects related to survey design	IWC POWER planning and Technical Advisory group meetings (Sept17; IA03)	Review aspects related to survey design

Group	Topic	Intersessional	During the 2017 meeting	Intersessional	During the 2018 meeting
	IWC-SOWER cruises		Review progress on website, publications, analyses		
Non-deliberate Human-Induced Mortality of cetaceans (HIM)	<i>Assess entanglement rates, risks and mortality (large whales)</i>		Review new estimates		Review new estimates
	<i>Reporting of entanglements and bycatch in National Progress Reports</i>	Intersessional group on time series of non-deliberate human induced mortality estimates to review submission and possible streamlining	<ul style="list-style-type: none"> Review summary table Review the information submitted in National Progress Reports and evaluate its adequacy 	Update summary table	<ul style="list-style-type: none"> Review summary table Review the information submitted in National Progress Reports and evaluate its adequacy
	<i>Mitigation measures for preventing large whale entanglement</i>	Consider final Portsmouth report and any advice from IWC66	Review progress on developing a summary table of measures		Review progress on mitigation measures
	<i>Consideration of CMP for bycatch and disentangling</i>	Intersessional group to address this and consider advice from IWC66	Review report of the intersessional group and consider handover to CMP group if a CMP on bycatch is recommended		Depends on whether passed to CMP group
	<i>Mitigation of ship strikes in high risk areas</i>	Secretariat to maintain dialogue with Sri Lankan and Greek authorities	Review progress towards assessing and mitigating ship strikes in identified high risk areas		Secretariat to maintain dialogue with Sri Lankan and Greek authorities
	<i>Co-operation with IMO Secretariat and relevant IMO committees</i>	IWC Secretariat and members of the Committee continue to engage	Review co-operation	Continue to engage	Review co-operation
	<i>Estimation of rates of bycatch, risks of, and mortality for small cetaceans</i>		Further consideration of: <ol style="list-style-type: none"> observer programmes including technology use and required levels of coverage role of fisheries data collection schemes use of strandings data for quantitative estimation of bycatch 		Estimation of rates of bycatch, risks of, and mortality for small cetaceans.
Group	Topic	Intersessional	During the 2017 meeting	Intersessional	During the 2018 meeting
Aboriginal Subsistence Whaling (ASW-SC)	<i>Progress work on fin and common minke whale SLAs for the Greenland hunts</i>	AWMP Workshop to develop SLAs for the final two Greenland hunts and consider AWS (Dec 2016; AWMP-RMP01)	Review WS report and recommend SLA(s) if completed	AWMP Workshop to finalise common minke whale SLA if needed and to consider multispecies issues (AWMP01)	Recommend common minke whales SLAs if not completed in 2017
	<i>Progress work on AWS (workshop)</i>	Develop text to recommend to Commission		Continue work if needed	Present final text to Commission
	<i>Implementation Reviews</i>	Prepare for BCB bowhead <i>Implementation Review</i>	Review timetable for <i>Implementation Reviews</i> for next six years		Complete BCB Bowhead <i>Implementation Review</i>
	<i>Management Advice</i>	Annual provision of management of advice			Annual provision of management of advice (this is a quota renewal year.
Group	Topic	Intersessional	During the 2017 meeting	Intersessional	During the 2018 meeting
Whale Stocks not dealt with elsewhere Southern Hemisphere (SH)	<i>Southern Hemisphere humpback whales: Breeding Stocks D, E and F</i>	Complete mixed stock analysis (SH10)	No discussion unless advice requested	Continue mixed stock modelling work	<ul style="list-style-type: none"> Complete modelling. Develop guidance for this issue in the future.
