



FOOD CERTIFICATION INTERNATIONAL LTD

Findhorn House, Dochfour Business Centre, Dochgarroch, Inverness, IV3 8GY, Scotland, UK

Tel: +44 (0) 1463 223 039

Fax: +44 (0) 1463 246 380

www.foodcertint.com

MSC SUSTAINABLE FISHERIES CERTIFICATION

The Dutch Fisheries Organisation (DFO) Gill Net Sole Fishery



2nd Annual Public Surveillance Report

December 2nd 2011

Prepared For: *Co-operative Fisheries Organisation* (Coöperatieve Visserij Organisatie) Formerly The Dutch Fisheries Organisation (Stichting van de Nederlandse Visserij)

Prepared By: Food Certification International Ltd



Assessment Data Sheet

Certified Fishery	The Dutch Fisheries Organisation (DFO) Gill Net Sole Fisheries
Fishery Management Agency	Ministry of Economic Affairs, Agriculture, and Innovation, Fisheries Directorate
Species	Common Sole (<i>Solea solea</i>)
Fishing Method	Sole Gill Net
MSC Registration Number	F-FCI-0005
Certification Date	24 th November 2009
Certification Expiration Date	23 rd November 2014

Certification Body	FOOD CERTIFICATION INTERNATIONAL Ltd Findhorn House, Dochfour Business Centre Dochgarroch, Inverness, IV3 8GY, Scotland, UK
Tel:	+44(0)1463 223 039
Contact:	Melissa McFadden <i>MSC Fisheries Coordinator</i>
Email:	melissa.mcfadden@foodcertint.com
Web:	www.foodcertint.com

Certificate Holder:	Dutch Fisheries Organisation, which forms part of the Coöperatieve Visserij Organisatie - CVO (Co-operative Fisheries Organisation) Postbus 64, 8300 AA Emmeloord, The Netherlands.
Contact:	Mr Derk-Jan Berends (Operational Secretary)
Tel:	00 31 527 698 151
Email:	djtberends@vissersbond.nl

Surveillance Team:	Bernard Keus, Dr Paul Medley, Tristan Southall and Rohan Smith
--------------------	---

Surveillance Stage: **2nd Annual Surveillance 2011**

Surveillance Date: **November 2nd 2011**

Contents

Summary of progress on complying with conditions	v
1. Introduction.....	1
1.1 Purpose.....	1
1.2 Recapitulation of Original Assessment.....	1
1.2.1 Recapitulation of 1 st Surveillance Audit (2010).....	2
1.3 Process.....	3
1.4 General Background about the Fishery.....	3
1.4.1 The Dutch Fisheries Organisation Gill Net Sole Fishery, Fishing Fleet, and Method.....	3
2. Changes in Circumstance or Practice	6
2.1 Certified Sole Fisheries.....	6
2.2 Stock Status.....	6
2.2.1 Target Species Reference points.....	6
2.2.2 Changes in Stock Status	7
2.3 Ecosystem Considerations	8
2.4 Management Systems Considerations	9
3. Progress in meeting the conditions of certification.....	10
Condition 1:.....	10
Condition 3:.....	12
Recommendation 1.....	14
Recommendation 2.....	15
Recommendation 3.....	15
Recommendation 4.....	16
Recommendation 5.....	16
Recommendation 6.....	17
5. Conclusions	18
5.1. Consequential Re-scoring of Performance Indicators.....	18
5.2 Summary of Progress.....	18

List of Figures

Figure 1: Allocation of original weighted scores (2009)	1
Figure 2: Original principle level scores (2009).....	2
Figure 3: Most recent status and reference points for North Sea Sole Fishery.....	7
Figure 4: North Sea Sole 2010 TAC and actual catch	8
Figure 5: North Sea Sole fishery and DFO gill net sole fishery catch data (2010).....	8
Figure 6: Condition 1: Target Stock Status / Rebuilding	10
Figure 7: Condition 3: Condition3: Discarding and ETP Information	12
Figure 8: Recommendation 1: Stock Assessment	14
Figure 9: Recommendation 2: Gear Loss	15
Figure 10: Recommendation 3: Stakeholder engagement on spatial Issues.....	15
Figure 11: Recommendation 4: Incentives	16
Figure 12: Recommendation 5: Enforcement.....	16
Figure 13: Recommendation 6: ETP Interactions	17
Figure 14: Consequential Re-Scoring of Performance Indicators	18

