FISHERY ASSESSMENT REPORT

IFFO GLOBAL STANDARD FOR RESPONSIBLE SUPPLY OF FISHMEAL AND FISH OIL

FISHERY:	**Capelin (*Mallotus villosus*)**
LOCATION:	**Iceland-E. Greenland-Jan Mayen** **(ICES Subareas V and XIV and Division IIa west of 5°W)**
DATE OF REPORT:	**24/6/13**
ASSESSOR:	**Sam Peacock**

1. Application Details and Summary of the Assessment Outcome			
Name:	**Icelandic Association of Fishmeal Manufacturers**		
Address:			
Country:	Iceland	**Zip:**	
Tel. No.		**Fax. No.**	
Email address:		**Applicant Code**	
Key Contact:		**Title:**	

Certification Body Details			
Name of Certification Body:	**Global Trust Certification Ltd**		
Assessor Name:	**Peer Reviewer:**	**Assessment Days:**	**Initial/Surveillance/Re-certification:**
Sam Peacock	Mike Platt	10	Re-certification
Assessment Period	May- August 2013		

Scope Details	
1. Scope of Assessment:	IFFO Global Standard for Responsible Supply – Issue 1
2. Fishery	Capelin (*Mallotus villosus*)
3. Fishery Location	Iceland-E. Greenland-Jan Mayen (ICES Subareas V and XIV and Division IIa west of 5°W)
4. Fishery Method	Purse Seine / Pelagic Trawl

Outcome of Assessment	
5. Overall Fishery Compliance Rating	**High/medium**
6. Sub Components of Low Compliance	None
7. Information deficiency	None
8. Peer Review Evaluation	The reviewer agrees with the findings of the assessment and recommends the re-approval of this fishery for a further three years subject to annual review
9. Recommendation	**Approve fishery**

2. Quality of Information
Good; primarily ICES and MRI websites

3. Compliance Level Achieved
High / medium
Recommendation
Approve fishery

4. Guidance for On-site Assessment
Based on High Compliance Findings
Based on Medium Compliance Findings
Key Stakeholders of the Fishery

5. Assessment Determination

Icelandic fisheries management has a solid legal and administrative basis, backed up by national and international scientific studies, stock assessments and advice, and controlled and enforced effectively. In general, the management of the capelin fishery meets the requirements of the IFFO RS standard, with a scientifically-founded stock definition, two stage quota setting mechanism backed up by multiple acoustic surveys, and a spectrum of measures aimed at minimising the already limited cases of bycatch and non-target interactions.

ICES scientists have suggested that the level of in-season transparency in the quota-setting process could be improved, and there is a slight discrepancy between the ICES-recommended season and the period used in practice. This led the assessment team to award medium compliance in section B2.

HIGH COMPLIANCE

A1, A2, A3, B1, C1, D1, D2, D3, E1, E2

MEDIUM COMPLIANCE

B2

Background

The capelin is a small, pelagic schooling migratory fish. It is a cold water species that occurs throughout the Arctic and Sub-Arctic. The capelin in the Iceland-East Greenland-Jan Mayen area is considered to be separate from other North-East Atlantic stocks. The spawning grounds are in shallow waters (10-150m) off the south-east, south and west coast of Iceland. Some minor spawning occurs elsewhere, especially off the north coast. Spawning peaks in March in the main spawning areas but somewhat later (April) elsewhere. Although capelin spawn between the ages of 2 and 4 years, the large majority spawns at 3 years of age with the males and most of the females dying after spawning. Capelin is a very important forage species for many commercial fish species and especially cod.

The Icelandic capelin fishery is prosecuted by Iceland, Norway, Faroe Islands and Greenland, but by far the largest quantities are fished by Iceland. The fishery began in the mid-1960's, and during its first eight years was conducted in February and March on schools of prespawning fish on or close to the spawning grounds south and west of Iceland. In January 1973 a successful capelin fishery began in deep water near the shelf break east of Iceland. In July 1976 a summer capelin fishery began in the Iceland Sea, and became multinational with vessels from Iceland, Norway, the Faroes and Denmark. In mid 1990s the pelagic trawl was introduced to the capelin fishery, and in the 2011/12 season the gear ratio by landed weight was around 75% purse seine to 25% pelagic trawl. The fishery is conducted annually except in periods of low stock size, which in practice has meant every year except 2008/09. Over the years the season has become limited to June – March, and in recent years little capelin, if any, has been landed before the end of December.

