

South Atlantic Overseas Territories Commercial Fisheries Management Review Summary

An independent report by MarEcol



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1 Background

The UK South Atlantic Overseas Territories (OTs) are together responsible for the management of 3.43 million km² of the South Atlantic. Fisheries are an important part of the economy of each of the territories and it is important that such fisheries are managed sustainably.

The management of the principal fisheries in each of the three UK South Atlantic Overseas Territories was reviewed. Although St Helena, Ascension and Tristan da Cunha are one OT, each island or island group manages its own fishery and has separate fisheries and environmental legislation.

Table 1. The fishing zones and principal fisheries in each of the South Atlantic Overseas Territories.

Territory / Island	Managed area ¹ (km ²)	Fisheries
Falkland Islands	550,872	Patagonian toothfish (<i>Dissostichus eleginoides</i>) Long-fin squid (<i>Doryteuthis gahi</i>) Short-fin squid (<i>Illex argentinus</i>) Mixed finfish
South Georgia & the South Sandwich Islands	1,238,725	Patagonian toothfish (<i>Dissostichus eleginoides</i>) Mackerel icefish (<i>Champscephalus gunnari</i>) Antarctic krill (<i>Euphausia superba</i>)
St Helena	444,916	Tuna (<i>Thunnus</i> sp. & <i>Katsuwomis pelamis</i>)
Tristan da Cunha	754,720	Tristan lobster (<i>Jasus tristani</i>) Southern bluefin tuna (<i>Thunnus maccoyii</i>) Blue-nose (<i>Hyperoglyphe antarctica</i>)
Ascension	441,568	Bigeye (<i>Thunnus obesus</i>) and yellowfin (<i>T. albacares</i>) tuna

2 Sustainability

The sustainability of each fishery is considered following Marine Stewardship Council pre-assessment criteria in the context of (i) target species; (ii) non-target (by-catch) species; (iii) the marine ecosystem (Table 2).

Falkland Islands

The Falkland Islands MSC certified Patagonian toothfish is considered sustainable, although there are some concerns about the status of the toothfish stock and fishing on the stock outside of Falkland waters. The impacts on non-target species appear to be sustainable.

The *Doryteuthis* squid fishery has a well managed and sustainable target stock, with little by-catch, but there are concerns regarding the impact of bottom trawls on benthic habitats.

Sustainable management of *Illex* squid is compromised by the lack of a regional management agreement. The fishery has little by-catch, but the impacts of the fishery on the ecosystem have not been established.

The sustainability of the mixed fin-fish fishery is of concern, with the biomass of the “index” species (rock cod) reduced to 30% of previous levels. Some of the targeted species are migratory and, as with

¹ Exclusive Fishing Zone, Maritime Zone or Conservation Zone.

Illex, require a regional management approach. As with the *Doryteuthis* fishery, the widespread use of bottom trawling is a concern.

South Georgia & the South Sandwich Islands

The South Georgia Patagonian toothfish fishery was one of the highest scoring of the MSC certified fisheries when it was recertified in 2014 and is rated highly in sustainability. There is a need to examine post-tagging mortality in the target species and evaluate the impact of longlines on benthic ecosystems.

The South Georgia Antarctic krill and mackerel icefish fisheries are both highly rated in terms of sustainability.

St Helena

The St Helena pole & line tuna fisheries target four tuna species that have widespread distributions and are managed by ICCAT. There is concern about the status of the bigeye stocks, which remain overfished (on an Atlantic scale). The pole & line method has little impact on non-target species.

Ascension

The Ascension longline fishery largely targets bigeye tuna, which is managed regionally by ICCAT. Whilst the fishery in the EFZ represents a small fraction of the total catch there is concern about the status of the bigeye stock. The by-catch in the longline fishery includes shark and turtles, but has not been fully evaluated.