	<i>Southern Hemisphere Pygmy blue whale assessments</i>		Review progress on research recommendations and collate info from other groups		Depends on progress in 2017
	<i>Antarctic blue whale assessment (Areas III and IV)</i>		Review progress including compiling information from other groups		Depends on progress in 2017
	<i>Southern Hemisphere Fin whales</i>	Progress recommendations to compile a list of available information for use in a potential assessment. Develop a proposal for a dedicated fin whale study in the west Antarctic Peninsula and Scotia Arc area.	Review progress and develop workplan		Depends on progress in 2017

Group	Topic	Intersessional	During the 2017 meeting	Intersessional	During the 2018 meeting	
Northern Hemisphere (NH)	<i>Review new information on Southern Hemisphere stocks not being dealt with elsewhere</i>	<ul style="list-style-type: none"> Aerial photographic survey of southern right whales on the southern Cape nursery ground in South Africa (BRG01) 	Sei Southern right Dwarf minke Bryde's Sperm			
	<i>Review new information on Northern Hemisphere stocks not being dealt with elsewhere</i>		North Pacific <ul style="list-style-type: none"> Fin Central and eastern common minke Central and eastern blue 		North Atlantic <ul style="list-style-type: none"> Blue Sei Bowhead Humpback 	
	<i>Review information to see if an in-depth assessment is feasible</i>	Collate information	Review information and develop timetable if feasible: <ul style="list-style-type: none"> North Pacific blue North Atlantic sei 		Depends on 2017	
Whale Stocks	In-depth Assessment (IA)	<i>Antarctic minke whales: Indo-Pacific Antarctic minke whale assessment</i>	Intersessional group on synthesis of the in- depth assessment of Indo-Pacific Antarctic minke whale (IA02_2015)	Draft document reviewed	Finalise document for publication in JCRM	Completed
		<i>North Pacific Humpback whales</i>	Initiate work on an-in depth assessment, including a WS (IA01)	Complete assessment if possible, if not develop workplan for completion in 2018	Depends upon 2017 progress	Complete assessment if not completed in 2017
		<i>North Pacific blue whale assessment</i>	Review information to examine the feasibility of undertaking an assessment and develop a timetable	Review progress	Depends on progress in 2017	Depends on progress in 2017
		<i>North Pacific sei whale in-depth assessment</i>	Sei whale assessment (Steering Group): <ul style="list-style-type: none"> Complete identified work on: a) revisions to catch history; b) analysis of past sighting data; c) modelling (IA02_2015 & IA02) Conduct initial modelling. 	Review progress and finalise modelling requirements to complete assessment	Undertake additional modelling	Complete assessment
		<i>Status of North Pacific sperm whales</i>	Identify available data to review to update our current understanding on the status of North Pacific sperm whales.	Review progress		
		<i>Southern Hemisphere humpback whales</i>	Modelling support (SH02_2015)	No discussion	Review progress on activities identified in Appendix 2, Annex H to fill identified gaps	Examine feasibility of new in-depth assessment for 2020
Group	Topic	Intersessional	During the 2017 meeting	Intersessional	During the 2018 meeting	
Whale Stocks	Conservation Management Plans (CMP)	<i>SE Pacific and S Atlantic southern right whales</i>	<ul style="list-style-type: none"> Tracking southern right whales through the southwest Atlantic (BRG05) Passive acoustic monitoring of the eastern South Pacific Southern right whales, improving CMP outputs (BRG03) 	<ul style="list-style-type: none"> Review progress of CMP Review new information from funded projects 	<ul style="list-style-type: none"> Aerial photographic survey of southern right whales on the southern Cape nursery ground in South Africa (BRG01) Tracking southern right whales through the southwest Atlantic (BRG05) Passive acoustic monitoring of the eastern South Pacific Southern right whales, improving CMP outputs (BRG03) 	<ul style="list-style-type: none"> Review progress of CMP Review new information from funded projects
		<i>North Pacific gray whales</i>	Fourth workshop on the rangewide review of population structure and status of North Pacific gray whales (BRG02)	<ul style="list-style-type: none"> Review progress of CMP Review new information Review WS report 		<ul style="list-style-type: none"> Review progress of CMP Review new information