References: 1, 2, 3

SUMMARY OF LEVEL OF COMPLIANCE					
	The Management Framework and Procedures	Stock assessment procedures and management advice	Precautionary approach	Management measures	Implementation
legal and administrative basis					
Fisheries management should be concerned with the whole stock unit					
Management actions should be scientifically based					
Research in support of fisheries conservation and management should exist					
Best scientific evidence available should be taken into account when designing conservation and management measures					
The precautionary approach is applied in the formulation of management plans					
The level of fishing permitted should be set according to management advice given by research organisations					
Where excess fishing capacity exist, mechanisms should be in established to reduced capacity					
Management measures should ensure that fishing gear and fishing practices do not have a significant impact on non-target species and the physical environment					
A management system for fisheries control and enforcement should be established					
A framework for sanctions of violation of laws and regulations should be efficiently exists					

KEY: Low Compliance Medium Compliance High Compliance:

6. Rationale of the Assessment Outcome

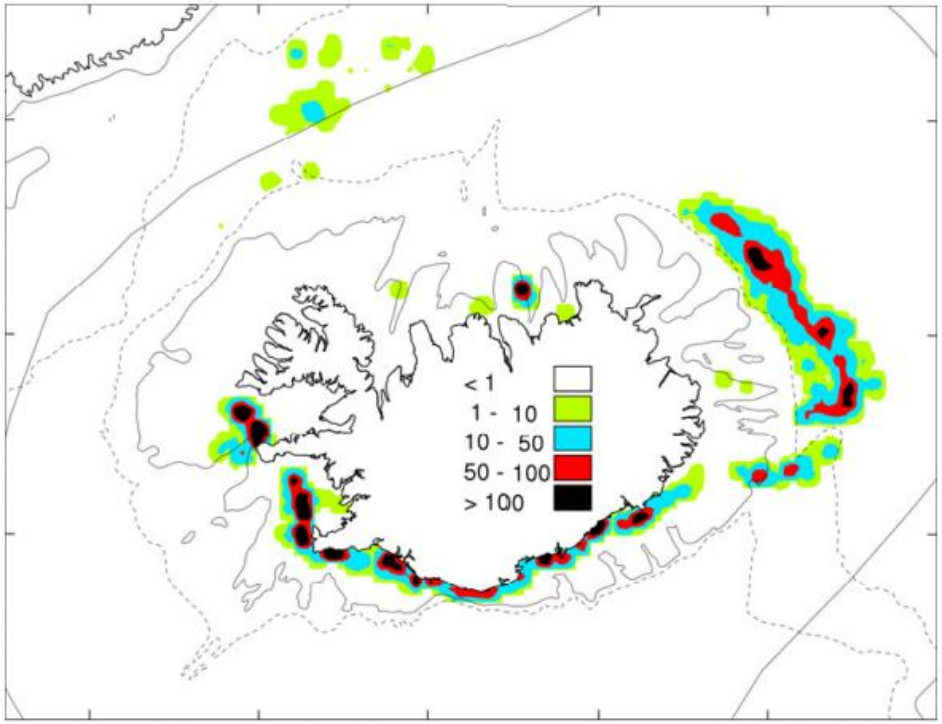
a. The Management Framework and Procedure

LEVEL OF COMPLIANCE		a.i. The management of the fishery must include a legal and administrative basis for the implementation of measures and controls to support the conservation of the fishery.	References	Rating
LOW		***Determination: Fisheries management in Iceland is based on firm legal and administrative foundations. The assessment team considers the management framework for the fishery to be both adequate and effective.***	7	HIGH
MEDIUM		Modern Icelandic fisheries management is based on the Fisheries Management Act of 1990, and is the responsibility of the Ministry of Fisheries and Agriculture. The objectives of the Fisheries Management Act are to promote the conservation and efficient utilisation of the marine resources and thus to ensure stable employment and economic viability of fishing communities. In other words, the aim is to ensure the sustainability of the fisheries while emphasising the economic benefits of the fisheries sector. The fisheries management system in Iceland is primarily based on extensive research on the fish stocks and the marine ecosystem, decisions made on the conduct of fisheries and allowable catches on the basis of scientific advice, and effective monitoring and enforcement of the fisheries and the total catch. These are the main pillars of the Icelandic fisheries management intended to ensure responsible fisheries and the sustainability of the ocean's natural resources.		
HIGH		The most recent version of the Fisheries Management Act was published in 2006 and includes: • A commitment to the conservation and efficient utilisation of Icelandic fishery resources (Article 1). • A commitment to set an annual TAC for each species "for which it is deemed necessary to limit the catch" (Article 3). • A requirement for all commercial fishers to obtain a general fishing permit; vessels not fishing for an entire 12 month period will have their permit revoked (Article 4).		