Tristan da Cunha

The Tristan lobster fishery is MSC certified. There is some concern about the status of the stock around Tristan island (and the implementation of harvest control rules) and about the impact of the pots on benthic habitats, but the fishery is considered sustainable in terms of target and non-target impacts.

The Tristan blue-nose fishery is small, with one vessel fishing for a few weeks each year, however there has been no assessment of the blue-nose stock and the fishery employs bottom trawls on seamounts, which may damage sensitive benthic habitats.

The licensed southern bluefin tuna fishery in the Tristan EFZ is a very small part of the broad Atlantic fishery, with one or two longline vessels licensed to fish inside the EFZ each year. The status of the southern bluefin tuna is of significant concern, but the stock is managed by CCSBT and any catches within the Tristan zone will count against the catch limit. As with longlining in other areas, there is concern regarding the by-catch of seabirds and shark, which has not been properly evaluated.

Across these OTs five fisheries are certified (at least in part) as sustainable by the Marine Stewardship Council:

- (i) South Georgia Patagonian toothfish (since 2004, without conditions since 2009);
- (ii) South Georgia mackerel icefish (for the majority of the fishing fleet, since 2010);
- (iii) South Georgia Antarctic krill (Aker Biomarine vessels, since 2011);
- (iv) Falkland Islands Patagonian toothfish (since 2014, with 4 conditions);
- (v) Tristan da Cunha lobster (since 2011, with a new condition in 2016).

Table 2. Sustainability of the fisheries in the South Atlantic OTs

OT	Fishery	Sustainability		
		Target Species	Non-target species	Ecosystem
Falkland Islands	Patagonian toothfish (MSC)	Reasonable, but stock close to limit reference point and fishing outside the zone not taken into account.	Good. Seabird by-catch issues addressed through technical measures and industry co-operation. Work required on fish by-catch and benthic impact of longlines.	Good. Some work has been done on the trophic links of toothfish, which has few dependent predators.
	Illex / Short-fin squid	Difficult to evaluate without regional co-operation.	Excellent as there is little or no by-catch.	Uncertain. The impact of the fishery on <i>Illex</i> dependent predators is difficult to properly evaluate without regional co-operation.
	Doryteuthis/ Long-fin squid	Excellent, with in-season management.	Good. Low levels of by-catch in the fishery. Small toothfish occasionally caught.	Moderate. The impact of bottom trawling has not been established and the impact of the fishery on the ecosystem and particularly dependent predators is not established.
	Mixed finfish	Poor. Status uncertain for many of the species. Rock-cod population at 30% of 2010 level.	Poor. Mixed fishery. Status of many of the non-target species is uncertain.	Moderate. The impact of bottom trawling has not been established and the impact of the fishery on the ecosystem not fully evaluated.
South Georgia	Patagonian toothfish (MSC)	Excellent. Highly conservative long-term target and recent rise in CPUE. Need to address post-tagging mortality.	Good. Recent white-chinned petrel by-catch a concern and there is a need to assess grenadier populations. Benthic closed areas provide protection for Vulnerable Marine Ecosystems.	Good. Some work has been done on the trophic links of toothfish, which has few dependent predators. Increasing sperm whale population may compete with the fishery.
	Antarctic krill (MSC ²)	Good. The fishery takes a small fraction of the estimated biomass, but the biomass estimate is 17 yrs old (from 2000).	Good. Small by-catch of larval fish. Need to evaluate trawl warp bird strike risk.	Good. Ecological role of krill well established. Seasonal closure of the fishery protects land-based breeding populations of penguins and seals.
	Mackerel icefish (MSC ³)	Good. Fishery takes a very small fraction of the estimated stock. Need to consider recent published work on survey estimates.	Good. Limited by-catch. Main concern is the by-catch of yellow-tailed rock cod at Shag Rocks and the risk of catching small toothfish.	Excellent. Pelagic trawl fishery has minor benthic impact. Significant closed areas afford considerable protection. Ecosystem relations of icefish reasonably well established.
St Helena	Tuna (Pole & line)	Moderate. Fishery a small component of Atlantic fisheries. Status of bigeye of concern; retention of yellowfin in the EFZ needs to be established.	Excellent. Very little by-catch and what is caught can, generally, be released alive.	Moderate. The take from the fishery is small, but the role of tuna in the ecosystem not established. Bait species ecology poorly understood.
Ascension	Bigeye tuna (pelagic longline)	Moderate. The fishery is a small component of the Atlantic fisheries. Status of bigeye of concern.	Moderate. By-catch of shark and turtles with pelagic longlining is not fully evaluated.	Moderate. The take from the fishery is small, but the role of tuna in the ecosystem not established.
Tristan da Cunha	Tristan lobster (MSC)	Good. Some concern regarding the status of the stock around Tristan Island.	Good. Main by-catch is octopus, but is < 5 % of lobster. Sustainability of octopus not established.	Moderate. Impact of pots on the benthic environment has not been established.
	Southern bluefin tuna (pelagic longline)	Poor. The SBT is over-exploited and is estimated to be at 9% of the virgin biomass. Catch in Tristan is part of CCSBT limit.	Poor. Limited data available, but risk of by-catch of seabirds, shark and other non-targets.	Moderate. Limited data on the trophic impacts of the fishery.
	Blue-nose (bottom-trawl)	Poor. Although the fishery is small, there is no information on the sustainability of the stock.	Poor. There is no information on the sustainability of the by-catch.	Poor. The fishery uses bottom trawls on seamounts and whilst there is no data, seamounts often have endemics and vulnerable ecosystems.