	<i>Humpback whales in the northern Indian Ocean including the Arabian Sea</i>	<p>Intersessional working group:</p> <ul style="list-style-type: none"> • Progress recommendations on scientific work (Emerging whalewatching industry in Oman; WW01_2015) • Liaise with the Port of Duqm on ship strike mitigation • Work with the Conservation Committee at IWC66 regarding CMPs 	<p>Review progress – also in light of IWC66</p> <p>Modify recommendations as necessary</p>	Continue to progress recommendations	As for 2017	
	<ul style="list-style-type: none"> • Update on previously suggested potential CMPs (Franciscana, common minke whales (coastal waters of China, Japan and Republic of Korea); blue whales (northern Indian Ocean); fin and sperm whales (Mediterranean); Boto in Amazonia) 		<p>Update if new information provided</p> <p>Consideration of other candidates if proposed</p>		<p>Update if new information provided</p> <p>Consideration of other candidates if proposed</p>	
Group	Topic	Intersessional	During the 2017 meeting	Intersessional	During the 2018 meeting	
Stock Definition (SD)	<i>DNA Testing</i>		<ul style="list-style-type: none"> • Genetic methods for species, stock and individual identification • ‘Amendments’ of sequences deposited in GenBank • Collection and archiving of tissue samples from catches and bycatches • Reference databases and standards for diagnostic DNA registries 		<ul style="list-style-type: none"> • Genetic methods for species, stock and individual identification • ‘Amendments’ of sequences deposited in GenBank • Collection and archiving of tissue samples from catches and bycatches • Reference databases and standards for diagnostic DNA registries 	
	<i>Guidelines for DNA data quality and genetic analyses</i>	Progress work through intersessional groups	<ul style="list-style-type: none"> • Update DNA quality guidelines to include discussion of NGS data • Complete genetic analysis guidelines 	Ensure guidelines are placed on the website and consider publication	Review and update as necessary	
	<i>Statistical and genetic issues concerning stock definition</i>			Review papers and provide advice to relevant groups		As in 2017
	<i>Terminology review and unit-to-conserve</i>	Progress work through intersessional group		Review progress and update list as necessary	Depends on 2017	Depends on 2017
	<i>Simulation tools for spatial structuring (e.g. TOSSM)</i>			Review relevant papers. Develop work plan for specific issues as necessary	Depends on 2017	Depends on 2017
	<i>Provide specific advice on stock structure to other sub-groups</i>	Several intersessional groups/research projects		<p>Including:</p> <ul style="list-style-type: none"> • Northern Indian Ocean humpback subspecies determination-genetics (SH3a) • Blue whale (Antarctic and pygmy) stock structure using acoustics, genetics and catch data • Antarctic blue whale • Antarctic fin whales in Peninsula region 		Depends on 2017
Group	Topic	Intersessional	During the 2017 meeting	Intersessional	During the 2018 meeting	
Environmental Concerns (E)	<i>SOCER</i>	Compiling SOCER on the Indian Ocean region (E04)	Submit report	Compiling SOCER on the Mediterranean and Black Seas		
	<i>Pollution 2020</i>	<ul style="list-style-type: none"> • Progress on risk assessment for PCBs • Data integration and mapping (E02) 	Brief review on intersessional progress	<ul style="list-style-type: none"> • Continue modelling of contaminants incl. addition of PBDEs. • Data integration and mapping 	Review on intersessional progress	
	<i>Oil spill impacts</i>	Intersessional WG on Oil spills	<p>Update on:</p> <ul style="list-style-type: none"> • Development of information resource and communication strategy • Progress on oil spill science, planning and preparedness 			
	<i>Cumulative impacts</i>	Intersessional SG on planning and preparation for collaborative cumulative impacts workshop or focus sessions at SC/67b.		Brief update (5’) on intersessional progress	Planning and preparation for collaborative cumulative impacts workshop or focus sessions at SC/67b.	Focus session (or pre-meeting): Methods and techniques for assessing cumulative impacts (E05)
	<i>Harmful algal blooms</i>	Intersessional SG on planning for focus meeting according to the terms of reference		Focus session (or pre-meeting): Synthesis of current state of science and impacts to cetaceans (E03)	Depending on outcomes from SC67a	Depending on outcomes from SC67a