		• An outline of the ITQ quota system (described in more detail in section D2, below) (Article 8). • An outline of the methodology and responsibility for enforcement and monitoring of fishery regulations (Articles 17 & 18). • An outline of penalties for transgressions (Articles 24 – 27). Iceland's national fisheries science organisation is the Marine Research Institute (MRI). The MRI carries out wide ranging and extensive research on the status and productivity of the commercial stocks, and long-term research on the marine environment and the ecosystem around Iceland. The results of this research are the foundations on which the majority of Icelandic fishery management decisions are made. Additional scientific advice is provided by ICES.		
		a.ii. Fisheries management should be concerned with the whole stock unit over its entire area of distribution and take into account fishery removals and the biology of the species	References	Rating
LOW MEDIUM HIGH		***Determination: The management unit for the stock accurately reflects the biological population, management advice and measures take into account the biology of the species, and ICES considers all fishery removals to be taken into account.*** Capelin in the Iceland/East Greenland/Jan Mayen area is considered by ICES to be a separate stock. ICES has a good understanding of the distribution and life history of the stock. Icelandic capelin spawn in March in shallow water off the southeast, south and west coast of Iceland. Most juveniles grow on or close to the continental shelf off northwest, north and northeast Iceland, and on the East Greenland plateau, west of the Denmark Strait. Maturing capelin usually undertakes extensive feeding migrations in spring and summer northwards into the Iceland Sea and the Denmark Strait. They return in September and October. The main spawning migration usually reaches the west coast and spawns there but late arrivals spawn further east at the southeast and south coast. The design of management measures takes extensive account of the biology of the species. For example, as a precautionary measure to protect juveniles, all fishing with pelagic trawl has been banned in the Icelandic	1-6	HIGH

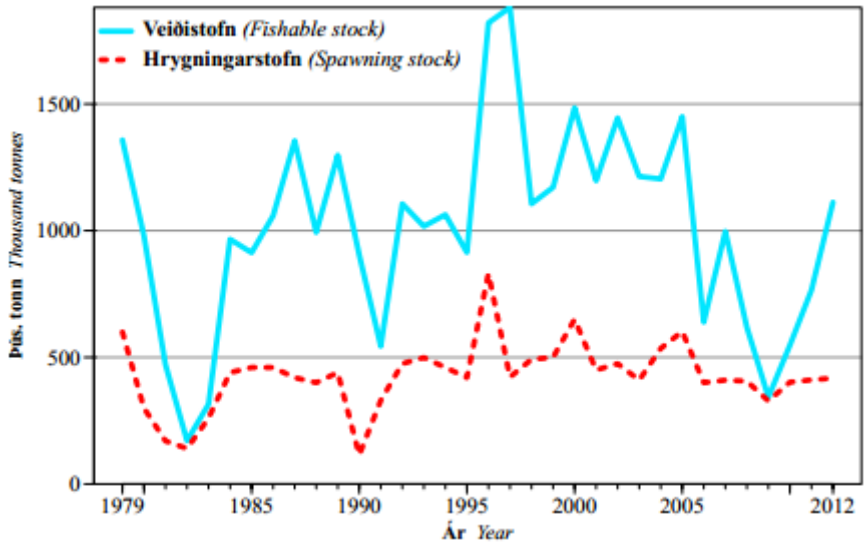
waters where juveniles are generally found, either separately or mixed with the adults. Additional temporary localised closures are enacted when high proportions of juveniles are detected in the catch. The timing of the fishery is also designed around protecting juveniles and the spawning stock.

Fishery-dependent data include detailed landings information and are used in the formulation of management actions and the production of scientific advice. Discards and bycatch are not included in stock assessments, but based on observer data both are considered by ICES to be negligible.



Fishing grounds in 2011/2012 fishing season. Dark areas indicate highest catch (tonnes/nmi^2). From the MRI advice, 2012/13 (R6).

		a.iii .Management actions should be based on long-term conservation objectives	References	Rating
LOW		***Determination: As a short-lived species, capelin is managed using an escapement strategy which aims to ensure spawning biomass is above 400,000t at the end of the fishing season. ICES comments and the fairly consistent SSB estimates over the past 15 years indicate to the assessment team that this approach is appropriate.***	1-6	HIGH
MEDIUM				
HIGH		Since 1980 the TAC has been set in accordance with a 400,000t escapement strategy management plan. In June 1989 Greenland, Iceland and Norway signed an agreement on the division of the TAC between the countries. This agreement has been revised several times since then, most recently in 2003. The first step in the management plan is to set a preliminary TAC based on the results of an acoustic survey carried out to evaluate the abundance of immature (age 1 and age 2) part of the capelin stock about a year before it enters the fishable stock. The preliminary TAC is set at 2/3 of the predicted TAC, calculated on the condition that 400,000t of the Spawning Stock Biomass (SSB) should be left for spawning. The second step is based on the results of another survey conducted during the fishing season for the same year classes. This result is used to revise the TAC and set the final TAC, still based on the condition that 400,000t should be left for spawning. ICES has not evaluated the management plan, but states that the escapement target of 400,000t can be "treated as preliminarily precautionary". As most capelin die at age 3, ICES does not consider medium-term stock projections to be useful. Additionally, at the time the management plan was devised, an escapement-based management approach had been successfully implemented for the Barents Sea capelin stock. Estimates of SSB have fluctuated around approximately 400,000t since the late 1990's. Thus although the specifics have not been confirmed by ICES, an escapement-based approach appears to be appropriate for the short-lived capelin stock.		