List of Tables

Table 1: Summary of progress on complying with conditions of certification	v
Table 2: Sole fisheries within the MSC certification program (as at November 2011).....	6

Summary of progress on complying with conditions

Table 1: Summary of progress on complying with conditions of certification

Binding Conditions / Recommendations	Descriptions	Status of Progress
Condition 1	The target stock status and rebuilding PI 1.1.1 & 1.1.3	Behind Target
Condition 2	Retained species information	Closed in 2010
Condition 3	Discarding and ETP information PI 2.2.3 & 3.3.3	Behind Target
Recommendation 1	Stock assessment should include wider uncertainties	Updated
Recommendation 2	Quantification of any gear loss	Updated
Recommendation 3	Wider cooperation with stakeholders on spatial planning issues and the EU Marine Directive	Updated
Recommendation 4	Request for clear national policy and strategy for gill net fishers with regards to sustainable fishing incentives	Updated
Recommendation 5	Fisheries enforcement and assurance of accurate reporting of catch	Updated
Recommendation 6	ETP interaction guidance	Updated

Sourced from original assessment 2010

1. Introduction

1.1 Purpose

The purpose of the annual Surveillance Report is fourfold:

1. to establish and report on any material changes to the circumstances and practices affecting the original complying assessment of the fishery.
2. to monitor progress made to improve those practices that have been scored as below “good practice” (a score of 80 or above) but above “minimum acceptable practice” (a score of 60 or above) – reflected in “conditions” detailed in the original Public Certification Report and in the corresponding Action Plan drawn up by the client.
3. to monitor actions taken in response to any (non-binding) “recommendations” made in the Public Certification Report.
4. to re-score any Performance Indicators (PIs) where practice or circumstances have materially changed during the intervening year, focusing on those PIs that form the basis of any “conditions” raised.

1.2 Recapitulation of Original Assessment

At the time of the original assessment, the expert team carried out information gathering through client and stakeholder consultations which took place in Ijmuiden and Scheveningen, The Netherlands during February 2009. This was followed by a scoring meeting, where scores were allocated to the fishery for each performance indicator as shown in **Figure 1**. The weighted scores for performance indicators where a score of below 80 was achieved and consequently assigned a Condition and Client Action in order to bring that element up to good industry practice are indicated in **red (Figure 1)**.

Figure 1: Allocation of original weighted scores (2009)

Principle 1 – Stock Status / Harvest Control Rules			
1.1.1	Outcome (status)	Stock status	75
1.1.2		Reference Points	80
1.1.3		Stock Rebuilding	75
1.2.1	Management	Harvest Strategy	90
1.2.2		Harvest control rules & tools	80
1.2.3		Information & monitoring	90
1.2.4		Assessment of stock status	80
Principle 2 – Wider Ecosystem Impacts			
2.1.1	Retained Species	Outcome (status)	85
2.1.2		Management	85
2.1.3		Information	75
2.2.1	By-catch	Outcome (status)	80
2.2.2		Management	80
2.2.3		Information	75
2.3.1	ETP Species	Outcome (status)	80
2.3.2		Management	80
2.3.3		Information	75

2.4.1	Habitats	Outcome (status)	95
2.4.2		Management	80
2.4.3		Information	85
2.5.1	Ecosystem	Outcome (status)	90
2.5.2		Management	85
2.5.3		Information	85

Principle 3 – Management / Governance			
3.1.1	Governance & Policy	Legal & customary framework	90
3.1.2		Consultation, roles & responsibilities	90
3.1.3		Long term objectives	90
3.1.4		Incentives for sustainable fishing	80
3.2.1	Fishery-specific Management System	Fishery specific objectives	80
3.2.2		Decision making processes	85
3.2.3		Compliance & enforcement	80
3.2.4		Research plan	85
3.2.5		Management performance evaluation	90

Sourced from original assessment 2010

The fishery attained a score of 80 or more against each of the MSC Principles and did not score less than 60 against any MSC Criteria. Summary of Principle level scores are provided in **Figure 2**. On November 24th 2009, it was therefore recommended that this fishery should be certified according to the Marine Stewardship Council Principles and Criteria for Sustainable Fisheries.