² MSC for some vessels in the fishery

³ MSC for most of the vessels in the fishery

3 Management

Whilst none of the South Atlantic OTs has declared an Exclusive Economic Zone (EEZ) each OT (or component island groups) has an exclusive fishing zone of some form. In the case of St Helena, Tristan and Ascension, this is a 200 nm Exclusive Fishing Zone, whilst SGSSI has a Maritime Zone and the Falkland Islands has a Conservation Zone. In each case the Territory has jurisdiction over fisheries resources within that zone. The SGSSI Maritime Zone lies within the CCAMLR area, which means that all CCAMLR regulations must be adopted.

3.1 General fisheries legislation

Although the fisheries are quite different, the Fisheries legislation (Table 3) is similar between some of the territories, which have clearly drawn on each other's legislation.

Table 3. Principal fisheries legislation in the South Atlantic OTs.

Territory	Fisheries Legislation	Comments
Falkland Islands	Fisheries (Conservation & Management) Ordinance 2005	Revised in 2005 to introduce ITQ system.
South Georgia & the South Sandwich Islands	Fisheries (Conservation & Management) Ordinance 2000	Amended in 2005; may need some changes/updates.
Ascension	Fisheries (Conservation & Management) Ordinance 2015	Recently enacted and provides good basis for new St Helena legislation.
St Helena	Fishery Limits Ordinance (1977, as amended)	Ordinance currently under review.
Tristan da Cunha	Fishery Limits Ordinance 1983	Ordinance dated and in need of revision.

The Falklands Islands, SGSSI and Ascension legislation are modern and generally fit for purpose. The St Helena and Tristan da Cunha legislation are both in need of revision and updating. St Helena has a new Fisheries Ordinance being drafted. The recent Ascension Fisheries (Conservation & Management) Ordinance 2015 provides an excellent model for both St Helena and Tristan. In addition to the Fishery Limits Ordinance, St Helena also has a High Seas Fishing Ordinance and a Conservation and Management of Fishery Resources Ordinance, which relates to the implementation of the SEAFO Treaty. The provisions of the High Seas Fishing Ordinance could be included in an updated general fisheries ordinance and, as the SEAFO Treaty has not been extended to St Helena, the Conservation and Management of Fishery Resources Ordinance could be repealed.

