Table I
Status of highly migratory fish stocks reported in the 2006, 2010, 2016 and 2023 reports of the Secretary-General

Species		Geographical area	2006 report	2010 report	2016 report	2023 report
Tuna and tuna-like species	Bluefin tuna	East Atlantic Ocean	Overfished		Probably overfished	Maximally sustainably fished
		West Atlantic Ocean	Overfished		Fully or overfished	Maximally sustainably fished
		Southern hemisphere		Overfished		Recovered to interim management targets
		Pacific Ocean	Maximally sustainably fished		Overfished	
	Albacore	South Atlantic Ocean	Maximally sustainably fished	Overfished	Possibly overfished	Maximally sustainably fished
		North Atlantic Ocean	Overfished			Maximally sustainably fished
		South Pacific Ocean	Maximally sustainably	y fished		
		North Pacific Ocean	Maximally sustainably	y fished		
		Indian Ocean	Probably non- maximally sustainably fished	Probably maximally	sustainably fished	

Species		Geographical area	2006 report	2010 report	2016 report	2023 report
		Mediterranean Sea	Not known			Overfished
	Bigeye tuna	East Pacific Ocean	Overfished		Maximally sustainab	ly fished
		West Pacific Ocean	Probably maximally s	ustainably fished	Overfished	Maximally sustainably fished
		Indian Ocean	Probably maximally s	Probably maximally sustainably fished		
		Atlantic Ocean	Probably maximally s	ustainably fished		Overfished
	Yellowfin tuna	Indian Ocean		Probably maximally sustainably fished	Overfished	
		Atlantic Ocean	Close to or being Sustainably fished		Overfished	Maximally sustainably fished
		Pacific Ocean	maximally sustainably fished	Maximally sustainably fished		Maximally sustainably fished
		Other oceans		Maximally sustainably fished		No assessment
	Skipjack tuna	Pacific Ocean	Underfished	Moderately exploited	Underfished	
		Indian Ocean	Probably non-maxima	lly sustainably fished	,	Maximally sustainably fished
		Atlantic Ocean	Uncertain	Close to maximally su	stainably fished	Likely to be close to maximally sustainably fished
	Blue marlin	Atlantic Ocean	Likely to be overfishe	d		•

Species		Geographical area	2006 report	2010 report	2016 report	2023 report	
Tuna and tuna-like species		East Pacific Ocean	Maximally sustainably	fished		Maximally sustainably fished	
		Indian Ocean				Close to maximally sustainably fished	
	White marlin	Atlantic Ocean	Likely to be overfishe	d			
	Striped marlin	North Pacific Ocean		Maximally sustainably fished	Overfished		
		South-western Pacific Ocean		Likely to be overfishe	;d		
		East Pacific Ocean	Underfished	1	Likely maximally s	ustainably fished	
		Indian Ocean				Overfished	
	Sailfish	Atlantic Ocean			Overfished	Eastern stock is overfished Western stock is maximally sustainably fished	
	Billfish	Indian Ocean	Not known	.1	•	Most stocks are maximally sustainably fished, other than striped marlin, marlin	
	Swordfish	North Atlantic Ocean	Maximally sustainably fished			Maximally sustainably fished	

Species			Geographical area	2006 report	2010 report	2016 report	2023 report
			South Atlantic Ocean				Less certain than North Atlantic, but indicators suggest a lower exploitation rate
			South-east Pacific Ocean	Maximally sustainably fished			Maximally sustainably fished (South Pacific)
			Western and central north Pacific Ocean			Probably non- maximally sustainably fished	Probably underfished
			North-east Pacific Ocean	Underfished	Probably non- maximally sustainably fished		No Assessment
			Mediterranean Sea		Overfished		Overfished
			Indian Ocean	Intensification of fisheries targeting swordfish	Maximally sustainably fished		Underfished
	Kawakawa		Indian Ocean				Maximally sustainably fished
Oceanic sharks	Bluntnose sixgill sharks	Hexanchus griseus		No assessments	No assessments but pr or overfished globally	udently considered max	ximally sustainably fished
Oceanic sharks	Basking sharks ^{a,b}	Cetorhinus maximus		Probably overfished globally	Overfished globally		Probably overfished globally with some areas depleted

