Response to Notification to the Parties No. 2011/049

Please find below Australia's response to Notification to the Parties No.2011/049. Australia thanks the Secretariat for the opportunity to provide input to the following points for discussion at the 20th meeting of the Plants Committee and the 26th meeting of the Animals Committee:

a) Sharks

Parties are invited to

- i. report on trade in specimens of these species and to provide information on the implementation of national or regional plans of action for sharks and other available relevant data and information on the species [see Resolution Conf. 12.6 (Rev. CoP15)];
- ii. submit a list of shark species (Class Chondrichthyes) that they believe require additional action to enhance their conservation and management, including if possible any concrete measures which they believe to be needed. The list should include a summary of additional supporting information;
- iii. advise whether they have domestic measures (e.g. laws or regulations) regulating the fishing, retention or landing of shark or ray species in their waters, and whether those measures apply to certain species only or to all species; and
- iv. advise whether they have domestic measures (e.g. laws or regulations) regulating the import or export of shark parts and products (fins, meat, skin, organs, etc.) and, if so, what those measures are.

a)i

Australia's National Plan of Action for the Conservation and Management of Sharks

As a member of the Food and Agriculture Organization of the United Nations (FAO) and in response to the FAO International Plan of Action for the Conservation and Management of Sharks, Australia developed its own National Plan of Action for the Conservation and Management of Sharks (NPOA-Sharks) was officially launched on 26 May 2004.

The 2004 NPOA-Sharks directs action relating to the conservation and management of sharks within Australian waters. Responsibility for implementing actions under the NPOA-Sharks, as well as broader responsibility for shark conservation and management, lies with each Australian jurisdiction (i.e. the states, Northern Territory and the Commonwealth governments).

In 2009 the 2001 Australian Shark Assessment Report was updated to assess the status of shark conservation and management in Australia. The 2009 Shark Assessment Report contributed to a review of the 2004 NPOA-Sharks and has assisted in the development of a revised NPOA-Sharks. The revised draft NPOA-Sharks was released for public consultation in May 2011 and the final revised NPOA-Sharks is expected to be released in 2012.

Trade in shark species

Export accreditation

In Australia, the primary piece of environmental legislation is the Environment Protection and Biodiversity Conservation Act 1999 (EPBC Act). In accordance with the EPBC Act, all Australian wild harvest fisheries must undergo an independent assessment in order to gain approval to export specimens. This requirement applies to both state/territory-managed or Commonwealth-managed fisheries (including those fisheries

that interact with sharks). The assessment of fisheries allows the Australian Government to assess the environmental performance of fisheries, promote ecologically sustainable management, and ensure that the operation is not detrimental to the survival of CITES-listed species. These assessments ensure that, over time, fisheries are managed in an ecologically sustainable way.

These fisheries assessments are conducted against the Guidelines for the Ecologically Sustainable Management of Fisheries – 2nd Edition (the Guidelines). The Guidelines outline specific principles and objectives designed to ensure a strategic and transparent way of evaluating the ecological sustainability of fishery management arrangements. The assessments consider the impacts of the fishery on target and nontarget species caught, and the impacts of fishing on the broader marine environment, including interactions with protected species. Only when a fishery's management arrangements are assessed as sustainable is it declared an Approved Wildlife Trade Operation and/or included on the List of Exempt Native Specimens, to allow the export of specimens derived from the fishery.

The Guidelines used to assess Australian export fisheries are publicly available at the following link: http://www.environment.gov.au/coasts/fisheries/publications/guidelines.html

Data collection on shark trade

The Australian Government maintains two databases of relevance to trade in shark products, each of which may be preferentially used for various reporting purposes. The first of these is managed by the Australian Bureau of Statistics (ABS) which holds fisheries trade data, including shark product exports. These data are derived using a harmonised system of tariff codes, which forms the basis for administering Australia's imports and exports and the collection and dissemination of detailed international trade statistics. Reports on trade in the current product categories used by ABS may mask some of the trends in the most popular exported and imported shark products such as shark trunk pieces, shark fin and shark liver oil. This is because ABS aggregate some shark product data into broader fisheries categories. For example, there is no specific category for shark liver oil. Instead, imports of shark liver oil may be classified under a more generic category such as 'fish-liver oils and their fractions'. In addition, sharks are not defined in terms of families or species as these are too numerous to include in the harmonised system.