3.2 Marine protected area legislation

In 2012 the SGSSI Maritime Zone was declared by Order (under the Wildlife & Protected Areas Ordinance) as a Category VI Marine Protected Area. The provisions were updated in a revised Order in 2013 and that Order provides details of prohibition of certain fishing methods and of spatial and temporal closures. A management plan was published to accompany the declaration (GSGSSI, 2013).

St Helena also declared, by Notice (under the Environmental Protection Ordinance) in the official Gazette, a Category VI MPA in 2016. The notice in the Gazette was accompanied by the publication of the Marine Management Plan (SHG, 2016). Here, some of the key legislation is not yet in place,

so some of the restrictions detailed in the Marine Management Plan (such as prohibition on purse seining and bottom trawling) cannot yet be legally enforced. The revised Fisheries Ordinance, which is due to be enacted in 2017, should address this issue.

3.3 Fisheries Licensing

The licensing systems are very different across the OTs. The Falklands has an ITQ system for most of the fisheries (except *Illex argentinus*), with catch entitlements awarded for 25 years to locally owned companies. The *Illex* fishery is currently licensed on an annual basis, but consideration is being given to implementing an ITQ system for *Illex*. The long-term ITQ system should enable ITQ holders to invest in their vessels and encourage them to support the broad objectives of the fisheries.

The SGSSI fisheries have competitive licensing rounds every two years for toothfish and icefish and every year for krill. The competitive nature of the licensing, particularly for toothfish, means that high standards are maintained or raised and encourages vessel operators to contribute to science activities. The toothfish licensing has been frequently subject to judicial review.

Ascension Island has no commercial fishing vessels of its own, so commercial fishing has only been undertaken by licensing foreign-flagged vessels. Vessels are required to apply in advance of the season and must meet minimum standards. The bigeye fishery is seasonal and, at its peak in 1996, over 80 longliners were licensed. The recent strengthening of license conditions and closure of half of the zone appears to have made the purchasing of licenses less attractive.

In St Helena waters the majority of the fishing is undertaken by local vessels fishing with traditional pole & line methods. There have been some foreign-flagged vessels licensed to fish in the past, but the recent declaration of the MPA prohibits the use of purse seines and precludes the use of industrial longlining.

In Tristan waters the lobster fishery is undertaken by a single concession-holder (Ovenstone). Around the island of Tristan lobsters are caught by local vessels, whilst the Ovenstone vessel (*Edinburgh*) fishes around the other islands. Foreign-flagged vessels are occasionally licensed to fish for blue-nose and Southern bluefin tuna.

The price of licences varies considerably. Licence fees must reflect the value of the catch (or value of the catch differential) and strike a balance between the need to raise revenue, whilst not wanting to deter good operators. For instance for highly migratory species such as tuna and *Illex* squid the licence fee must reflect the value of the catch differential between fishing outside the zone (on the high seas) and inside the zone. For less mobile species that are predominantly inside the relevant EFZ the licence fees should reflect the value of the catch. In St Helena (and Tristan) local vessels are not charged licence fees. The highest fees charged are for Patagonian toothfish licences in South Georgia, where the fees are around 20% of the first sale value of the catch.

3.4 Monitoring

The Falkland Islands and SGSSI have well-developed monitoring systems that include routine daily data collection, observer programmes, AIS and VMS systems and fishery patrol vessels with experienced fishery protection officers.

Under CCAMLR regulations SGSSI must have high levels of observer coverage in all fisheries. The Falkland Islands has around 45 % observer coverage in the toothfish fishery, with lower levels in other fisheries. Whilst a high level of observer coverage is generally beneficial, it may not be necessary in all fisheries. For instance in the *Illex* jig fishery, where there is little or no by-catch, the requirement for observers is likely to be less than in other fisheries.

St Helena has recently implemented an observer programme on the local pole & line boats and has, in the past, deployed observers on any foreign licensed vessels. Data collection is rather limited, but a new system is due to be implemented in the near future.

