ANNEX A

SIOFA CMM 2016-02 Data Standards:				
Information need	**Verified through EM**		**Information need**	**Verified through EM**
Trip Details			**For Longline fishing activities ONLY**	
Trip Number	Yes		Longline Description	Yes
Cruise details (start and end dates – YYYY.MON.DD)	Yes		Longline Type (FFSSCV)	Yes
Date report is generated (UTC)	Yes		Period in which the gear was used (YYYY.MON.DD)	Yes
Current vessel flag State (ISO 3-apha)	No		Start and end date (YYYY.MON.DD)	Yes
Previous flag (if any) (ISO 3-apha)	No		Target Species (FAO species code)	No
Name of vessel	Yes		Main Line	No
Owner/Charterer	No		Material	No
Name of the Captain	No		Diameter (mm)	No
Name of the Fishing Master	No		Integrated Wt (g/m)	No
Number of Crew	No		Branch Lines	No
Vessel Registration number (flag State)	Yes		Material	No
International radio call sign (if any)	No		Length (M)	Maybe*
Lloyd's / IHS Fairplay /IMO Number (if allocated)	Yes		Spacing (m)	No
Previous Names (if known)	No		Hooks	No
Port of registry (UNLOCODE)	No		Type	No
Port of Landing (UNLOCODE)	Yes		Make	No
Type of vessel (use appropriate ISSCFV codes, Annex F)	Yes		Total length (mm)	No
Type of fishing method(s) (use appropriate ISSCFG codes, Annex E)	Yes		Shank (mm)	No
Length (m)	No		Gape (mm)	No
Beam (m)	No		Throat (mm)	No
Gross Tonnage – GT (to be provided as the preferred unit of tonnage), Gross registered tonnage – GRT (to be provided if GT not available; may also be provided in addition to GT)	No		Front length (mm)	No
Power of main engine(s) (kilowatts)	No		Usual setting position	Yes
Hold capacity (m3)	No		Line off bottom (m)	No
Fish Meal Hold Capacity (m3)	No		Hooks off bottom (m)	No
Other Hold Capacity (m3)	No		Method of baiting (manual/automatic)	Yes
Net monitoring cable used (Yes/No)	Yes		Automatic baiting equipment (make and model)	No

Record of the equipment on board which may affect fishing power factors (navigational equipment, radar, sonar systems, weather fax or satellite weather receiver, sea-surface temperature image receiver, Doppler current monitor, radio direction finder), where practical	No		Hook sinkers	No
			Size (g)	No
Observer Details			Position from hook (mm)	No
Observer name and ID	N/A		Offal dumping position (port, starboard, stern)	Yes
Nationality (ISO 3-apha)	N/A		longline setting position (port, starboard, stern)	Yes
Employing organisation	N/A		Offal dumping during hauling (never, occasionally, always)	Yes
Contact name in organisation (Address/email/fax)	N/A		Propeller rotation direction (clockwise/anti-clockwise)	No
Boarding location (UNLOCODE, if applicable or Latitude/Longitude)	N/A			
Boarding Date (UTC:YYYY.MON.DD)	N/A		**Detail the weight and distance between the line weights for the longline system used**	
Disembarkation location (UNLOCODE, if applicable or Latitude/Longitude)	N/A		Single (Auto) Line (kg:m)	No
Disembarkation date (UTC:YYYY.MON.DD)	N/A		Double (Spanish) Line (kg:m)	No
Time Zone (UTC +-)	N/A		Trotline (vertical droppers/trots attached to a mainline) (kg:m)	No
Length Frequency Data			**General Streamer Line Description**	
Representative and randomly sampled length-frequency data shall be collected for the target species (FAO species code)	Maybe*		Vessel equipped with a streamer line (y/n)	Yes
Where possible, representative and randomly sampled length-frequency data shall be collected for other main by-catch species.	Maybe*		Number of streamer lines regularly set	No
Length data shall be collected and recorded at the most precise level appropriate for the species (cm or mm and whether to the nearest unit or unit below) and the type of measurement used (total length, fork length, or standard length) shall also be recorded.	Maybe*		Streamer line position (port, starboard, stern)	Yes
Where possible, total weight of length-frequency samples should be recorded, or estimated and the method of estimation recorded	No		Streamer line length (m)	No
Where possible, Observers should determine and record sex of measured fish to generate length-frequency data stratified by sex	No		Streamer length min/max (m)	No
			Attached height above water (m)	No