Species			Geographical area	2006 report	2010 report	2016 report	2023 report			
		Alopias pelagicus ^c	North-west Indian Ocean, central Pacific Ocean							
	Thresher sharks (family Alopiidae) ^c Alopias superciliosus (family Alopiidae) ^c Alopiidae) ^c Alopias superciliosus (Indian Ocean, west and central Pacific Ocean, north-east Pacific Ocean and north Atlantic Ocean Alopias (Off the west Indian Ocean, west and central Pacific Ocean, north-east Pacific Ocean and north Atlantic Ocean					ed globally				
		Alopias vulpinus ^c	Off the west coast of the United States							
	Whale shark ^{a,c}	Rhincodon typus	Indian Ocean, west Pacific Ocean	Prudent to be considered being maximally sustainably fished globally	Continues to be uncertain, but considered maximally sustainably fished globally	Remains uncertain in most areas and is considered maximally sustainably fished globally				
Oceanic sharks	Silky shark	Carcharhinu s falciformis ^c	Oceanic and coastal, circumtropical distribution and is most common offshore	Not known	Not known, but probably maximally sustainably fished globally	Overfished in the western central Pacific Ocean and probably maximally sustainably fished in other regions	Overfished in the western central Pacific Ocean, indication of overexploitation in the Eastern Pacific Ocean and Indian Ocean and likely overfished globally			

Species			Geographical area	2006 report	2010 report	2016 report	2023 report
	Night shark	Carcharhinu s signatus	Western Atlantic Ocean from the United States of America to Argentina and in the eastern Atlantic Ocean from Senegal to northern Namibia	Not known	Considered at least maximally sustainably fished in the north-eastern Atlantic Ocean, not known in other parts of its range		Considered at least maximally sustainably fished in the northeastern Atlantic Ocean, not known in other parts of its range, and considered either maximally sustainably fished or endangered by the IUCN
Oceanic sharks		Whitetip shark (Carcharhin us longimanus) ^a	In tropical and warm-temperate waters of the Atlantic Ocean, possibly in the Mediterranean Sea, the west Indian Ocean and the Pacific Ocean	Not known		Overfished in the western central Pacific Ocean, not known in other areas	Overfished in the western central Pacific Ocean, the global population is considered critically endangered
		Blue shark (Prionace glauca)	Worldwide in temperate and tropical oceanic waters	In 2003, more than 30,000 tons were recorded	Prudent to consider maximally sustainably fished in the Atlantic and eastern Pacific oceans, but not known in other parts of its range	Considered non-maximally sustainably fished in the Atlantic and western Pacific oceans, and other parts of its ranges remains unknown	Unlikely to be overfished in the Atlantic, Pacific and Indian oceans
		Winghead (Eusphyra blochii)	A global distribution mostly in warm waters	Not known			

Species			Geographical area	2006 report	2010 report	2016 report	2023 report
	Hammerhe ad, bonnethead or	Scalloped bonnethead (Sphyrna corona)	A global distribution mostly in warm waters	Not known		l	I
	scoophead sharks (family Sphyrnidae	Whitefin hammerhead (Sphyrna couardi)	A global distribution mostly in warm waters	Not known			
		Scalloped hammerhead (Sphyrna lewini) ^a	A circumglobal distribution in coastal and semi-oceanic warm temperate and tropical seas	Local depletion remains a serious concern	Not known	Not known, but likely fished or overfished	maximally sustainably
		Scoophead (Sphyrna media)	A global distribution mostly in warm waters	Not known			
Oceanic sharks		Great hammerhead (Sphyrna mokarran) ^a	A global distribution mostly in warm waters	Not known			Probability of overfishing across stock components in Atlantic Ocean Status unknown in the Western Central Pacific Ocean
		Bonnethead (Sphyrna tiburo)	A global distribution mostly in warm waters	Not known			•

Species			Geographical area	2006 report	2010 report	2016 report	2023 report
		Smalleye hammerhead (Sphyrna tudes)	A global distribution mostly in warm waters	Not known	L	I	I
		Smooth hammerhead (Sphyrna zygaena) ^a	In temperate waters in the northern and southern hemispheres and in the tropics	Not known			Probably overfished in the Atlantic Ocean. Status not known in the western and central Pacific Ocean
	Mackerel sharks	Great white shark (Carcharodo n carcharias) ^a , b,c	Amphitemperate and found in coastal and offshore areas of continental and insular shelves	Not known			
		Shortfin mako (Isurus oxyrinchus) ^c	Coastal and oceanic circumglobal species found in temperate and tropical waters	Overfished in the north Atlantic Ocean, not known in other regions	Probably overfished in the northern Atlantic Ocean and maximally sustainably fished in the eastern Pacific Ocean, not known in other areas	Probably maximally sustainably fished in the north and south Atlantic and in the eastern Pacific oceans, not known in other areas	North Atlantic stock is overfished and the southern stock is possibly overfished The North Pacific stock is likely not overfished The status is not known for stocks in the Indian Ocean and other areas
		Longfin mako (Isurus paucus) ^c	Common in the west Atlantic Ocean and possibly in the central Pacific Ocean	Not known			