Tristan da Cunha deploys an observer on the lobster vessel (*Edinburgh*) when she fishes at the outer islands. An observer has also been consistently used in the blue-nose fishery, but not for vessels licensed to catch southern bluefin tuna.

Under the new licensing system, Ascension requires that all vessels are willing to accept an observer whilst fishing in the EFZ. Ascension also has an AIS system.

3.5 Surveillance

The Falkland Islands and SGSSI both have full-time patrol vessels that are the primary surveillance tool. Licensed vessels are inspected at sea to check compliance and the prime fishing grounds patrolled to detect and deter any illegal fishing. The high value of Patagonian toothfish makes it very attractive to illegal fishing. The recent increase in trawler catch verification in the Falklands is a positive development.

There is no dedicated patrol vessel in St Helena, Ascension or Tristan da Cunha. A St Helena fishing vessel (*Extractor*) has recently been used as a temporary patrol vessel in Ascension waters. In the past other fishing vessels (e.g. *Argos Helena*) has been used to patrol the EFZs of the three islands.

3.6 Fishing vessel safety

Fishing vessel safety standards vary between OTs. SGSSI requires that all vessels must comply with the provisions of the Torremolinos Protocol of 1993 (relating to the Torremolinos International Convention for the Safety of Fishing Vessels 1977). This addresses both vessel safety and living conditions for crew and is the standard applied to all UK -and EU- flagged vessels.

In the Falkland Islands the majority of the vessels in the *Doryteuthis* squid and mixed finfish fishery and the sole vessel in the Patagonian toothfish fishery are UK or EU -flagged and will thus meet the standards of the Torremolinos Protocol. The jiggers that operate in the *Illex* squid fishery are flagged to Korea and Taiwan and, following concerns about safety and conditions on board the vessels, the Falkland Islands have recently introduced the requirement for vessels to comply with Articles 8, 25, 26 and 31-33 of the Work in Fishing Convention (2007).

In St Helena waters, there is a need to develop clear guidelines on safety requirement for all vessels. The current inspection system for the small inshore vessels is inadequate.

In Ascension, under the new licensing system, vessels must have flag-state safety certificates and also have sufficient life-jackets and life raft spaces for all on board (including an observer).

In Tristan waters, the MV *Edinburgh*, which fishes the outer islands, is flagged to Belize and it is not clear to what standards the vessel operates. The blue-nose fishery is undertaken by a UKOT-flagged vessel, which will be required to meet the standards of the Torremolinos Protocol⁴. There are no specific safety standard requirements for the Japanese-flagged longline vessels that fish for tuna.

⁴ All UK flagged vessels are required by the MCA to meet the Torremolinos standards

Table 3. Management of the key fisheries in each of the South Atlantic OTs.