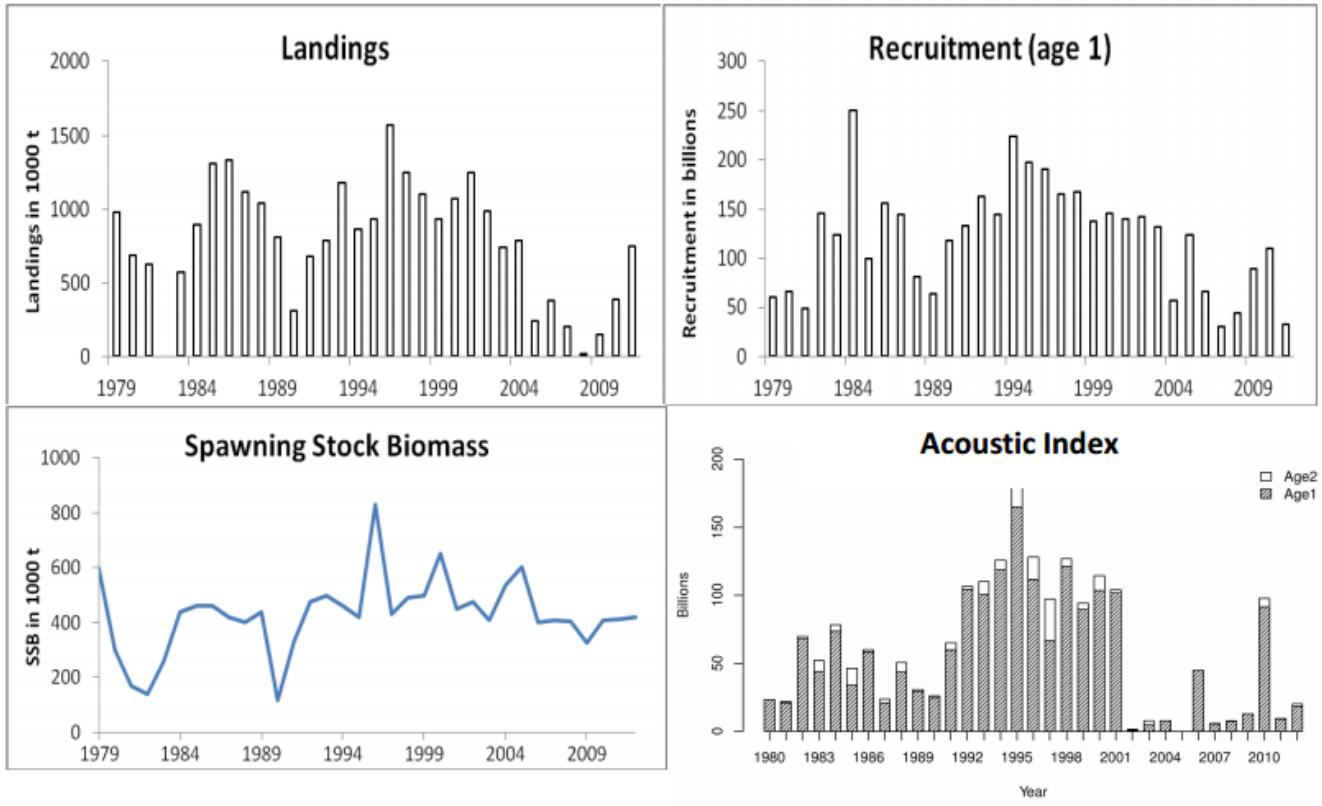


Abundance of the fishable capelin stock on the 1 January in the 1978/79–2011/12 fishing seasons, and the remaining spawning stock biomass at the end of each season. From the 2012/13 MRI advice (R6).