Species			Geographical area	2006 report	2010 report	2016 report	2023 report
		Salmon shark (Lamna ditropis)	In cool waters of the north Pacific Ocean	Considered heavily fish by-catch	ned even though most of	the catch is discarded	Populations in the Northeast and Northwest Pacific are probably stable.
							Bycatch in the Eastern and Western Central Pacific has been significantly reduced and in the Northeast and Eastern Central Pacific appears to be at low levels.
Oceanic sharks		Porbeagle (Lamna nasus) ^{a,c}	North Atlantic Ocean and in a circumglobal band of temperate water of the south Atlantic, south Indian, south Pacific and Southern oceans	Overfished in the north and west Atlantic Ocean	Overfished in the west in the Southern Ocean	ern and the north-east At	lantic Ocean, not known
Other highly migratory species	Pomfrets	Include 8 genera and 21 species	In temperate and tropical waters of the Atlantic, Indian and Pacific oceans	Maximally sustainably fished in the east Indian Ocean and non-maximally sustainably fished in the south-west Pacific Ocean	Underfished to maximally sustainably fished	Unlikely to be overfish	ed

Species			Geographical area	2006 report	2010 report	2016 report	2023 report	
	Sauries	Atlantic saury (Scombereso x saurus)	Near the surface in the north Atlantic Ocean, in the Baltic Sea and throughout the Mediterranean Sea	Not known, but unlike	Not known, but unlikely to be overfished			
		Pacific saury (Cololabis saira)	North Pacific Ocean	Not known, but unlike	y to be overfished		High certainty that the stock is overfished	
		Saury (Cololabis adocetus)	East Pacific Ocean	Not known, but unlike	y to be overfished		No assessment	
		King gar (Scombereso x saurus scombroides)	Atlantic, Indian and Pacific oceans	Not known, but unlike	y to be overfished		No assessment	
	Dolphinfis h	Common dolphinfish (Coryphaena hippurus)	In most warm and temperate seas (20°C to 30°C) in the Atlantic Ocean, including the Mediterranean Sea, the west and east Indian Ocean and in the west central Pacific Ocean	Not known, but unlike	y to be overfished			

Species		Geographical area	2006 report	2010 report	2016 report	2023 report
	(Coryphaena	Worldwide distribution in tropical and subtropical seas	Not known, but unlike	ly to be overfished	I	I

Table II

Status of the selected straddling fish stocks reported in the 2006, 2010, 2016 and 2023 reports of the Secretary-General

Geographic areas		Species	2006 report	2010 report	2016 report	2023 report
Pacific	North-west Pacific	Alaska (walleye) pollock (Theragra chalcogra mma)	Maximally sustainably fished	Overfished		Of the three management units in the stock in the Western Bering Sea, 2 are overfished and 1 maximally sustainably fished
		Flying squid (Ommastre phes bartrami) Boreal clubhook squid (Onychoteu this borealijapo nica)	Non-fully to maximally sustainably fished and in some cases recovering Non-fully to maximally sustainably fished and in some cases recovering	Non-fully to maximally sustainably fished		Unlikely to be currently overfished From 2019 assessment, Japanese flying squid may be overfished but all other stocks are maximally sustainably fished.
		Boreopacif ic armhook squid (Gonatopsi s borealis)	Non-fully to maximally sustainably fished and in some cases recovering			

Geographic areas		Species	2006 report	2010 report	2016 report	2023 report
		Pacific Ocean perch (Sebastes alutus)	Overfished			
		Pelagic armourhea d (Pseudope ntaceros rishardsoni	Not known			
		Alfonsino (Beryx splendens)	Not known			Not known Probably overfished or depleted, based on catch declines
	North-east Pacific	Jack mackerel (Trachurus picturatus symmetricu s)	Underfished			Stocks in the north-east and north-west Pacific are maximally sustainably fished
		Alaska (walleye) pollock (Theragra chalcogra mma)	Maximally sustainably fish	hed		Stocks in the eastern Bering Sea and Aleutian Islands region are maximally sustainably fished