Biological Sampling			Distance between streamers (m)	No
			Number of streamers	Yes
Species			Streamer design (single or paired)	No
Length (mm or cm), with record of the type of length measurement used.	Maybe*		Aerial extent of line (m)	No
Skates and rays:			Method used to assess aerial extent	
• maximum disk width shall be measured	Maybe*		Streamer material	Yes
Sharks	Maybe*		Streamer line diameter (mm)	No
• Appropriate length measurement to be used should be selected for each species. As a default, total length should be measured.	Maybe*		Streamer colours	Yes
Weight (kg)	Maybe*		Streamer line over bait entry position? (y/n/u)	Yes
Sex (male, female, immature, unsexed)	Maybe*		Distance from stern to bait entry point (m)	No
Maturity stage (and criteria/schedule used)	No		Towed object (Y/N)	Yes
Gonad weight (g)	No		Horizontal distance from bait entry point to streamer line (m)	No
Otoliths	No			
			Daily setting observations	
Incidental capture of seabirds, mammals turtles and other species of concern			Set Number (as referenced in catch and effort log)	Yes
The following data shall be collected for all seabirds, mammals, turtles and other species of concern caught in fishing operations:			Set Type: Research or Commercial (R/C)	Yes
			Longline Type Code (FSSCV)	Yes
Species (identified taxonomically as far as possible, or accompanied by photographs if identification is difficult) and size	Yes		Trotline cetacean exclusion device used (Y/N)	Yes
Estimated species abundance around fishing vessel	Yes		Date of observation (YYYY/MON/DDy)	Yes
Species interactions with fishing gear	Yes			
Count of the number of each species caught per tow or set	Yes		**Setting information**	
Fate of bycatch animal(s) (retained or released/discarded)	Yes		Vessel setting speed (knots)	Yes
If released, life status (vigorous, alive, lethargic, injured, dead) upon release	Yes		Number sets unobserved since last set	Yes
If injured, what was the cause of injury?	Yes			
If dead, then collect information or samples for onshore identification in accordance with pre-determined sampling protocols. Where this is not possible, observers may be required to collect sub-samples of identifying parts, as specified in biological sampling protocols	No		**Start and End setting for each haul**	

Record the type of interaction (hook/line entanglement/warp strike/net capture/other) if other, describe	Yes		Date (YYYY/MON/DD)	Yes
Sex of each individual for taxa where this is feasible from external observation, e.g. pinnipeds, small cetaceans or Elasmobranchii species	Maybe*		Time (hh:mm)	Yes
identify any circumstances or actions that may have contributed to the bycatch event? (E.g. tori line tangle, high levels of bait loss)	Yes		Latitude	Yes
			Longitude	Yes
Tag Recoveries			Bottom Depth (m)	Yes
The following data shall be collected for all recovered fish, seabird, mammal or reptile tags if the organism is dead, to be retained, or alive:			Total length of longline set (km)	Maybe*
			Total number of hooks for the set	No
Name of observer	No			
Name of vessel	No		**For each Observation**	
International radio call sign (if any)	No		Start date (YYYY.MON.DD)	Yes
Vessel flag State (ISO 3-apha)	No		Start time (hh:mm)	Yes
Collect, label (with all details below) and store the actual tags for later return to the tagging agency	No		End date (YYYY.MON.DD)	Yes
Species from which tag recovered	Yes		End time (hh:mm)	Yes
Tag colour and type (spaghetti, archival)	Yes			
Tag numbers	No		**Details of Longline Setting**	
Date and time of capture (UTC)	No		Main line length (m)	Maybe*
Location of capture (Lat/Lon, to the nearest 1 minute)	Yes		Number of hooks set	No
Animal length / size (cm or mm) with description of what measurement was taken (such as total length, fork length, etc)	Maybe*		Number of Baskets/Magazines Set	Yes
Sex (F=female, M=male, I=indeterminate, D=not examined)	Maybe*		Number of hooks per Basket/Magazine	No
Whether the tags were found during a period of fishing that was being observed (Y/N)	Yes		Percentage hooks baited	No
			Distance between branches (m)	No
Hierarchies for Observer Data collection			Distance of hooks off bottom (m)	No
Fishing Operation Information	Yes		Bait species (FAO species code)	Yes
All vessel and tow / set / effort information.	Yes		Deck lights during setting (On, Off)	Yes
			Streamer lines used (Yes, No)	Yes
Reporting of Catches	Yes		Number of streamer lines used	Yes