The second of these datasets of relevance to shark exports, as reported in our previous response to Notification 2010/027, is housed by the Australian Quarantine and Inspection Service (AQIS) (now known as Department of Agriculture, Fisheries and Forestry Biosecurity). These data are based on export documentation and are of greater resolution with a larger number of product codes as detailed in the Australian 2009 Shark Assessment Report (which was attached to our response to Notification 2010/027), so can be of more use for examining the level of export for particular shark products.

a)ii:

Status of stocks and fisheries

The Australian Bureau of Agricultural and Resource Economics and Sciences produces annual Fishery status reports. The Fishery status report 2010 provides an assessment of the status of domestic and international fish stocks managed by the Australian Government. It reports on the state of the biomass and the level of fishing mortality for Commonwealth managed (or jointly managed) fish stocks, and provides valuable information to government, industry and the broader community on emerging trends.

The Fishery status report 2010 summarises the latest biological and economic information for 96 stocks, species or groups of species (all referred to as 'stocks'). Stocks are usually assessed if they meet one or more of the following criteria (stocks may also be removed if they fail to meet at least one of these criteria):

- target or key commercial species;
- stock managed under a total allowable catch (TAC);
- stock previously classified as 'overfished' that has not yet recovered to a 'not overfished' state
- byproduct stock of ecological and/ or economic importance—determined on the basis of whether they meet one or more of the following criteria:
 - for several consecutive years or fishing seasons, the total catch (landings and discards) of a byproduct stock is approximately equal to or greater than that of any other stock currently targeted and/or assessed in that fishery or sector;
 - o the value of the total catch landed of a byproduct stock is considered to be an important economic component of that fishery or sector; and
 - o a byproduct species or stock is listed as being at high risk from fishing activity in the ecological risk assessment process for that fishery or sector;
- a species previously considered as a single stock that has been reclassified as multiple stocks to align with species biology and management, as appropriate;
- stock of undifferentiated species managed as a sector within a fishery.

Five classifications of biological stock status are used in the Fishery status reports 2010:

Not overfished refers to the biomass of a fish stock. The biomass is adequate to sustain the stock in the long term.

Overfished refers to the biomass of a fish stock. The biomass may be inadequate to sustain the stock in the long term. The Commonwealth Fisheries Harvest Strategy Policy requires that fish stocks remain above a biomass level at which the risk to the stock is regarded as too high at least 90% of the time.

Not subject to overfishing refers to the amount of fishing. The stock is not subject to a level of fishing that would move the stock to an overfished state.

Subject to overfishing refers to the amount of fishing. The stock is subject to a level of fishing that would move the stock to an overfished state, or prevent it from returning to a not overfished state. The stock is experiencing too much fishing and the removal rate from the stock is unsustainable.

Uncertain refers to the overfished or overfishing status of a fish stock for which there is inadequate information to determine status.

The shark species taken in Australian Commonwealth fisheries that are classified as either overfished or subject to overfishing are presented in Table 2.

Table 2. Sharks identified in the Fishery status report 2010 as overfished or subject to overfishing.

Species	Status
School shark	subject to overfishing / overfished
Gulper sharks (upper slope)	subject to overfishing / overfished
(Centrophorus harrissoni,	
C. moluccensis,	
C. zeehaani)	

Management strategies have been developed that aim to reduce the level of fishing mortality (so these stocks are no longer classified as 'subject to overfishing') and to rebuild the populations (so they are nolonger classified as 'overfished'). Information on these management strategies can be found in the 'Management measures' section in (iii) below.

The 2010 Fishery status report is available at:

http://www.daff.gov.au/abares/publications_remote_content/publication_topics/fisheries_and_aquaculture?sq_content_src=%2BdXJsPWh0dHAIM0EIMkYIMkYxNDMuMTg4LjE3LjIwJTJGYW5yZGwlMkZEQUZGU2VydmljZSUyRmRpc3BsYXkucGhwJTNGZmlkJTNEcGRfZmlzaHN0YXR1czIwMTA5YWJmZjAwMTAxXzExYS54bWwmYWxsPTE%3D

Catch levels for Commonwealth fisheries

Table 3 provides a summary of retained shark catch by trunked weight for Australian Commonwealth managed fisheries based on catch disposal records. The databases housing these data were combined recently and are continually updated to account for mis-codings and late entries. Therefore, there is some variation in a number of the 2007/08 values in this response to Notification 2011/047 compared to those previously reported for Notification 2010/027. For the same reason, the updated data also reveal several additional shark species for 2007/08 that were not included in Australia's response to Notification 2010/027. The catch is recorded by species or species group, and shows that gummy shark, followed by sawsharks, then school shark are the most prominent species or species groups retained by weight for each of the last four years.