Figure 2: Original principle level scores (2009)

MSC Principle	Fishery Performance
Principle 1: Sustainability of Exploited Stock	Overall : 81 PASS
Principle 2: Maintenance of Ecosystem	Overall : 82 PASS
Principle 3: Effective Management System	Overall : 86 PASS

Sourced from original assessment

Nonetheless, at the time of the original assessment 3 conditions of certification were raised by the assessment team, and maintenance of the MSC certificate is contingent on the DFO gill net sole fishers moving to comply with these conditions. In addition 6 recommendations were made which are not obligatory, however the client is encouraged to act upon within the spirit of the certification.

Further information of these conditions and recommendations, and details of progress achieved by the client in meeting these requirements are outlined in sections 3 and 4 of this report. Details of fishing vessels subjected to this certification can be provided by contacting the [client](#) and [Food Certification International](#).

Information of this fisheries complete MSC assessment, client action plan, and supporting MSC certification policies are available by following this link ([DFO Gill-net sole fishery full assessment](#)).

1.2.1 Recapitulation of 1st Surveillance Audit (2010)

At the time of the 1st surveillance audit condition 2 was closed. The clients active participation contributed to the re-scoring and closing of condition 2 as it related to improved information on retained species for this fishery. There was reported evidence of client action such as setting up a working group, meeting with key stakeholders, in particular scientists, and implementing new procedures. Furthermore there has been good action at a national administrative level, in terms of

establishing clearer controls for other gill net vessels (outside of the client group) and taking a lead in seeking a review of the sole and plaice management plan.

From the numbers of conditions and recommendations raised during the full assessment, it is unsurprising that some will progress quicker than others, perhaps due to resources limitations and priorities within the client action plan. In addition, the client (DFPO) mentioned that they have not managed to capitalize on the successful certification as much as expected.

The status of the spawning stock biomass was reduced from 37,601 tonnes in 2008 to 33,000 in 2010. Thus, indicating that SSB is fluctuating around the precautionary biomass reference point (also now referred to a MSY Btrigger). Fishing mortality in 2010 was 0.34, and has steadily reduced in recent years, and remains below the precautionary level of 0.4, although it does exceed the defined Fmsy target of 0.22. The TAC set for 2010 was in line with the ICES advice of 2009 (14,100t).

The expert team reminded the client that failure to meet conditions within outlined timeframes shall result in loss of certification, unless meaningful mitigating circumstances (typically beyond the control of the client group) can be presented. For this reason further client action and prioritization is required to address the remaining outstanding conditions for this fishery.

1.3 Process

The 2nd annual surveillance audit was carried out in accordance with the post-certification requirements of the MSC Fisheries Certification Methodology and policy guidance documents.

Food Certification International (FCI) have actively sought the views of client and stakeholders (including managers, scientists, industry and environmental NGOs) with regards to this fishery and its performance in relation to conditions of certification and issues relevant to the MSC's Principles and Criteria for Sustainable Fishing.

The 2nd surveillance audit for the Dutch Fisheries Organisation (DFO) gill net sole Fisheries was announced on the MSC website on April 12th 2011. Direct email notifications were sent to the stakeholders that had previously been identified for this fishery, inviting interested parties to contact the audit team.

All three members of the original assessment team have been involved in the surveillance process. Dr Paul Medley and Tristan Southall contributed on key aspects in relation to principle 1 and 2, respectively; Bernard Keus and Rohan Smith met with the client representative, fishermen and key stakeholders on November 2nd in Scheveningen to discuss progress against milestones.

This surveillance report is based on the combined outcomes of before-mentioned interactions and discussions. **Appendix 1** lists consultees and documents referred to during this audit.

1.4 General Background about the Fishery

1.4.1 The Dutch Fisheries Organisation Gill Net Sole Fishery, Fishing Fleet, and Method

The client for this certification is Stichting van de Nederlandse Visserij (Foundation of the Dutch Fishery). All 44 vessels covered by this certificate are members of one of the following Producer Organisations (PO): PO Nederlandse Vissersbond, PO Wieringen, PO Delta-Zuid, and PO Urk.

These Producer Organisations have signed an undertaking to cooperate within a grouping called the GPO (Gezamenlijke Producenten Organisatie or Joint Producers Organisation), which manages and evaluates the management plan for this fishery, which all signatories of this certification must

adhere too. Further information on the Dutch fishermen's association and producers organisations is available through link provided (<http://www.vissersbond.nl>).