Geographic areas		Species	2006 report	2010 report	2016 report	2023 report
	Western central Pacific		No information on straddl	ing stocks		
	Eastern central Pacific	Giant squid (Dosidicus gigas)	Underfished to maximally	sustainably fished	Not Overfished	Likely maximally sustainably fished to overfished
		Jack mackerel (Trachurus spp.)	Underfished to maximally sustainably fished	Underfished		
		Spanish mackerel (Scomber japonicus)	Underfished to maximally	sustainably fished	Not Overfished	Likely maximally sustainably fished to overfished
	South-west Pacific	Orange roughy (Hoplostet hus atlanticus)	Maximally sustainably fis	hed to overfished	Overfished	
		Oreo dories (Allocyttus verrucosus, Allocyttus niger, Neocyttus rhomboidal is, Pseudocytt	Maximally sustainably fis	hed to overfished		

Geographic areas		Species	2006 report	2010 report	2016 report	2023 report
		us maculatus)		L	L	L
		Hoki (Macruron us novaezelan diae)	Maximally sustainably fis	hed to overfished	Maximally sustainably fished	
		Narrow- barred Spanish mackerel (Scombero morus commerson	Underfished	Likely to be non-maximally sustainably fished	Underfished	Not known
		Flying squids	Underfished			Not known
		Flying fish	Underfished	Likely to be non-maximally sustainably fished	Underfished	Not known
	South-east Pacific	Jumbo squid (Dosidicus gigas)	Underfished		Maximally sustainably fished	
		Chilean jack mackerel (Trachurus picturatus murphyi)	Fully or overfished	Maximally sustainably fished to overfished	Overfished	Maximally sustainably fished to overfished

Geographic areas		Species	2006 report	2010 report	2016 report	2023 report
		Spanish mackerel (Scomber japonicus)	Catches are small	Underfished to maximally sustainably fished	Maximally sustainably fished	Overfished
Atlantic	North-west Atlantic	Cod (Gadus morhua)	Overfished		Maximally sustainably fished to overfished	Overfished
		American plaice (Hippoglos soides platessoide s)	Overfished		Maximally sustainably fished to overfished	Maximally sustainably fished to overfished
		Redfish (Sebastes marinus)	Overfished		Maximally sustainably fished	Overfished
		Witch flounder (Glyptocep halus cynoglossu s)	Overfished		Maximally sustainably fished or overfished	Overfished
		Atlantic halibut (Hippoglos sus hippogloss us)	Overfished		•	Maximally sustainably fished
		Black halibut	Overfished			No assessment

Geographic areas		Species	2006 report	2010 report	2016 report	2023 report
		(Reinhardti us hippogloss oides)				
		Yellowtail flounder (Pleuronect es ferrugineus)	Maximally sustainably fish	hed		Maximally sustainably fished to overfished
		Grenadiers (Macrourid ae)	Not known	Maximally sustainably fished to	o overfished	Not known
		Capelin (Mallotus villosus)	Underfished	Overfished		
		Shrimp (Pandalus borealis)	Maximally sustainably fished	Maximally sustainably fished to overfished	Overfished	Overfished to maximally sustainably fished
	North-east Atlantic	Blue whiting (Micromesi stius poutassou)	Overfished		Maximally sustainably fished	
		Oceanic redfish (Sebastes mentella)	Maximally sustainably fished	Overfished		Maximally sustainably fished

Geographic areas	Species	2006 report	2010 report	2016 report	2023 report
	Cod (Gadus morhua)	Overfished	Maximally sustainably fished	Maximally sustainably fished to overfished	Maximally sustainably fished to overfished
	Haddock (Melanogr ammus aeglefinus)	Overfished	Maximally sustainably fished	Maximally sustainably fished to overfished	Maximally sustainably fished
	Black halibut (Reinhardti us hippogloss oides)	Overfished		Maximally sustainably fished	
	Atlanto- Scandian (Norwegian spring- spawning) herring (Clupea harengus)	Maximally sustainably fis	hed		
	Mackerel (Scomber scombrus)	Overfished		Maximally sustainably fished	
	Horse mackerel (Trachurus trachurus)	Uncertain	Not known	Maximally sustainably fished	Maximally sustainably fished to overfished

Geographic areas		Species	2006 report	2010 report	2016 report	2023 report
	Eastern central Atlantic		No significant fisheries			
	West central Atlantic		No significant fisheries			
	South-west Atlantic	Shortfin squid (Illex argentinus)	Maximally sustainably fish	ned	Maximally sustainably fished to overfished	Maximally sustainably fished
		Common squid (Loligo spp.)	Not known			
		A flying squid (Martialia hyadesi of the Ommastrep hidae family)	Not known			
		Hakes (Merlucciu s hubbsi and Merluccius australis)	Maximally sustainably fish	ned to overfished		Overfished
		Southern blue whiting	Maximally sustainably fished to overfished	Overfished Overfished		