Table 3. Shark landings for Commonwealth managed fisheries as identified by catch disposal records (supplied by the Australian Fisheries Management Authority).

Species Name	2007/2008 weight (kg)	2008/2009 weight (kg)	2009/2010 weight (kg)	2010/2011 weight (kg)
Gummy Shark	1,905,715	1,740,320	1,576,873	1,555,793
Sawsharks	257,655	248,802	206,410	245,330
School Shark	266,246	236,329	205,102	219,733
Ornate Angelshark	119,969	88,516	93,160	97,571

	2007/2008	2008/2009	2009/2010	2010/2011
Species Name	weight (kg)	weight (kg)	weight (kg)	weight (kg)
Australian Angelshark	96,137	71,736	69,368	62,943
Shortfin Mako	54,702	66,472	63,823	64,072
Platypus shark (mixed)	31,947	44,668	46,819	51,241
Bronze Whaler	22,897	41,309	52,228	54,569
Broadnose Shark	33,354	35,510	39,450	36,309
Whiskery Shark	29,014	30,911	42,623	29,844
Piked Spurdog	29,120	24,637	22,319	18,016
Draughtboard Shark	18,586	18,463	20,467	14,956
Blue Shark	13,209	22,777	24,266	10,922
Wobbegongs blind nurse carpet & zebra sh	20,715	13,889	14,204	17,959
Dogfishes	11,658	22,395	16,883	14,938
Deepwater dogfish unspecified	5,719	10,683	17,251	12,809
Roughskin dogfish (mixed)	6,786	13,195	10,130	11,294
Greeneye dogfish (discontinued)	10,387	8,143	10,926	11,468
Blacktip shark (mixed)	4,450	20,482	1,497	11,607
Sharks (mixed)	10,482	9,693	7,409	7,810
Thresher Shark	5,249	7,305	9,016	12,849
Smooth Hammerhead	4,862	5,285	13,535	10,644
Whitefin Swell Shark	87		12,881	15,164
Tiger Shark	5,331	8,458	3,275	2,582
Endeavour Dogfish	5,295	6,576	2,508	4,445
Longsnout Dogfish	5,387	4,423	3,729	5,012
Hammerhead sharks	2,006	4,233	2,565	5,005
Oceanic Whitetip Shark	2,814	3,711	3,245	3,247
Whaler and weasel sharks	1,241	6,157	1,153	1,185
Dusky Whaler	222	3,421	2,021	3,665
Angel Sharks	1,966	1,690	1,583	1,515

	2007/2008 weight	2008/2009 weight	2009/2010 weight	2010/2011 weight
Species Name	(kg)	(kg)	(kg)	(kg)
Silky Shark	3,478	284		
Porbeagle	513	1,021	857	770
Sixgill and Sevengill sharks unspecified	1,962	646	90	33
Scalloped Hammerhead		1,658		
Sandbar Shark	248	1,086		
Bull Shark	497	381	225	191
Velvet dogfish		114	9	1,133
Whitetip Reef Shark	1,090			
Sandtiger Shark	180	93	109	385
Grey Reef Shark	326	261		60
Longfin Mako	39		540	65
Catsharks		115	143	362
Whitespotted Spurdog	599		2	8
Australian spotted catshark		445		
Brier Shark	72	6	195	30
Crocodile Shark	4	17	233	38
Smalltooth Cookiecutter Shark	258		2	
Pencil Shark	11	38	58	49
Bluntnose sixgill shark				137
Lantern shark (mixed)	111			
Pacific Sleeper Shark			49	
Prickly shark			38	
Port Jackson Shark	28			
Common Sawshark			3	

Threatened shark species

Several sharks have been assessed under the threatened species provisions of Australia's EPBC Act and found to warrant listing (see Table 4). National recovery plans are in place for a number of these species and others are currently under development or review (required every five years).

