



FISHERY ASSESSMENT REPORT

IFFO GLOBAL STANDARD FOR RESPONSIBLE SUPPLY OF FISHMEAL AND FISH OIL



FISHERY:	Summer spawning herring (<i>Clupea harengus</i>)
LOCATION:	Iceland (ICES Division Va)
DATE OF REPORT:	13/1/12
ASSESSOR:	Sam Peacock

Global Trust Certification Ltd, 3rd Floor, Block 3, Quayside Business Park, Mill Street, Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864

Issue No; 2; Issue Date; Nov 09

Report Ref: Iceland Blue Whiting

CCM Code:

This report shall not be reproduced in full or in part without the permission of Global Trust Certification Ltd.

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: Sam Peacock	Peer Reviewer: Mike Platt	Assessment Days: 1	Initial/Surveillance/Re-certification: Surveillance
Assessment Period	11/1/12		
Scope Details			
1. Scope of Assessment:		IFFO RS standard	
2. Fishery		Summer spawning herring (<i>Clupea harengus</i>)	
3. Fishery Location		Iceland (ICES Division Va)	
4. Fishery Method		Purse seine and pelagic midwater trawls	
Outcome of Assessment			
5. Overall Fishery Compliance Rating		HIGH	
6. Sub Components of Low Compliance		None	
7. Information deficiency		None	
8. Peer Review Evaluation		Maintain Approval Status	
9. Recommendation		Approve fishery	

Global Trust Certification Ltd, 3rd Floor, Block 3, Quayside Business Park, Mill Street, Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864

Issue No; 2; Issue Date; Nov 09

Report Ref: Iceland Blue Whiting

CCM Code:

This report shall not be reproduced in full or in part without the permission of Global Trust Certification Ltd.

2. Quality of Information
Good; primarily from Icelandic government, MRI and ICES websites.
3. Compliance Level Achieved
HIGH
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
The initial assessment of this fishery noted discrepancies between scientific advice, TACs, and actual landings. These have now mostly been rectified, and the annual landings of the fishery have been drastically reduced in recent years, primarily in response to outbreaks of the disease <i>Ichthyophonus</i> . Although landings do continue to slightly exceed quotas, and future surveillance should focus particularly on this aspect, it is the opinion of the assessment team that this fishery now scores highly in every category of the standard. There have been no major changes in management procedure or structure since the initial assessment, and management measures continue to be informed by robust scientific analysis.
HIGH COMPLIANCE
A1, A2, A3, B1, B2, C1, D1, D2, D3, E1, E2
MEDIUM COMPLIANCE
N/A

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

KEY: Low Compliance [Red Box] Medium Compliance [Yellow Box] High Compliance: [Green Box]

Global Trust Certification Ltd, Quay side Business Centre,, Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864

Issue No: 2; Issue Date; Nov 09	Report Ref: Iceland Blue Whiting	CCM Code:
---------------------------------	----------------------------------	-----------

This report shall not be reproduced in full or in part without the permission of Global Trust Certification Ltd.

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.	Rating
LOW		<p>Determination: Icelandic fisheries management continues to be supported by robust legal and administrative foundations.</p> <p>Iceland operates a structured, legal fisheries management system to ensure responsible fisheries, focusing on the sustainable utilization of the fish stocks and good treatment of the marine ecosystem. The fisheries management 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.</p> <p>For more details please refer to the original fishery assessment report.</p>	HIGH
MEDIUM			
HIGH			
		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	Rating
LOW		<p>Determination: There has been no change in the scientific understanding of the distribution of this herring stock, nor any change in the management unit.</p> <p>At the time of the initial assessment, fisheries management was concerned with the entire distribution of the summer herring stock, and all fishery removals and species biology were taken into account by management organisations. There have been no changes in either the science or the management unit since that time.</p>	HIGH
MEDIUM			
HIGH			