OT	Fishery	Management			
		Licensing	Monitoring Control & Surveillance	External Review	Safety
Falkland Islands	Patagonian toothfish	ITQ system with single operator. License fees low, compared to other FI fisheries (and SGSSI).	Good. Around 50% observer coverage. Detailed data collection. Catch verification. Catch Documentation Scheme. VMS & AIS. Regular patrols.	Conditionally MSC Certified, but no external peer review.	Good. Single UK-flagged vessel, which should meet high standard of safety.
	Short-fin squid	Licensed on an annual basis. Consideration being given to ITQ.	Good. Low level of observer coverage (but more may not be necessary). Daily reporting. VMS & AIS. Regular patrols.	No external review of stock assessment or fisheries management.	Moderate. Mostly Taiwanese and Korean vessels. Standards of safety not certain.
	Long-fin squid	ITQ system (25 years).	Good. Daily reporting. 10% observer coverage. VMS & AIS. Regular patrols.	No external review of stock assessment or fisheries management.	Good. All vessels EU-flagged, so should meet high standard of safety.
	Finfish	ITQ system (25 years).	Moderate. VMS & AIS. Daily reporting. Some observer coverage. Regular patrols.	No external review of stock assessment or fisheries management.	Good. Most vessels EU-flagged, so should meet high standard of safety.
South Georgia	Patagonian toothfish	Two years licences issued following competitive licensing round.	Excellent. 100% observer coverage, plus roaming observer. Vessels inspected before licensing and at sea. Detailed data collection. Catch verification. CDS. Regular patrols.	Excellent. MSC Certified since 2004 and without conditions since 2009. External peer review in 2014.	Good. Torremolinos safety standards applied to all vessels.
	Antarctic krill	Single year licences available to CCAMLR-notified vessels that meet the requisite standards.	Good. 50%+ observer coverage. Vessels inspected before licensing and at sea. Detailed data collection. Regular patrols.	Stock assessment reviewed by CCAMLR. MSC certification for some vessels.	Good. Torremolinos safety standards applied to all vessels.
	Mackerel icefish	Two years licences issued following competitive licensing round.	Excellent. 100% observer coverage. Vessels inspected before licensing and at sea. Detailed data collection. Regular patrols.	Stock assessment reviewed by CCAMLR. MSC certified since 2010, but no external review of fisheries management.	Good. Torremolinos safety standards applied to all vessels.
St Helena	Tuna	Local vessels issued licences, but conditions not particularly detailed. Foreign vessels occasionally licensed.	Moderate. Data collection of landings only. Observer programme recently established.	ICCAT responsible for stock assessments. MSC certification attempt in 2010 provided some external advice.	Poor. Clear guidelines required on safety standards for all vessels.
Ascension	Tuna	Single season licences issued to longliners for big-eye season.	Good. All licensed vessels must be prepared to accept an observer. AIS monitoring in place. Patrol vessel chartered for part of main bigeye season.	ICCAT responsible for stock assessments. No review of management system.	Moderate. New standards of safety introduced for the 2015/16 season.
Tristan	Lobster	Single concession holder (Ovenstone), with local fishermen supplying catch from Tristan and larger vessel (Edinburgh) licensed to fish other islands.	Good. 100% observer coverage on main fishing vessel. Good data collection. No patrol vessel.	Good. Conditionally MSC certified. Stock assessment was externally reviewed.	No information.
	Southern Bluefin tuna	Licences issued on an ad-hoc basis, with limited conditions.	Poor. No observer coverage and limited data collection. No patrol vessel.	Stocks assessed by CCSBT, but no review of local management practice.	Poor. No safety standards in licence conditions.
	Blue-nose	Licence issued with limited conditions.	Good. 100% observer coverage and good data collection. No patrols.	No external review of assessment or management.	Good. Single vessel is UKOT flagged, so should be of high standard of safety.

4 Opportunities for further co-operation between the South Atlantic OTs

There is already some co-operation between the OTs. For instance SGSSI contracts the services of the Falkland Islands Fishery Protection Officers and the Falklands Directorate of Natural Resources – Fisheries (DNR-F) also provides monitoring of VMS for SGSSI.

4.1 Monitoring, control and surveillance

Existing cross-territory co-operation over legislation could be extended to other areas of MCS to include centralized VMS and AIS monitoring, which could improve efficiency and reduce costs. There are also opportunities to co-operate over training of fisheries protection officers.

St Helena and Tristan would both benefit from improved data collection and management systems and taking a common approach could reduce development costs for both. There is no patrol vessel for St Helena, Tristan or Ascension Island waters. If funds were available, a patrol vessel could be shared between the islands and perhaps also transfer passengers.

4.2 Fisheries Science

There is already co-operation between Ascension & St Helena in fisheries science under recent Darwin Plus projects. It is important that such co-operation is maintained, particularly with respect to tagging programmes and biological analyses.