Table 4. EPBC Act listed threatened shark species

Category of listing	Species listed	Date listed	
Critically endangered	Grey nurse shark (Carcharias taurus) – eastern population	16 October 2001	Recovery Plan released 2002. Revised Recovery Plan to go out for 3 months public comment in 2012.
	Speartooth shark (<i>Glyphis</i> sp. A)	16 October 2001	Recovery Plan will be finalised in 2012.
Endangered	Northern river shark (<i>Glyphis</i> sp. C)	16 October 2001	Recovery Plan will be finalised in 2012.
	Maugean skate (<i>Raja</i> sp.)	4 March 2004	Conservation Advice – no Recovery Plan required.
Vulnerable	Grey nurse shark (<i>Carcharias taurus</i>) – western population	16 October 2001	Recovery Plan released 2002. Revised Recovery Plan to go out for 3 months public comment in 2012.
	White shark (Carcharodon carcharias)	16 July 2000	Recovery Plan released 2002. Revised Recovery Plan to go out for 3 months public comment in 2012.
	Whale shark (Rhincodon typus)	16 October 2001	Recovery Plan released 2005. Review initiated for revision of Recovery Plan.
	Freshwater sawfish (<i>Pristis microdon</i>)	16 July 2000	Recovery Plan will be finalised in 2012.
	Green sawfish (<i>Pristis zijsron</i>)	7 March 2008	Recovery Plan will be finalised in 2012.
	Dwarf sawfish (<i>Pristis clavata</i>)	20 October 2009	Recovery Plan will be finalised in 2012.
Conservation dependent	School shark (<i>Galeorhinus galeus</i>)	22 January 2009	Rebuilding strategy.

The Convention on the Conservation of Migratory Species (CMS) Appendix listings are automatically incorporated into domestic legislation and protected under the EPBC Act. As a result, it is an offence to kill, injure, take, trade, keep or move protected species in Commonwealth waters. Migratory shark species protected under the EPBC Act include: white shark; whale shark; basking shark; shortfin mako shark; porbeagle; and longfin mako shark (noting that on 15 July 2010, an amendment was made to the EPBC Act to allow recreational fishing of longfin and shortfin mako and porbeagle sharks to occur in Commonwealth waters). For CMS Appendix II listed species, shortfin and longfin makos and porbeagle, commercial fishers may retain these sharks if they are caught dead, and must release them if caught alive.

All Commonwealth-managed fisheries and any State-managed fisheries that operate in Commonwealth waters must be assessed to determine the impacts of fishing operations on cetaceans, listed threatened species and ecological communities, migratory species, and listed marine species under the EPBC Act.

a)iii:

Fishery measures addressing shark sustainability issues

Ecological Risk Management

The Australian Fisheries Management Authority (AFMA) has developed an ecological risk management (ERM) framework for Commonwealth managed fisheries. This involves managing the risks of fishing on the environment by focusing those high risk priorities (species and/or habitats) identified through the ecological risk assessment (ERA) process. ERAs identified species at greatest risk from the pressures of commercial fishing and associated activities.

ERAs have been completed (at least to Level 1) for all of Australia's Commonwealth fisheries. This process was based on the Ecological Risk Assessment for the Effects of Fishing (ERAEF) framework, which is a hierarchical approach going from a qualitative, scoping analysis (Level 1 SICA – Scale Intensity Consequence Analysis), through a semi-quantitative analysis (Level 2 PSA – Productivity Susceptibility Analysis) and finally, if required, to a fully quantitative analysis (Level 3— either Sustainability Assessment for Fishing Effects (SAFE) or a full stock assessment) of assessing risk.

ERAs progress through a number of steps and involve a hierarchy of methodologies. This approach screens out low risk activities and species, and focuses more intensive and quantitative analyses on those species assessed as being at greater environmental risk within Australia's fisheries. Further information on ERA and ERM methodology and individual fishery reports are available at:

http://www.afma.gov.au/managing-our-fisheries/environment-and-sustainability/Ecological-Risk-Management/

Once identified, species that comprise the priority list for each fishery will be managed either through fishery specific arrangements or under one or more of the following policies or measures:

- Commonwealth Fisheries Harvest Strategy Policy and Guidelines;
- Commonwealth Policy on Fisheries Bycatch;
- Bycatch and Discard Program; and
- International plans of action, species recovery plans etc.

This ERM strategy clearly identifies how each species or group of species may be managed under the policies or measures described above.

AFMA is now undertaking the next stage of the ERA process by redoing ERAs for those fisheries that have triggered that requirement.