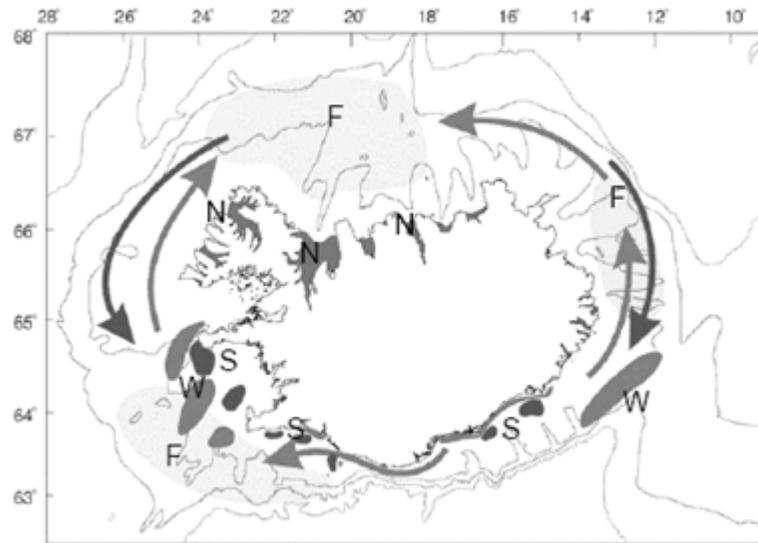
Global Trust Certification Ltd, Quay side Business Centre,, Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864

Issue No; 2; Issue Date; Nov 09

Report Ref: Iceland Blue Whiting

CCM Code:

This report shall not be reproduced in full or in part without the permission of Global Trust Certification Ltd.



Map indicating the distribution of major life-history aspects of the Icelandic summer-spawning herring, including the feeding (F) wintering (W) spawning (S) and nursery (N) grounds, and the main migration routes around Iceland (arrows).

	a.iii .Management actions should be based on long-term conservation objectives	Rating
LOW	<p>Determination: <i>In the initial assessment this stock scored a medium compliance rating in this section; however, quotas in recent years have been set in compliance with long-term objectives and so the fishery now scores highly in this section.</i></p> <p>The initial fishery assessment for this stock reported that “long term management plans do cover the conservation of this stock, but in 2008/9 the set TAC was 14.5% higher than that advised by the scientists and this...has reduced the compliance rating to medium”. However, according to the ICES 2011 advice, which summarises historical TAC recommendations, since the 2009/10 season quotas have been set and adhered to in compliance with the scientific advice. As there have been no major changes to the long-term objectives of the management organisations involved, the surveillance assessment team has upgraded the fishery score in this section to highly compliant.</p>	HIGH
MEDIUM		
HIGH		

Global Trust Certification Ltd, Quay side Business Centre., Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864

Issue No; 2; Issue Date; Nov 09

Report Ref: Iceland Blue Whiting

CCM Code:

This report shall not be reproduced in full or in part without the permission of Global Trust Certification Ltd.

b. Stock Assessment Procedures and Management Advice

LEVEL OF COMPLIANCE	bi. Research in support of fisheries conservation and management should exist.	Rating
LOW	<p>Determination: <i>The Marine Research Institute (MRI) continues to conduct annual hydroacoustic surveys of this stock, and make quota recommendations in cooperation with the International Council for the Exploration of the Sea (ICES).</i></p> <p>Landings of summer-spawning herring in Icelandic waters during the fishing season 2010/2011 amounted to 44,000t. The spawning stock was estimated as 218,000t at the beginning of the 2011/2012 fishing season. In 2010, the stock was heavily infected by <i>Ichthyophonus</i> for the third year in a row. It was estimated that roughly 30% of the stock had died because of the infection during the 2010/2011 quota year. ICES also produce recommendations for the stock in conjunction with the MRI research.</p>	HIGH
MEDIUM		
HIGH		