Record time, weight of catch sampled versus total catch or effort (e.g. number of hooks), and total numbers of each species caught	Yes		Offal dumping during setting (Yes, No)	Yes
Identification and counts of seabirds, mammals, reptiles (e.g. turtles), sensitive benthic species and vulnerable species	Yes		Bait entry position (Port, Starboard, Stern)	Yes
Record numbers or weights of each species retained or discarded	Yes			
Record instances of depredation, where appropriate	No		**Daily hauling observations**	
			Set number	Yes
Biological Sampling			Date of observation (YYYY.MON.DD)	Yes
Check for presence of tags	No			
Length-frequency data for Target species (FAO species code)	Maybe*		**Hauling Information**	
Basic biological data (sex, maturity) for Target species (FAO species code)	No		Number of hooks observed for seabird and fish by-catch (tally period)	Yes
Length-frequency data for main by-catch species	No		Offal dumped during hauling (Yes / No)	Yes
Otoliths (and stomach samples, if being collected) for Target species (FAO species code)	No			
Basic biological data for by-catch species	No			
Biological samples of by-catch species (if being collected)	No		**Gear lost**	
Take photos	Yes		Number of sections lost	No
			Number of hooks lost that were attached to lost sections of the longline	No
For trawl fishing activities ONLY			Number of other hooks lost (excluding hooks attached to lost sections)	No
Gear details	No		**Observed catch composition**	
Net ID	No		Was Haul observed for fish/invertebrate by-catch (Y/N):	Yes
Net type (ISSFCV)	No		Estimate percentage of the haul observed for by-catch (%)	Yes
Headrope length (m)	No			
Groundrope length (m)	No		**Species**	
Bobbin diameter (cm)	No		Species code (FAO species code)	Yes
Otterboard to wing length (m)	No		Total retained catch weight (kg)	No
Horizontal Opening (m)	No		Total discarded catch weight (kg)	No
Vertical Opening (m)	No			
			Species Retained	
Codend mesh			Observed number retained	Yes
Mesh size (cm), codend circumference (cm), Orientation	No		Observed number retained with tags	No
Mesh type (diamond, square, etc)	No			
			Species Discarded	

Otterboard			Observed number discarded	Yes
Type, weight (kg)	No		Observed number discarded dead	Yes
			Observed number discarded alive	Yes
Net design				
Net design description including make, model etc	No		**Species Lost**	
			Observed number lost/dropped off at surface	Yes
Trawl details				
Trawl Number	No		**Interactions with Vulnerable Marine Ecosystems (VME)**	
Gear	Yes			
Trawl type: Research or Commercial (R/C)	No		**General information**	
Observed (Yes/No)	Yes		Name of observer	N/A
Target Species (FAO species code)	No		Name of vessel	Yes
Date Start (YYYY.MON.DD)	Yes		Date	Yes
Date Finish (YYYY.MON.DD)	Yes		Trip number	Yes
Time net deployed (hh:mm)	Yes		Set number	Yes
Time net retrieved (hh:mm)	Yes			
	Yes		**VME location**	
Start and End Fishing	Yes		Start and end positions of all gear deployments and/or observations. (Latitude/longitude)	Yes
(For Trawl fishing – "start" is defined as when the otterboard is on the bottom, "end" is when the tow ends)			Depth(s) fished (m)	No
Time (hh:mm)	Yes		**Fishing Gear**	
Latitude	Yes		Indicate fishing gears used at each location	
Longitude	Yes			
Trawl Depth (m)	No		**VME Taxa**	
Bottom Depth (m)	No		a) Species (identified taxonomically as far as possible, or accompanied by a photograph where identification is difficult).	Maybe*
			b) An estimate of the quantity (weight (kg) or volume (m3)) of each listed benthic species caught in the tow.	Maybe*
Other			c) An overall estimate of the total quantity (weight (kg) or volume (m3)) of all invertebrate benthic species caught in the tow.	Maybe*
Offal discharged during shooting (Y/N)	Yes		d) Where possible, and particularly for new or scarce benthic species which do not appear in ID guides, whole samples should be collected and suitably preserved for identification on shore.	No
Offal discharged during hauling (Y/N)	Yes		5) Collect representative biological samples from the entire VME catch. (Biological samples shall be collected and frozen when requested by the scientific authority in a Contracting Party). For some coral species that are under the CITES list photographs should be taken.	No
Trawl speed (knots)	Yes			

Horizontal opening (m)	No			
Total catch (kg)	No			
Observed catch composition				
Observer ID	No			
Was Haul observed for fish/invertebrate by-catch (Y/N):	Yes			
Record the total weight of all sub-samples for this shot (kg):	No			
Species				
FAO species code	Yes			
Scientific name	Yes			
Total retained catch weight (kg)	No			
Total discarded catch weight (kg)	No			
Bycatch mitigation measures employed:				
Were bird scaring (tori) lines in use? (Yes/No)	Yes			
Were bird bafflers in use? (Yes/No)	Yes			
Trawl warp strike (to be monitored for 15 minutes immediately after the net has been deployed).				
Trawl number	Yes			
Name of observer	N/A			
Start observation time (hh:mm)	Yes			
End observation time (hh:mm)	Yes			
Number of heavy warp strikes (record for Albatross, Giant Petrels, White chinned petrels, Other petrels)				
Air	Maybe*			
Water	Maybe*			
Sinker	Maybe*			
Seabird abundance observation				
Seabirds present in observation area (y/n)	Yes			
Estimated numbers of abundance (by species)	Yes			