Chondrichthyan Guide for Fisheries Managers

The overarching objective of the guide is to provide fisheries managers with practical options to mitigate chondrichthyan threatened, endangered, protected and high risk species bycatch. The options provided are applicable over a range of time frames; some may be implemented immediately while others may require more research to fully develop.

The Chondrichthyan Guide for Fisheries Managers was published in September 2009. The guide is publically available at the following link: http://www.daff.gov.au/brs/fisheries-marine/publications/chondrichthyan_guide_for_fisheries_managers_a_practical_guide_for_mitigating_chondrichthyan_bycatch/

Management measures

AFMA has direct requirements pertaining to sharks and commercial fishing. For example, shark finning (the process of cutting off the fins of a shark and discarding the body at sea) is banned in Commonwealth waters. Australian state and territory jurisdictions also have similar measures in place. Similarly, shark livers may not be landed without the body in Commonwealth fisheries. Trip limits on sharks are in place in many Commonwealth and regional fisheries as well. For example, The Western and Eastern Tuna and Billfish Fisheries (WETBF) have set a 20 shark trip limit within the Australian exclusive economic zone. The WETBF have also set a maximum catch of 100 pelagic sharks per vessel per trip outside the Australian exclusive economic zone upon approval of an application. Of those 100 sharks, a maximum of 80 may be blue whaler sharks (Prionace glauca) and a maximum of 20 sharks or rays from the species list: crocodile shark (Psuedocarcharias kamoharai), silky shark (Carcharhinus falciformis), oceanic whitetip shark (Carcharhinus longimanus), smooth hammerhead shark (Sphyrna zygaena), pelagic stingray (Dasyatis violacea), shortfin mako (Isurus oxyrinchus), probeagle shark (Lamma nasus) and thresher shark (Alopias vulpinus). The Indian Ocean Tuna Commission (IOTC) have also set a 20 shark trip limit. Trip limits on sharks prevents targeting of sharks but also limits the amount discarded. Wire tracers are also prohibited, making it easier for sharks to escape by biting off the hook.

AFMA has also developed bycatch work plans for each fishery to directly address bycatch issues, including those pertaining to sharks. These plans are consistent with the Commonwealth Policy on Fisheries Bycatch to manage the impact of fishing on non-target species and in particular to address the level of bycatch in many fisheries. The information contained in the Chondrichthyan Guide for Fisheries Managers has been considered in the development of these work plans.

For sharks assessed as overfished or subject to overfishing in the Fishery status report 2010, a range of targeted management measures are in place to address these concerns.

2010.

Southern and Eastern Scalefish and Shark Fishery (SESSF) upper-slope gulper sharks (3 species of dogfish) are assessed as overfished and subject to overfishing in the Fishery status report 2010. The Upper-Slope Dogfish Management Strategy has been implemented in stages. Stage 1 of the Strategy primarily included new spatial closures and reduced catch limits. These measures were implemented on 1 May 2010. Stage 2 of the Strategy included a further network of spatial closures, the implementation of a research zone and the development of quantitative targets. Closures were implemented on 17 December 2010, targets are included in the Strategy and the Flinders Research Zone Policy commenced on 1 February 2011. This strategy is currently being modified and updated. School shark in the SESSF is assessed as overfished and subject to overfishing in the Fishery status report 2010. A stock rebuilding strategy was developed in accordance with the Commonwealth Fisheries Harvest Strategy Policy which requires formal rebuilding strategies for all species that are below their biomass limit reference point. Measures adopted under the strategy include area

Australia is a member of a number of RFMOs which have adopted the following measures for the conservation and management of sharks:

closures, gear restrictions and selectivity, catch limits, enhanced compliance, a minimum length for retained school shark and processing standards for landing sharks. Further detail about this stock and the Commonwealth Fisheries Harvest Strategy Policy is provided in the Fishery status report

- The Western and Central Pacific Fisheries Commission (WCPFC) adopted the "Conservation Management Measure for Sharks in the Western and Central Pacific Ocean" 2006 which was revised in 2010 (2010-07).
- At the ninth session of the Indian Ocean Tuna Commission (IOTC), Resolution 05/05
 "Concerning the conservation of sharks caught in association with fisheries managed by the
 IOTC" was adopted. IOTC has also adopted Resolution 10/12 on the Conservation of Thresher
 Sharks (Family Alopiidae) caught in association with fishers in the IOTC area of competence.
- The Commission for the Conservation of Antarctic Marine Living Resources (CCAMLR) adopted Conservation Measure 32-18 in 2006.
- While the Commission for the Conservation of Southern Bluefin Tuna (CCSBT) has not adopted shark-specific or bycatch-specific conservation measures, CCSBT authorized vessels operating in the convention areas of IOTC or WCPFC abide by the shark measures adopted by the respective Commissions.