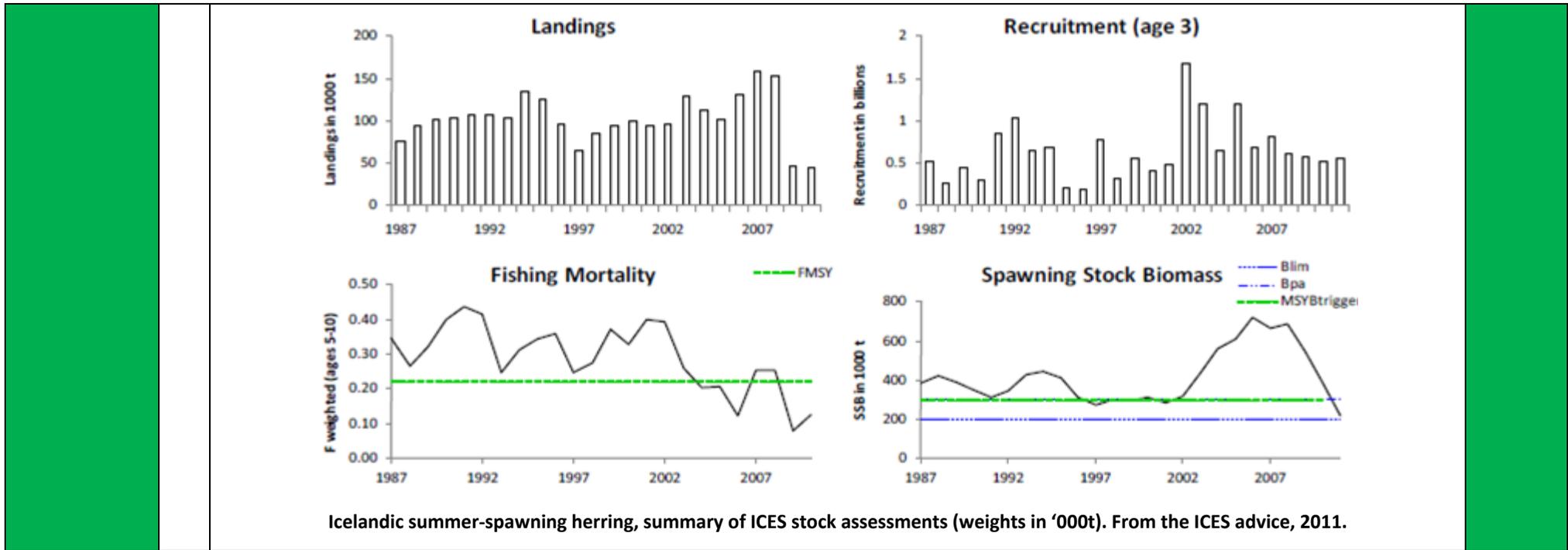
Global Trust Certification Ltd, Quay side Business Centre,, Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864

Issue No; 2; Issue Date; Nov 09

Report Ref: Iceland Blue Whiting

CCM Code:

This report shall not be reproduced in full or in part without the permission of Global Trust Certification Ltd.



Icelandic summer-spawning herring, summary of ICES stock assessments (weights in '000t). From the ICES advice, 2011.

LEVEL OF COMPLIANCE	b.ii Best scientific evidence available should be taken into account when designing conservation and management measures	Rating
LOW	<p>Determination: <i>There have been no significant changes since the initial assessment in the way in which scientific information is utilised in the management of this fishery.</i></p> <p>The initial assessment of this fishery concluded that scientific advice is fully taken into account in the management of this fishery. There have been no significant changes in the management methodology or the manner in which scientific evidence is factored into management decisions since that time.</p> <p>For more information please refer to the initial assessment.</p>	HIGH
MEDIUM		
HIGH		

c. The Precautionary Approach

LEVEL OF COMPLIANCE	c.i The precautionary approach is applied in the formulation of management plans.	Rating																					
LOW	<p>Determination: There have been no fundamental changes to the approach taken by stock management organisations, which was found by the initial assessment to be adherent to the precautionary approach. In addition, recent actions taken by management organisations in response to an outbreak of disease in the stock are considered by the assessment team to be appropriate.</p> <p>The following reference points were agreed in 1998 and have been unchanged since.</p> <p style="text-align: center;">Reference points</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>Type</th> <th>Value</th> <th>Technical basis</th> </tr> </thead> <tbody> <tr> <td rowspan="4" style="text-align: center;">Precautionary approach</td> <td>B_{lim}</td> <td>200 000 t</td> <td>SSB with a high probability of impaired recruitment.</td> </tr> <tr> <td>B_{pa}</td> <td>300 000 t</td> <td>$B_{pa} = B_{lim} e^{1.845\sigma}$, where $\sigma = 0.25$.</td> </tr> <tr> <td>F_{lim}</td> <td>Not defined.</td> <td></td> </tr> <tr> <td>F_{pa}</td> <td>0.22</td> <td>$F_{pa} = F_{0.1} = 0.22$ (based on a weighted average).</td> </tr> <tr> <td style="text-align: center;">Targets</td> <td>F_v</td> <td></td> <td></td> </tr> </tbody> </table> <p style="text-align: center;"><i>(unchanged since 1998)</i></p> <p>The precautionary approach reference points are used by ICES and MRI to produce quota recommendations for the stock. Although no precautionary approach reference point for fishing mortality has been set, ICES reports that fishing mortality is currently well below F_{MSY}. There is concern over outbreaks of <i>Ichthyophonus</i> in recent years, and the additional natural mortality caused by this infection is reflected in the reduced quotas (compared to historical values) in the past few years. The ICES advice for 2011/12 does not contain quota recommendations due to the uncertainty introduced by the infection, and until further information is available the Icelandic government has set an initial TAC of 5,000t (compared to 40,000t in 2010/11, and the historical maximum of 150,000t in 2007/8).</p>		Type	Value	Technical basis	Precautionary approach	B_{lim}	200 000 t	SSB with a high probability of impaired recruitment.	B_{pa}	300 000 t	$B_{pa} = B_{lim} e^{1.845\sigma}$, where $\sigma = 0.25$.	F_{lim}	Not defined.		F_{pa}	0.22	$F_{pa} = F_{0.1} = 0.22$ (based on a weighted average).	Targets	F_v			HIGH
		Type	Value	Technical basis																			
Precautionary approach		B_{lim}	200 000 t	SSB with a high probability of impaired recruitment.																			
	B_{pa}	300 000 t	$B_{pa} = B_{lim} e^{1.845\sigma}$, where $\sigma = 0.25$.																				
	F_{lim}	Not defined.																					
	F_{pa}	0.22	$F_{pa} = F_{0.1} = 0.22$ (based on a weighted average).																				
Targets	F_v																						
MEDIUM																							
HIGH																							