	<i>Marine debris</i>	Intersessional working group on Marine Debris	Brief update (5') on intersessional progress	Intersessional working group on Marine Debris	<ul style="list-style-type: none"> Review biennial progress on pre-planning for marine debris workshop on plastics. Progress on collaborations with IGOs particularly on gear marking. Initial planning for workshop on plastics
	<i>Diseases of concern</i>	Intersessional working group on Cetacean Diseases of Concern (CDOC; E01)	Progress on website and communications (including quarterly CDOC updates)	Intersessional working group on Cetacean Diseases of Concern (CDOC)	Progress on website and communications (including quarterly CDOC updates)
	<i>Strandings and mortality events</i>	International stranding response WG	Short review on intersessional progress	International stranding response WG	<ul style="list-style-type: none"> Review progress of intersessional steering group, expert panel, and international stranding program development New information
	<i>Noise</i>	Intersessional WG on Anthropogenic noise	Update on intersessional advances on: <ul style="list-style-type: none"> Integrate work with that of GWAP Noise Task Force Update on national and international ocean noise strategies Other issues 		Brief review on intersessional progress
	<i>Climate change</i>	Intersessional WG on Effects of climate change on cetaceans advancing discussions on future work and development of a strategy to address the potential vulnerability of tropical species, river dolphins and beaked whales	Brief update (5') on intersessional progress	Intersessional WG on Effects of climate change on cetaceans	Update on intersessional progress
	<i>Arctic issues</i>	Intersessional working group on Arctic issues	<ul style="list-style-type: none"> Progress on priority topics Collaboration with Arctic Council 	Intersessional working group on Arctic issues	<ul style="list-style-type: none"> Progress on priority topics Collaboration with Arctic Council
Group	Topic	Intersessional	During the 2017 meeting	Intersessional	During the 2018 meeting
Ecosystem Modelling (EM)	<i>Co-operation with CCAMLR on multispecies modelling</i>	Intersessional SG: progress plans and hold a pre-meeting between IWC- SC EM and SC-CAMLR WG-EMM (EM01 & EM02_2015)	Review plans for a joint workshop in 2018	Intersessional SG: progress plans and hold a workshop between IWC- SC EM and SC-CAMLR WG-EMM	Review workshop report and recommendations and develop a work plan
	<i>Applications of species distribution models (SDMs) and ensemble averaging</i>	Intersessional group developing guidelines and recommendations for best practice in species distribution modelling	Review progress	Depends on 2017	Depends on 2017
	<i>Effects of long-term environmental variability on whale populations</i>	Intersessional group activity: 1) identify long time series (>=20 yr) of cetacean demographic parameters and/or abundance; 2) identify potentially relevant environmental time series.	Review progress and determine a work plan	Depends on 2017	Depends on 2017
	<i>Further investigation of individual-based energetics models</i>	Continue development (including meeting recommendation under Item 5.1)	Review progress and determine a work plan	Depends on 2017	Depends on 2017
	<i>Modelling of competition among whales</i>		Review requested analyses		
	<i>Update of information on krill distribution and abundance by NEWREP-A</i>	Conduct a survey in consultation of CCAMLR specialists.	Review results of survey and analysis	Depends on 2017	Depends on 2017
Group	Topic	Intersessional	During the 2017 meeting	Intersessional	During the 2018 meeting
Small Cetaceans (SM)	<i>Global Tursiops Taxonomy review</i>	Intersessional group to synthesise information presented at SC/66a; SC/66b and any new information	Review progress	Intersessional Workshop <i>Tursiops</i> taxonomy (SM01)	Review report of the global <i>Tursiops</i> Taxonomy review WS
	<i>Poorly documented takes food, bait or cash</i>	Intersessional SG to plan and conduct a South American workshop	Review report	Intersessional SG to plan and conduct an African workshop	Review report
	<i>Small Cetacean Task Team</i>	Intersessional WG continues work on Franciscana and explore other taxa	Review progress	Continue work on Franciscana and explore other taxa	Review progress
	<i>Progress on previous recommendations</i>	Intersessional WG on "Reporting from Brazil" on river dolphins	Review progress		Review progress