The fishing fleet under this certification is the Dutch sole gill net fleet. As noted in previous reports, there are other Dutch gill netters targeting sole with the same type of gear described in the initial assessment, however this certificate only covers those vessels who have signed up to comply with the rules of the local fisheries management plan. The North Sea sole fishery is also targeted by the Dutch beam trawlers fleet, catching both sole and Plaice, but again, these are not covered by this certificate.

The certified fleet range in size from 3.8m to 24.12m LOA. Of the 44 vessels, 16 are in the under 10m category (therefore subject to slightly different management), 20 vessels are in the 10 – 15m category (the 12 – 15m LOA are expected to be subjected to VMS regulations in 2011), with a further 8 being over 15m and therefore subject to additional controls such as electronic VMS controls and regulations.

The fishery is seasonal with fishing typically taking place during April to September. Different vessels are likely to pursue different fisheries throughout the rest of the year. The sole gill net fishery vessels are specially designed for static gear operations, with a net hauler on the forward starboard quarter and sufficient deck space for sorting and storing the catch and the nets. The MLS of North Sea sole is 24 cm; consistent with fishers who are frequently landing fish of 250 grams average size in weight.

The fishing method employed in this fishery is a bottom set gill net. The net consists of a single netting wall (as opposed to the multiple netting layers used in trammel nets) kept more or less vertical by a float line and a weighted ground line. Each net is approximately 1m high (from the seabed) and 50m long with a monofilament mesh size of 92mm. However fishing with 96mm mesh is very common to reduce catch of non-target fish. Typically lengths of nets are joined together, making long nets sometimes up to several kilometres in length. Vessels in this fleet typically carry between 100 and 300 nets. The Dutch regulations allow vessels to fish with a maximum of 500 nets. Nets are typically shot in the late afternoon, and hauled at around dawn, taking advantage of the sole's diurnal and nocturnal feeding behaviour. All nets are hauled each day, and brought ashore when vessels are not fishing. All catch are sold to wholesalers through the fish auction house. Further details of the DFO fishing fleet can be provided through contacting the [client](#).

1.4.2 The Target Specie and Stock

The target species for the fishery under certification is the common sole (*Solea solea*); however management is joint with plaice (*Pleuronectes platessa*) due to the mixed nature of this fishery ([EC Council regulation 676/2007](#)).

The North Sea sole stock is estimated to be much more abundant in 2010 compared to 2009. Stock management is under the EU management plan which implies first stage and second stage target levels in support of stock rebuilding the biomass to above the precautionary level. Total annual removals from this fishery are guided by ICES advice (and in accordance with ICES evaluations – International Council for Explorations of the Seas). Further details on this specie and stock are available through links provided:

» Fishbase:

<http://fishbase.org/summary/Solea-solea.html>

<http://fishbase.org/summary/Pleuronectes-platessa.html>

» ICES Fishmap:

<http://www.ices.dk/marineworld/fishmap/ices/default.asp?id=Sole>

<http://www.ices.dk/marineworld/fishmap/ices/default.asp?id=Plaice>

- » ICES stock management advice:
<http://www.ices.dk/committe/acom/comwork/report/2011/2011/sol-nsea.pdf>
- » Fishery Resources Monitoring System:
<http://firms.fao.org/firms/resource/10373/en>
- » Descriptions provided by national scientific bodies, such as IMARES and MMO:
http://www.imares.wur.nl/uk/zoek.htm?q=sole&ft=sole&requiredfields=ww_sitename:www_imares_wur_nl
http://marinemanagement.org.uk/search_results.htm?cx=006753055670391988215%3Aq9zo0xcdsm8&cof=FORID%3A9&ie=UTF-8&q=sole&sa=Search

2. Changes in Circumstance or Practice

2.1 Certified Sole Fisheries

At the time of this surveillance report the Sole fisheries listed in **Table 2** were participating in the MSC sustainable fisheries certification program.