d. Management Measures

LEVEL OF COMPLIANCE	d.i The level of fishing permitted should be set according to management advice given by research organisations.	Rating
LOW	<p>Determination: <i>The initial assessment gave the fishery a medium compliance rating for this component. Quotas since that time have been set at or below scientific advice, although they continue to be exceeded by up to 10% by actual landings. On balance the assessment team now scores the fishery highly compliant in this section, due mainly to the drastic reductions in quota achieved over the past few years.</i></p>	HIGH
MEDIUM		
HIGH		

Global Trust Certification Ltd, Quay side Business Centre., Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864

Issue No; 2; Issue Date; Nov 09

Report Ref: Iceland Blue Whiting

CCM Code:

This report shall not be reproduced in full or in part without the permission of Global Trust Certification Ltd.

Year	ICES Advice	Predicted catch corresp. to advice	Agreed TAC	ICES Landings
1984		50	-	50.3
1985		50	-	49.4
1986		65	-	65.5
1987	F _{0.1}	70	72.9	75.4
1988	F _{0.1}	-100	90	92.8
1989	F _{0.1}	95	90	97.3
1990/1991 ²	Status quo F	90	100	101.6
1991/1992 ²	F _{0.1}	79	110	98.5
1992/1993 ²	F _{0.1}	86	110	106.7
1993/1994 ²	No gain in yield by fishing higher than F _{0.1}	110 ¹	110	101.5
1994/1995 ²	No gain in yield by fishing higher than F _{0.1}	83 ¹	130	132
1995/1996 ²	No gain in yield by fishing higher than F _{0.1}	120 ¹	110	125
1996/1997 ²	No gain in yield by fishing higher than F _{0.1}	97 ¹	110	95.9
1997/1998	No gain in yield by fishing higher than F _{0.1}	90 ¹	100	64.7
1998/1999	No gain in yield by fishing higher than F _{0.1}	90 ¹	90	87.0
1999/2000	Current F is sustainable	100 ¹	100	92.9
2000/2001	Current F is sustainable	110 ¹	110	100.3
2001/2002	Current F is sustainable	125 ¹	125	95.3
2002/2003	Current F is sustainable	113 ¹	105	97
2003/2004	Current F is sustainable	113 ¹	110	131
2004/2005	F=0.22	106	110	114.2
2005/2006	Status quo catch	110	110	103
2006/2007	Status quo catch	110	130	135
2007/2008	Average of the last 3 years catch	117	150	159
2008/2009	F _{pa} = 0.22	131	130	152
2009/2010	F _{pa} =0.22	75	40	46
2010/2011 ²	Domestic advice autumn 2010	40	40	44
2011/2012 ²	Domestic advice autumn 2011, no fishery until then	0		

Weights in '000 t.

¹⁾ Catch at F_{0.1}.

²⁾ Season starting in October of first year.

³⁾ In early autumn 2011 new information on *Ichthyophonus* infection and the stock size will be available from survey monitoring and ICES cannot give advice until this information is available.

Icelandic summer-spawning herring ICES advice, final TAC and actual landings. From the ICES advice, 2011.