South Georgia and the Falklands both have longline fisheries for Patagonian toothfish and, whilst the gear differs between areas, there is a need to investigate the impacts of longlines on vulnerable marine ecosystems in both places. Co-operation in tagging and toothfish ecology could also benefit both territories. Tristan could also learn from the approach to protecting vulnerable marine ecosystems used in South Georgia.

There is also a need to develop / improve ecosystem approaches to fisheries management in all the OTs.

5 Recommendations

Recommendations have been developed for each fishery (Table 4), but some are common to many of the fisheries. Such common recommendations include that:

- 1) OTs develop management plans for each fishery, with clear targets and objectives;
- 2) OTs seek regular external peer review of their stock assessments and fisheries management to ensure best practice;
- 3) OTs make more information, including annual reports and stock assessments, available via their respective websites;

Table 4. Recommendations for each of the South Atlantic OT fisheries.

OT	Fishery	Recommendations
Falkland Islands	General	<ol style="list-style-type: none"> 1. Seek (with UK Government) the re-establishment of the South Atlantic Fisheries Commission to enable regional management of stocks. 2. Develop fishery management plans that include targets and objectives for each fishery. 3. Seek an external peer review of stock assessment and management for all fisheries, ideally on a regular cycle. 4. Consider gradually extending the requirements for fishing vessel safety to include compliance with the provisions of the Torremolinos Protocol on Fishing Vessel Safety. 5. Develop a strategy to minimise the impacts of the fisheries on non-target species and on the benthic fauna.
	Patagonian toothfish (MSC)	<ol style="list-style-type: none"> 1. Estimate the amount of toothfish being caught outside of the zone and include this in future assessments and as a deduction from TAC. 2. Develop an assessment or risk assessment for by-catch species, particularly the grenadier <i>Macrourus holotrachys</i>. 3. Implement a tagging programme to gain further information on fish movements and stock structure⁵. 4. Evaluate the impact of the fishing gear on the benthos, quantifying any gear loss and considering closed areas to protect vulnerable marine ecosystems⁶. 5. Consider the use of marked hooks, to encourage best practice hook management. 6. Consider cooperation with South Georgia Government on benthic and grenadier issues.
	Short-fin squid	<ol style="list-style-type: none"> 1. Develop an ecosystem model of the Patagonian Shelf to help understand the role of <i>Illex</i> and determine any ecological impacts of the fishery.
	Long-fin squid	<ol style="list-style-type: none"> 1. Develop a long-term strategy to mitigate the impacts of bottom trawling on benthic habitats. 2. Develop ecosystem model to evaluate the trophic impacts of the fishery, particularly any impact on dependent predators. Such information could be used to test the efficacy of the escapement rule. 3. Increase observer coverage for seabird mortality and stock monitoring.
	Mixed finfish	<ol style="list-style-type: none"> 1. Develop scientifically based catch limits for each of the main target species. 2. Consider developing a multi-species approach to fisheries management. 3. Develop a long-term strategy to mitigate the impacts of bottom trawling on benthic habitats, which could include evaluation of alternate capture methods and greater spatial and temporal regulation. 4. Develop an ecosystem model to evaluate the trophic impacts of the fishery, particularly any impact on dependent predators and to help inform a multi-species management approach. 5. Provide a more detailed explanation of the move-on rule in the licence conditions to ensure it is legally enforceable.
South Georgia	General	<ol style="list-style-type: none"> 1. Develop fishery management plans that include targets and objectives for each fishery. 2. That more information about each of the fisheries, including season reports and summary stock assessments, be made available on the GSGSSI website.
	Patagonian toothfish (MSC)	<ol style="list-style-type: none"> 1. Address the outstanding recommendations from the Hanchet and Welsford (2014) review. 2. That the recent by-catch issues with white-chinned petrels be addressed and considered as part of a management strategy evaluation.
	Antarctic krill (MSC*)	<ol style="list-style-type: none"> 1. Monitoring of seabird mortality and injury associated with warp strikes and birds striking the vessel should be increased and, if required, mitigation measures introduced. 2. Investigate the retention time / replacement time of krill on the main fishing grounds to underpin decisions about spatial and temporal closed areas.
	Mackerel icefish (MSC*)	<ol style="list-style-type: none"> 1. Seabird mortality associated with warp strikes and vessel strikes should be carefully monitored and, if appropriate, mitigated against. 2. Further work is needed to refine biomass estimates from the trawl surveys. The use of the correction factor is somewhat arbitrary and further consideration should be given to the use of acoustic methods. 3. The recent evaluation of the survey biomass estimates (Fallon et al., 2016) should be considered and methods adjusted accordingly.
St Helena	Tuna (Pole & line)	<ol style="list-style-type: none"> 1. The Fisheries Ordinance should be enacted as soon as possible to facilitate the new licensing system. In the interim, the Senior Fisheries Officer could include additional conditions on licences that would require log-books to be completed by inshore vessels. 2. As identified in the Marine Management Plan, a local enforcement post is required to ensure compliance with marine and fisheries legislation and restrict the illicit landing of fish. 3. The current science programme should be maintained, but there are likely to be benefits from working more closely with Ascension Island who have a similar fisheries programme. 4. Further tagging should be undertaken to determine movements and residence times of the tuna, with emphasis on yellowfin and bigeye tuna. 5. St Helena, with assistance from the UK Government, needs to engage fully with ICCAT at both science and policy level to ensure St Helena's interests are represented and protected. 6. St Helena should, together with other UKOTs, investigate options to use satellite monitoring system (AIS & SAR) to determine if there is any significant illegal fishing in the EFZ.
Ascension	Bigeye tuna (pelagic longline)	<ol style="list-style-type: none"> 1. The future operation of the fishery should be considered in the context of the tangible conservation benefits to the tropical Atlantic region and associated fisheries. 2. The structure of the licensing should be reviewed and alternate options considered, including the use of an application fee and access fee.