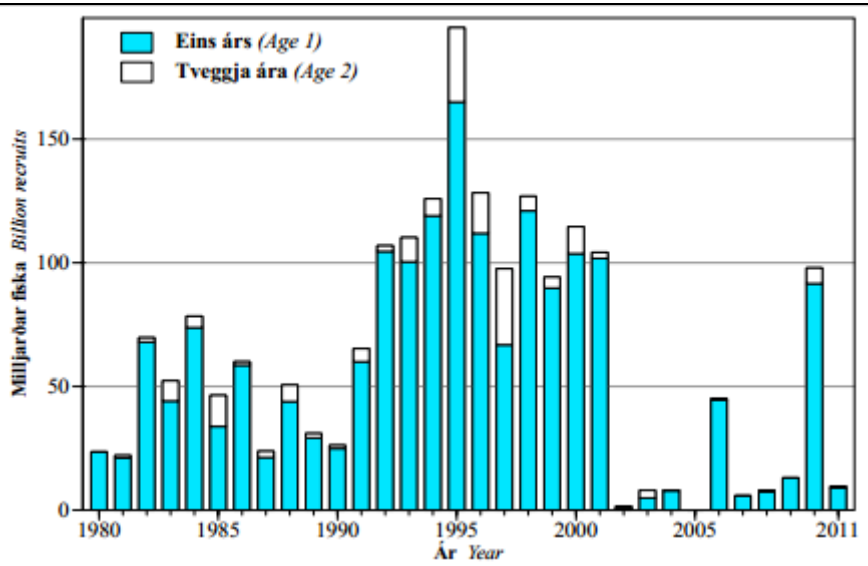
b. Stock Assessment Procedures and Management Advice

LEVEL OF COMPLIANCE		bi. Research in support of fisheries conservation and management should exist.	References	Rating
LOW		***Determination: Fishery dependent and independent data are available to ICES and MRI and form the basis for the advice they provide on the management of the stock. There are no substantial concerns over the level of research available, although ICES reports some gaps and is continuing to review the methodology used to produce recommendations.***	1, 2, 4, 6	HIGH
MEDIUM				
HIGH		ICES conducts an annual stock assessment and the MRI provides advice throughout the year based on the results of ongoing survey efforts. Data from a number of surveys (fishery-independent) and landings data (fishery-dependent) are available to ICES and the MRI, although the results of some non-stock-specific research efforts (such as estimates of bycatch and discarding) do not appear to be made available to ICES. ICES considers the estimate of natural mortality used in the stock assessment process to be an underestimate, and stated in the most recent advice that the assumed relationship between the results of the acoustic surveys during the fishing season and the post-season SSB (which is central to the quota advice) may be inaccurate. This source of uncertainty is covered in more detail in section C1. The ICES assessment methodology currently used was originally described in 2002, but was reviewed by an ICES workshop (WKSHORT) in 2009 which concluded that it was unable to approve the methodology due primarily to the low natural mortality estimate. ICES is continuing to use the existing methodology until an improved approach has been developed. *Fishery dependent data* Information about the Icelandic landings of the fishery fleet is collected by the Icelandic Directorate of Fisheries. They have access to both landings in the harbours (the official landing) and the registered catch in the digital logbook kept by all the vessels. The logbooks keep information about timing (day and time), location (latitude and longitude), fishing gear, catch size, and species composition in the catch of each fishing operation for each		

		vessel. Biological samples from the catch are taken at sea by the fishermen or in the harbours by the MRI and/or inspectors from the Directorate of Fisheries and then analysed by MRI. Samples record length, weight, age (from scales), sex, maturation, and weight of sexual organs. The information from the samples is then used along with the total landings and logbook data to generate landings composition estimates. Similar data are collected by the other States which prosecute the fishery, although the Icelandic catch represents the large majority. Commercial CPUE data are available but are not considered by ICES to be relevant due to the nature of the fishery. The total annual catch of capelin in the Icelandic stock by weight, season and fleet is available historically to 1964. Total catches in numbers by age during the summer/autumn are available from 1985 and for the winter seasons from 1986. *Fishery independent data* Several acoustic surveys aimed at different age groups of capelin have been conducted through the history of the fishery. The purpose of the surveys on young capelin is to locate and estimate the abundance of young capelin. They take place late October-December. The results from these surveys are used to predict a starting quota for the fishing season starting in the year after the surveys are conducted. The surveys aimed at the fishable part of the stock are conducted in the fishing season, most often in winter, but can take place in autumn.		



Capelin in Subareas V and XIV and Division IIa west of 5°W (Iceland–East Greenland–Jan Mayen area). Landings and assessment results (weights in thousand tonnes). Acoustic index of immature capelin at ages 1 and 2 (numbers in billions) from autumn surveys. From the ICES advice, Feb 2013 (R4).



Acoustically measured number of immature age 1 and 2 capelin in autumn 1980–2011. From the MRI advice, 2012/13 (R6).