Further, Australia adopted the Regional Plan of Action to Promote Responsible Fishing Practices including Combating IUU Fishing in the Region (RPOA), in May 2007, with ten other countries from the south-east Asia region. An effective International Monitoring, Control and Surveillance (MCS) system is a key component of a robust fisheries management regime. Australia continues to work with member countries to develop effective MCS networks and to identify areas where members can work together to deter IUU fishing in the region. Given that one of the primary targets for IUU fishing ventures were (and continues to be) shark fin, the RPOA contributes to the effort to reduce the take, mortality and/or trade of vulnerable threatened shark species.

Australian states and the Northern Territory also have complementary measures as outlined in the table below.

Victoria	Total protection of white shark - listed as protected aquatic biota (PAB) under Fisheries Act 1998.
	Total closure on the use of shark monofilament gillnets and longlining in open
	coastal waters.
	Requirement to land shark carcasses with the fins attached. Delivering limits of two school and grammy sharks for commercial (regreational).
	 Daily trip limits of two school and gummy sharks for commercial/recreational fishers.
	 Daily bag limit of one elephant shark (Callorhinchus milii) and all other shark species for recreational fishers.
	A person must not in, on or next to Victorian waters, land or cause to be landed
	shark or elephant fish in any form other than in the form of a carcass.
Western	Shark species which are listed as 'totally protected fish' are prohibited from
Australia	take and carry significant penalties. These sharks include the white shark, speartooth shark and whale shark.
	Regulations that prohibit shark finning.
	Significant permanent spatial closure to commercial 'shark fishing' in the northwest of Western Australia.
	Restrictions on longline hook sizes and prohibition on the use of metal wire
	traces on lines.
Northern	All Pristidae (sawfish) and Glyphis species are protected from fishing in
Territory	Northern Territory (NT) waters.
,	Performance measures and trigger limits are in place for all NT Fisheries,
	including the Offshore Net and Line Fishery (ONLF) which harvests sharks. The
	performance of the fishery against these limits and measures is reviewed annually.
	An ecological risk assessment has been conducted for the ONLF.
	 Stock assessments of those species harvested by the ONLF are conducted every three years.
	 In those fisheries that are permitted to harvest shark there are specific trip limits and shark fin ratio requirements.
	There are strict effort limits – including restrictions on individual fishing days
	permitted per operator and specific gear limitations.
	The commercial fishing industry has implemented an environmental
	management system for the shark fishery which includes comprehensive
	information on release strategies for protected species including sawfish.
	All commercial fishermen are required to attend a fisheries interview where they are advised of the reporting and release requirements for protected.
	they are advised of the reporting and release requirements for protected
South	 species. Ecologically sustainable development risk assessments as part of the
	development of all fishery management plans
Australia	 Legislation (Fisheries Management Act 2007) prohibiting taking, injuring,
	harming protected species.
	 Restrictions on gear to avoid capture (e.g. wire trace used with certain hook
	size) and promote survival (e.g. attendance, soak time).
	Minimum legal size limits and daily recreational bag and boat limits (e.g. for
	school shark).
L	1

New South Wales	 It is an offence to harm or possess threatened species of sharks (e.g. white and grey nurse shark) or parts thereof. Protection measures have been in place in various forms since the 1980s. These measures and recovery building strategies continue to be an effective means of reducing mortality of threatened sharks and to recover their depleted stocks.
Queensland	 Measures include: No take of white shark, grey nurse shark, sandtiger shark, sawfish, speartooth shark. Restricted take (in-possession limits) of grey reef shark, white tip reef shark, guitarfish and shovelnose rays. A total allowable commercial catch for sharks and rays and limited licensing of authorities to take commercial quantities of shark and ray. Maximum size limit on sharks and net mesh restrictions that limit bycatch of large sharks. Net attendance rules (ie. by law, net fishers are required to be 'in attendance' at the net while fishing). Anti-finning regulations (i.e. no discarding of finned carcasses at sea).

a) iv: See Export Accreditation under Trade in Shark Species in (i) above.