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.	Rating
LOW		<p>Determination: <i>The capacity-reducing mechanisms identified in the original assessment continue to be functional and effective.</i></p> <p>Iceland operates a vessel registration, licensing and permit system which is necessary to obtain quota within the Individual transfer quota system. The Marine Policy focuses on economic utilisation of stocks. The system acts to create disincentives for allowing excess capacity in fisheries. Other technical measures, including season, permanent and temporary closures act to manage effort and capacity within the permitted fleet.</p>	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.	Rating
LOW		<p>Determination: <i>The initial fishery assessment concluded after on-site assessment that there were adequate management measures in place for the fishery to score highly in this category, and there have been no major changes since that time.</i></p> <p>The fishery for the ISUM herring is predominantly a single species fishery and is not aimed at any other fish. After the end of the drift-net fishery in the 1980s, these herring are only fished with purse-seines and pelagic trawls. Purse seines cause little or no damage to the benthic habitat, and mid-water pelagic trawls have minimal impacts on the seabed ecology. 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 Marine Research Institute where the information is used in their scientific work</p> <p>For more information, please refer to the initial assessment.</p>	HIGH
MEDIUM			
HIGH			

Global Trust Certification Ltd, Quay side Business Centre., Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864

Issue No; 2; Issue Date; Nov 09

Report Ref: Iceland Blue Whiting

CCM Code:

This report shall not be reproduced in full or in part without the permission of Global Trust Certification Ltd.

e. Implementation

LEVEL OF COMPLIANCE	e.i There should be a framework for sanctions of violation of Laws and regulations.	Rating
LOW	<p>Determination: <i>The original assessment identified an efficient framework of sanctions for violations of laws and regulations. There have been no major changes since that time.</i></p> <p>The legal and administrative framework consists of laws and regulations that specify and allow the Ministry through the services of the Directorate to prosecute and charge fines through the Courts of Iceland for infringement of fishery regulations.</p> <p>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, the relevant company or individual 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.</p>	HIGH
MEDIUM		
HIGH		
LEVEL OF COMPLIANCE	e.ii A management system for fisheries control and enforcement should be established.	Rating
LOW	<p>Determination: <i>The original assessment concluded that an effective management system was in place. There have been no significant changes since that time.</i></p> <p>All commercial fisheries are subject to authorization by the Directorate of Fisheries. The Iceland Coast Guard, which falls under the auspices of the Ministry of Justice, monitors the fisheries of vessels operating in Icelandic waters, as well as monitoring closed areas.</p> <p>There are also strict requirements for the keeping of e- logbooks on-board all fishing vessels and they must be made available for fishery inspectors.</p> <p>The Icelandic Directorate of Fisheries is responsible for monitoring and inspecting vessels both at sea, through an observer</p>	HIGH
MEDIUM		
HIGH		

Global Trust Certification Ltd, Quay side Business Centre,, Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864

Issue No; 2; Issue Date; Nov 09

Report Ref: Iceland Blue Whiting

CCM Code:

This report shall not be reproduced in full or in part without the permission of Global Trust Certification Ltd.

	<p>programme and ashore, through a network of official landing sites where all catches are registered by officials who report to a central database. Thus 60 ports of landings in Iceland send electronic data daily to the Directorate. A total of approximately 50.000 landings are registered in the system every year.</p> <p>All vessels must be registered, licensed and the Directorate issues fishing permits and allocates catch quotas.</p>	
--	---	--

Global Trust Certification Ltd, Quay side Business Centre,, Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864		
Issue No; 2; Issue Date; Nov 09	Report Ref: Iceland Blue Whiting	CCM Code:

This report shall not be reproduced in full or in part without the permission of Global Trust Certification Ltd.

References

ICES advice on Herring in Division Va (Icelandic summer-spawning herring), June 2010:

<http://www.ices.dk/committe/acom/comwork/report/2010/2010/her-vasu.pdf>

ICES advice on Herring in Division Va (Icelandic summer-spawning herring), June 2011:

<http://www.ices.dk/committe/acom/comwork/report/2011/2011/her-vasu.pdf>

IFFO fishery assessment report, Summer-spawning herring, 6th April 2010 (Global Trust Certification).

Icelandic Ministry of Fisheries and Agriculture fishing quotas:

<http://www.fisheries.is/management/total-allowable-catch/>

Global Trust Certification Ltd, Quayside Business Centre,, Dundalk, Co. Louth, Ireland Tel: 042 932 0912 Fax 042 938 6864

Issue: 1 .0

Report Ref: Iceland Blue Whiting

CC Code:

This report shall not be reproduced in part without the permission of Global Trust Certification Ltd.