LEVEL OF COMPLIANCE		b.ii Best scientific evidence available should be taken into account when designing conservation and management measures	References	Rating
LOW		***Determination: In general the best available scientific advice appears to be taken into account during the management of the capelin fishery. However, ICES has noted a lack of transparency with regards to the availability of information on the scientific basis for MRI advice during the fishing season (although the methodology and results are made available to ICES on a post-hoc basis). This, and a minor discrepancy between the ICES-recommended season and the season as applied, leads the assessment team to consider a rating of medium compliance to be appropriate.***	1-6, 11	MEDIUM
MEDIUM				
HIGH		Fishery management decisions are informed by the annual stock assessments conducted by ICES and the MRI, and by in-year advice which is provided by the MRI and updated to reflect survey results. In general, this advice		

		has been followed, to the extent that the fishery was closed entirely in 2008/09, when biomass was estimated to be too low to ensure SSB would be above 400,000t if a fishery took place. In addition to following MRI quota recommendations, a number of technical measures have been implemented in the fishery in line with scientific advice, including minimum mesh sizes and closed areas. Members of the ICES North-Western Working Group (NWWG) have expressed concern over the lack of transparency in the scientific process by which Icelandic (i.e. MRI) data are analysed and advice produced. In 2012 (R11), Jesper Boje, a Danish member of NWWG stated that, "*The present practice that Iceland is autonomously assessing and releasing the final TAC is not appropriate or up to date. Analyses, assumptions and the entire process is not transparent to other parties…The entire assessment and advisory process for both initial and final TAC setting should therefore be conducted by ICES in order to ensure the necessary transparency.*" This comment, in the opinion of the assessment team, accurately reflects the limited availability of survey results and in-season advice on the MRI website in relation to capelin. In-season MRI advice is summarised in the season summary published after the fishery has closed, and all data are made available for analysis by ICES after the TAC has been set. The MRI states that "[In-season] *surveys start early January and are completed during the fishery often only few weeks prior to the end of the fishery (the spawning time). This short period, that is, from the end of the surveys until the end of the fishery, makes it impractical to seek advice regarding the final TAC by institute like ICES.*" The ICES NWWG has also advised that the fishing season should not begin until October, due to the period of rapid growth observed in the capelin stock during the plankton-rich period of June – late September. At present the assessment team is not aware of any plans to follow this advice, although landings before October have been very limited in recent years. The current season start and end dates are codified in a contract between Iceland, Greenland and Norway.		

c. The Precautionary Approach

LEVEL OF COMPLIANCE		c.i The precautionary approach is applied in the formulation of management plans.	References	Rating
LOW		***Determination: In general the fishery appears to be managed in adherence with precautionary principles. Appropriately conservative TAC-setting processes are in place to reflect the level of uncertainty in biomass estimates.***	1-6	HIGH
MEDIUM				
HIGH		ICES has not evaluated the management plan, but states that the escapement target of 400,000t can be "treated as preliminarily precautionary". There are no other reference points defined for the stock. A two-stage methodology is used for setting the annual TAC: a preliminary quota based on the results of an acoustic survey carried out before the fishing season begins, and a final quota based on a similar acoustic survey carried out later in the year. The objective of the process is to generate an estimate of the biomass which can be removed and still leave 400,000t of spawning stock at the end of the season. A core aspect of this estimate, in addition to the survey results, is to factor-in an estimate of natural mortality. ICES has recently expressed concern that the natural mortality estimates used in the TAC calculations may be too low, leading to higher TACs than sustainable. In response, the MRI applies a rule which means the initial TAC is set at 0t in any year where it would otherwise be set below 500,000t. This represents a precautionary approach as it does not use the lack of an accurate mortality estimate as an excuse for inaction, although future assessments should ensure that as new mortality estimates become available the MRI adopts them as appropriate. Although in recent years the fishery has generally remained closed until additional information becomes available during the fishing season, when appropriate the initial quota is set at a conservative level.		