	<i>Status of the Voluntary Fund for Small Cetacean Conservation Research</i>		Review progress of funded projects		Review progress

Group	Topic	Intersessional	During the 2017 meeting	Intersessional	During the 2018 meeting
Whalewatching (WW)	<i>Assess impact of whalewatching (priority)</i>	Intersessional SG on: • MAWI working group (priority) Intersessional WG on: • swim-with-whale impact	Review progress on MAWI and develop work plan	Intersessional SG on: • MAWI working group (priority; WW01) Intersessional WG on: • swim-with-whale impact	Depends on 2017
	<i>Emerging concerns</i>	Encourage submission (e.g. new areas, species, technology)	Review progress and if necessary include item in "Assess impact of WW"		Depends on 2017
	<i>Regional reviews (refer to CC)</i>	• Communication with IORA • Undertake review and decide the region for 2018	Review on scientific aspects of WW in Indian Ocean		Depends on 2017
	<i>5-year strategic plan and joint work with Conservation Committee</i>	Handbook: Assist as needed	Review impact of this review on WW work plan		Depends on 2017
	<i>Regulations and guidelines (refer to CC)</i>	Upload new compendium	Review progress incl. scientific evaluation of efficacy		Depends on 2017
	<i>Platform of opportunity data</i>		Provide advice and recommended practice		Depends on 2017
	<i>Progress on recommendations</i>	Encourage new information on progress	Review progress		Depends on 2017
Group	Topic	Intersessional	During the 2017 meeting	Intersessional	During the 2018 meeting
Databases (DB)	<i>Guidelines for IWC databases and catalogues</i>	Intersessional WG on development of IWC photo-ID guidelines	Agree guidelines if possible		
	<i>Updated IWC sightings database to link to multiple data types</i>	Intersessional working group	Develop workplan and budget		Review progress (new database available?)
	<i>IWC-SOWER and POWER photographic archive database</i>	Intersessional work to include 2016 IWC-POWER photographs and newly recovered IDCR/SOWER blue whale data	Review progress		
	<i>IWC Global database for disentanglement activities</i>	Secretariat and advisory group to work on development of an initial global entanglement database (HIM02)	Review progress on database	Continue development work	Finalise database
	<i>IWC global Ship Strike Database</i>	Review progress on data entry into and validation of records (HIM01)	Evaluate progress and consider summary for website as well as use for evaluation of risks and mortality	Ongoing data entry and validation	Ongoing data entry into and validation of records
	<i>IWC-POWER catalogues</i>	Develop validation methods	Evaluate progress		
	<i>IWC-SORP databases</i>		Review information on status and data availability		
	<i>Integration of eastern South and Central Pacific Blue, Humpback, and fin whale photo-catalogues</i>	Intersessional workshop (Nov 16; SH09) to assist regional catalogue holders and allow a range-wide abundance estimate to be developed.	Review workshop report		Develop abundance estimate (review by ASI if completed)
	<i>Southern Hemisphere and Indian Ocean humpback whales: Catalogues</i>	• Discuss links between Antarctic Humpback Whale Catalogue and Committee priorities (SH01) • Build and clarify relationships between humpback whale photo-identification data holders working in the Southern Ocean (working group) • Hold workshop to assist regional photo-id. data holders working on breeding stock G (working group; SH09)	Review progress in light of priorities and develop future plan with respect to these catalogues	Continue work in light of recommendations in 2017 Data archiving tool for northern Indian Ocean humpback whales	Develop workplan and budget requests in light of priorities
	<i>Southern Hemisphere Antarctic and pygmy blue whales: Catalogues and databases</i>	• Continued work on the Antarctic and Southern Hemisphere blue whale catalogues (SH02)	• Review progress on Antarctic blue whale assessment (Areas III and IV) catalogue matches • Review progress on activities identified in Appendix 2, Annex H to fill identified gaps	Develop blue whale song reference library (SH08)	Review progress with the reference library
Group	Topic	Intersessional	During the 2017 meeting	Intersessional	During the 2018 meeting
Sanctuaries (SAN)	<i>New proposals</i>		Examine new proposals if submitted		Advice to the Commission
	<i>Sanctuary reviews</i>		Examine any issues if required (next SOS due in 2026)		Advice to the Commission