Geographic areas	Species	2006 report	2010 report	2016 report	2023 report
	(Micromesi stius australis)				
	Pink cusk eel (Genypteru s blacodes)	Underfished to maximally sustainably fished	Maximally sustainably fished to overfished	Overfished Overfished	
	Patagonian toothfish (Dissostich us eleginoides)	Underfished to maximally sustainably fished	Maximally sustainably fished	Maximally sustainably fished to overfished	Maximally sustainably fished
	Tadpole mora (Salilota australis)	Not known			
	Patagonian grenadier (Macruron us magellanic us)	Underfished	Underfished to maximally sustainably fished	Maximally sustainably fished	Overfished to maximally sustainably fished
	Grenadier (Macrouru s whitsoni)	Not known			
	Antarctic cod (Nototheni a rossii)	Not known			

Geographic areas		Species	2006 report	2010 report	2016 report	2023 report
		Rockcod (Nototheni a spp.)	Not known			
		Southern hake (M. australis)				Overfished
		Argentinia n hake (M. hubbsi)				Overfished
		Sharks	Not known			
		Rays	Not known			
		Patagonian squids		Maximally sustainably fished		
	South-east Atlantic	Alfonsinos (family Bercycidae	Not known			
		Orange roughy	Not known			
		Horse mackerel (Trachurus spp.)	Maximally sustainably fished	Underfished to overfished	Maximally sustainably fished to	overfished
		Lanternfish (family Myctophid ae)	Not known			

Geographic areas	Species	2006 report	2010 report	2016 report	2023 report
	Mackerel (Scomber spp.)	Not known			
	Skates (family Rajidae)	Not known			
	Sharks (order Selachimor pha)	Not known			
	Armourhea d (Pseudope ntaceros spp.)	Not known			
	Cardinal fish (Epigonus spp.)	Not known			
	Deep sea red crab (Chaceon maritae)	Not known			
	Octopus (family Octopodid ae)	Not known			
	Squids (family	Not known			

Geographic areas	Species	2006 report	2010 report	2016 report	2023 report
	Loliginidae)				
	Wreckfish (Polyprion americanus)	Not known			
Indian Ocean	Deep-water snapper	No significant fisheries			
Southern Ocean	Antarctic krill areas 48 and 58 (Euphausia superba) Underfished in FAO areas 48 and 58				
	Lanternfish (Electrona carlsbergi)	Underfished in FAO area 48	Underfished		Probably underfished
	Sevenstar flying squid (Martialia hyadesi)	Underfished in FAO area 48	Underfished	Not known	
	Crab (Paralomis spinosissim a and P. formosa)	Underfished in FAO area 48	Underfished	Not known	
	Patagonian toothfish (Dissostich us	Considered overfished in parts of FAO area 58 and maximally sustainably fished in FAO area 48	Maximally sustainably fished to overfished	Maximally sustainably fished	

Geographic areas	Species	2006 report	2010 report	2016 report	2023 report
	eleginoides)	and other parts of FAO area 58			
	Mackerel icefish (Champsoc ephalus gunnari)	Maximally sustainably fished in FAO areas 48 and 58	Overfished		Overfished
	Marbled rockcod (Nototheni a rossii)	Uncertain	Underfished		No assessment
	Lanternfish (Myctophid ae)				Probably non- maximally sustainably fished in all FAO Areas
	Antarctic rockcod (Trematom us spp.)		Overfished		
	Blackfin icefish (Chaenoce phalus aceratus)		Overfished		
	Antarctic toothfish (D. mawso ni)		Maximally sustainably fished to	o overfished	Maximally sustainably fished

Geographic areas	Species	2006 report	2010 report	2016 report	2023 report
Mediterrane an Sea	Giant red shrimp (Aristaeom orpha foliacea)	Not known		Considered overfished in the western Mediterranean Sea	
	Blue and red shrimp (Aristeus antennatus)	Not known		Considered overfished in the western Mediterranean Sea	Considered overfished in the western Mediterranean Sea, status not known in the eastern Mediterranean Sea
	Rose shrimp	Maximally sustainably fished		Considered overfished in some zones	Maximally sustainably fished to overfished depending on the zone
	Hake (Merlucciu s merluccius)	Overfished		Considered overfished in some zones	Maximally sustainably fished to overfished depending on the zone
	Sardines (Sardina pilchardus)	Underfished to overfished, depending on the zone	Underfished to overfished	Maximally sustainably fished to overfished	Maximally sustainably fished to overfished depending on the zone
	Anchovy (Engraulis encrasicolu s)	Underfished to overfished, depending on the zone	Maximally sustainably fished to overfished, depending on the zone		е