d. Management Measures

LEVEL OF COMPLIANCE		d.i The level of fishing permitted should be set according to management advice given by research organisations.	References	Rating
LOW		***Determination: The level of fishing in the capelin fishery is set in two stages, an initial quota for the July – December period and a final quota for January – March. In recent years both initial and final TACs have been set in line with the scientific advice, and final landings have been at or below the official TAC.***	4, 6	HIGH
MEDIUM				
HIGH		The first step in the two-stage capelin management plan is to set a preliminary TAC, based on the results of an acoustic survey carried out to evaluate the immature 1-group and immature part of the 2-group in the autumn (October–November), almost a year before the fishing season starts. A recommendation for the initial TAC is published in the annual ICES advice in the February preceding the season start in July, with the objective that an SSB of at least 400,000t should be left at the end of the season the subsequent March. In recent years the fishery had remained closed for the first part of the season on the basis of the initial ICES (and MRI) advice. In 2011/12 and 2012/13 an initial quota was set on the basis of the MRI advice, which in turn was based on October survey results, although the actual landings prior to January were limited. The second step is to revise the TAC in early January based on the results of further surveys. Thus although confined in recent years almost entirely to January-March, the capelin fishery has been open every year except 2008/09 on the basis of this secondary advice. As evidence of the efficacy of the approach, the most recent MRI report states that the estimated SSB at the end of the 2011/12 season was 418,000t. In most years, and every year since 2009, the TAC is set in line with the MRI advice, and where it has exceeded the advice historically the difference has been minimal (see table below). Final total landings have consistently been at or below the official quota. The final TAC for the 2012/13 season was set at 570,000t. Final landings were 551,000t, of which Icelandic vessels landed 463,000t.		

MRI quota recommendations ('Rec. TAC'), final TAC, and landings data for Capelin 1984 – 2012. From the MRI advice, 2012/13 (R6).

Vertíðir *Seasons*	Tillaga *Rec. TAC*	Aflamark *TAC*	Afli Íslendinga *Landings (Iceland)*	Afli annarra *Landings (others)*	Afli alls *Total landings*
1984/85	920	920	774	123	897
1985/86	1 280	1 280	987	325	1 312
1986/87	1 290	1 290	1 053	380	1 333
1987/88	1 115	1 115	912	204	1 116
1988/89	1 065	1 065	921	116	1 037
1989/90	900	900	666	142	808
1990/91	250	312	284	27	311
1991/92	740	740	635	47	682
1992/93	900	900	655	95	793
1993/94	1 250	1 250	1 001	178	1 179
1994/95	850	850	750	114	864
1995/96	1 150	1 150	883	46	929
1996/97	1 600	1 600	1 249	322	1 571
1997/98	1 265	1 265	940	260	1 245
1998/99	1 200	1 200	899	201	1 100
1999/00	1 000	1 000	844	90	934
2000/01	1 110	1 110	894	177	1 071
2001/02	1 300	1 300	1 051	198	1 249
2002/03	1 000	1 000	765	223	988
2003/04	875	875	575	167	742
2004/05	985	985	640	144	784
2005/06	215	238	193	45	238
2006/07	370	385	307	70	377
2007/08	207	207	149	54	203
2008/09	0	15	15	0	15
2009/10	150	150	111	40	151
2010/11	390	390	322	68	390
2011/12	765	765	585	162	747

LEVEL OF COMPLIANCE		d.ii Where excess fishing capacity exist, mechanisms should be in established to reduced capacity to allow for the recovery of the stock to sustainable levels.	References	Rating
LOW		***Determination: The management of excess fishing capacity is handled satisfactorily in Iceland. Annual quotas remain the primary mechanism for limiting fishing effort, although capacity-reducing processes are also in place.*** The main instrument in Icelandic fisheries and fleet management is a system based on Individual Tradable Quota (ITQs), which has been in place in its current form since 1990. During the past 15 years there has been no specific fleet management system in Iceland; fishing licenses are readily available for anyone with a seaworthy vessel, and no decommissioning schemes are in place. Under the ITQ system, each vessel is allocated a certain share of the TAC of the relevant species. Within this system individual boat owners have substantial flexibility in exchanging quota, both among vessels within individual company as well as among different companies. The latter can be done via temporary or permanent transfer of quota. In addition, some flexibility is allowed by individual boats with regard to transfer allowable catch of one species to another. These measures, which can be acted on more or less instantaneously, are likely to result in lesser initiative to discards and misreporting than can be expected if individual boats are restricted by strict TAC measures alone. They may however result in fishing pressures of individual species to be different than intended under the single species TAC allocation. Decommissioning occurs indirectly, as companies increase their share of the TAC by buying out vessels and thus receiving the quota attached to those vessels.	9	HIGH
MEDIUM				
HIGH				