⁵ A tagging programme was established in 2016.

⁶ There is some work planned to address this in 2017.

		<ol style="list-style-type: none"> 3. AIG should establish a long-term strategy to gradually raise safety standards and crew conditions on the longline fleet. 4. A satellite based surveillance programme should be continued and options considered to enhance the current patrol arrangements. 5. Ascension, with assistance from the UK Government, needs to engage fully with ICCAT at both science and policy level to ensure their interests are represented and protected.
Tristan da Cunha	General	<ol style="list-style-type: none"> 1. Tristan should, together with other OTs, investigate options to use satellite monitoring system (AIS & SAR) to determine if there is any significant illegal fishing in the EFZ. 2. Develop fishery management plans that include targets and objectives for each fishery. 3. Improve transparency by providing more information (including legislation) on the Tristan Government website.
	Tristan lobster (MSC)	<ol style="list-style-type: none"> 1. Address the condition and recommendations from the recent MSC recertification. 2. Further explore and develop fishery-independent methods of determining the status of the stocks. 3. Address the issues with post-tagging mortality and, if the mortality is reduced, maintain and develop the tagging programme to provide data on growth and population size. 4. Seek fully independent external peer review of the stock assessment and harvest strategy.
	Southern bluefin tuna	<ol style="list-style-type: none"> 1. Tristan (with the UK) should engage with CCSBT to ensure that the SBT stock is managed to ensure recovery. 2. If vessels are to be licensed, Tristan should collect data on non-target species (e.g. seabirds & sharks), ideally by the deployment of observers on any licensed vessels.
	Blue-nose	<ol style="list-style-type: none"> 1. There is an urgent need to assess the sustainability of the blue-nose stock. 2. The sustainability of by-catch species such as alfonsino and jacobever need to be evaluated. 3. The impact of the fishery on benthic habitats must be evaluated and alternate, less damaging, fishing gears should be considered.