LEVEL OF COMPLIANCE		d.iii Management measures should ensure that fishing gear and fishing practices do not have a significant impact on non-target species and the physical environment.	References	Rating
LOW		***Determination: Bycatch of both PET and commercial species is considered limited, and when it does occur bycatch is landed and recorded by scientific and government officials. The assessment team was unable to determine the extent to which the ecological impacts of fishery removals are considered during the management process, but does not consider this to be a significant enough issue to warrant anything other than a score of high compliance in this section.***	1-6, 12	HIGH
MEDIUM				
HIGH		**Non-target species / bycatch** A number of species of sharks and skates are known to be caught as a by-catch in Icelandic waters, but information on amount of the catches is incomplete, and the status of these species is not known. Information on status and trends of non-commercial species are collected in extensive bottom trawl surveys conducted in early spring and autumn. With some minor exceptions it is required by Icelandic law to land all catches. Consequently, no minimum landing size is in force. To prevent the removal of juvenile and spawning fish Iceland implements various technical measures such as mesh size regulation, real-time, temporary and permanent area closures. ICES states that "*In the* [Icelandic] *pelagic fisheries catch other than the targeted species is considered rare.*" Occasionally juveniles of other species are caught, but when this occurs in significant numbers (20% or more of the catch by weight), temporary closures are implemented. **PET species** Icelandic legislation (557/2007) states that all fishing vessels must keep a Fishery Log-book. Birds and Mammals that are caught in fishing gear are to be reported and recorded in the Fishery Log-book. This Fishery Log-book is returned to the Directory of Fisheries once a month. These reports are then sent onto the MRI where the information is used in their scientific work. The seabird community in Icelandic waters is composed of relatively few but mostly abundant species,		

		accounting for roughly 1/4 of total number and biomass of seabirds within the whole ICES. Auks and petrels are the most important groups, comprising almost 3/5 and 1/4 of the total abundance and biomass in the area, respectively. **Ecosystem considerations** ICES states that capelin plays a key role in the marine ecosystem in this area and is by far the most important pelagic fish stock in Icelandic waters. Capelin are the main single item in the diet of Icelandic cod (Mean weight at age of Icelandic cod have been shown to correlate well with the size of the capelin stock), are prey to several species of marine mammals and seabirds, and are also important as food for several other commercial fish species. It is not clear to what extent the ecosystem impacts of capelin removals are factored into scientific advice or management decisions. **Physical environment** Direct effects on habitat and seafloor are typically minimal for pelagic gears, although occasional contact is known to occur and, in these cases, can potentially cause damage to fragile ecosystems (e.g. corals).		

e. Implementation

LEVEL OF COMPLIANCE		e.i There should be a framework for sanctions of violation of Laws and regulations.	References	Rating
LOW		***Determination: There is a robust framework for sanctioning violations of laws and regulations in place in Iceland.***	8	HIGH
MEDIUM		Breaches of the law and regulations on fisheries management are subject to fines or revoking of the fishing permit, irrespective of whether such conduct is by intent or negligence. Major or repeated intentional offenses are subject to up to six years imprisonment. If the catch of a vessel exceeds the allowable catch of the said vessel of individual species, the relevant fishing company must obtain an additional catch quota for the relevant species. If this is not done within a certain timeframe, the fishing permit may be revoked as well as a charge having to be paid for the illegal catch.		
HIGH		Collecting and bringing ashore any catches in the fishing gear of fishing vessels is obligatory; discarding is prohibited and such conduct is subject to penalty according to law. If a vessel catches any species in excess of its fishing permit, the relevant fishing company has the option of obtaining additional quota within a certain period of time after landing the catch. Vessels are authorized to land a small percentage of the catch, usually by-catch, without the use of quota. The catch in question is sold at auction and the proceeds go to a research fund that supports marine research.		
		Penalties are outlined in Articles 24-27 of the Fisheries Management Act, including: • Violations of the Act shall be prosecuted according to the Criminal Proceedings Act. • Violations against the Act shall be liable to fines, and cases of serious or repeated deliberate violation shall be liable to imprisonment for up to six years.		
		Fines may vary between ISK 400,000 (US$3,200) and ISK 8,000,000 (US$65,000), depending on the nature		

		and scope, and whether it represents a repeat offence.		
LEVEL OF COMPLIANCE		e.ii A management system for fisheries control and enforcement should be established.	References	Rating
LOW		***Determination: Effective fisheries control and enforcement regimes are in place in Iceland.***	10	HIGH
MEDIUM		Day to day administration and enforcement of the Fisheries Act and related legislation is in the hands of the Directorate of Fisheries, a government body responsible to the Minister of Fisheries. The Directorate is also responsible for the continuous monitoring of compliance with the Act.		
HIGH		The Icelandic Coast Guard, responsible to the Minister of Justice, monitors fishing activities in Icelandic waters, including surveillance of areas closed for fishing and inspection of mesh sizes and other gear related practices.		
		The Department of quota allocations of the Directorate issues commercial fishing permits, allocates catch quotas to Icelandic fishing vessels and maintains records of those rights. It also records quota transfers between vessels and checks that vessels do not fish in excess of their quotas. The department collects data on fishing and the catches landed by the Icelandic fleet and monitors compliance with rules on the weighing and recording of catches.		
		Under a bilateral agreement between Iceland and the European Union (EU), Icelandic inspectors are required on board all EU fishing vessels in Icelandic waters		

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