Table 2: Sole fisheries within the MSC certification program (as at November 2011)

Location	Fishery	Date	Certification Body
England - UK	Hastings fleet Dover sole trawl and gill-net – ICES area VIII d	Certified 09/08/09	Intertek Moody Marine
England - UK	Hastings fleet Dover sole (trammel net) – ICES area VII	<i>Certified 16/09/05 & In Re-Assessment</i>	Intertek Moody Marine
Netherlands	Dutch Fisheries Organisation (DFO) gill net sole – ICES area IV b & c	Certified 24/11/09	FCI
Denmark	DFPO Denmark North Sea sole – ICES area IV	<i>In Assessment</i>	FCI
England - UK	C&WSTG English Channel megrim, monk and sole beam trawl – ICES area VII d & e	<i>In Assessment</i>	Intertek Moody Marine
Netherlands	Cooperative Fishery Organisation (CVO) North Sea plaice and sole – ICES area IV a, b, & c	<i>In Assessment</i>	Intertek Moody Marine

Sourced from www.msc.org

2.2 Stock Status

At the time of the 1st surveillance audit in 2010, the ICES report classified the stock as having full reproductive capacity and has been harvested sustainably. SSB fluctuated around the precautionary reference points for the last decade, but increased since 2008 owing to a large incoming 2005 year class and reduced fishing mortality. Fishing mortality indicated a declining trend since 1995 and is currently estimated to be below precautionary level (F_{pa}). The assessment suggests that the 2006 year class was below average, and 2007 was average (ICES WGNSSK REPORT 2010).

Contrary to the stock being at full reproductive capacity and being harvested sustainably, there was uncertainty of SSB recovery and appropriate reductions in the fishing mortality to levels outlined in the management plan. Basically, current level of fishing mortality is above the reference points that are expected to deliver high long-term yields and low risks to stock depletion. It was therefore required that the stock should be exploited at F_{msy} and the stock biomass should be at levels consistent with B_{msy} (further details in **Figure 3**).

Based on the most recent ICES estimate of SSB (start of 2011) and fishing mortality (in 2010), ICES classifies the stock as having full reproductive capacity and as being harvested sustainably. SSB continue to fluctuate around the precautionary reference point. Fishing mortality declined between 1995 and 2007, and contrary to previous forecast, has been rather stable between 2008 and 2010, and is currently ($F_{bar\ 2010} = 0.34$) estimated to be below F_{pa} (0.4). The current (2011) assessment suggests that the 2009 year class was average, while 2010 year classes was above average

2.2.1 Target Species Reference points

The target reference points shown in **Figure 3** have been developed, reviewed, and accepted as precautionary for the North Sea sole stocks. The biomass limit reference points are used to define stock status and are based upon the stock recruitment relationships.

Figure 3: Most recent status and reference points for North Sea Sole Fishery

Reference points	Type	Value	Technical basis
Management Plan	SSB _{MP}	35 000 t	Applicable in Stage one
	F _{MP}	0.4	Applicable in Stage one
		0.2	Applicable in Stage two
MSY Approach	MSY B _{trigger}	35 000 t	Default to value of B _{pa} .
	F _{MSY}	0.22	Median of stochastic MSY analysis assuming Ricker Stock-Recruit relationship (range of 0.2-0.25).
Precautionary Approach	B _{lim}	25 000 t	B _{loss}
	B _{pa}	35 000 t	B _{pa} = 1.4 * B _{lim}
	F _{lim}	Not defined.	
	F _{pa}	0.4	F _{pa} = 0.4 implies B _{eq} > B _{pa} and P(SSB _{MT} < B _{pa}) < 10%

Source: ICES WGNSSK REPORT and Book 6 Advice, 2011

The current reference points are B_{lim} = B_{loss} at 25 000 t and B_{pa} is set at 35 000t. the precautionary level F_{pa} was proposed to be set at 0.4, which is the 5th percentile of F_{loss}. Analysis suggests that F of 0.4 is consistent with an SSB of around 35 000t. In the MSY approach Fishing mortality at MSY was estimated to be 0.22 (ICES WGNSSK REPORT 2011).

Both of the jointly managed stocks of North Sea sole and plaice stocks have been within safe biological limits in the last two years. According to the management plan, this signals the end of stage one. Transitional arrangements for stage two should amend the objectives and the procedures for setting TACs and effort limitations, but these have not been decided on yet. Therefore, ICES advice is limited to the procedures defined for stage one (ICES Advice 2011, Book 6).

2.2.2 Changes in Stock Status

North Sea Sole – stock assessment surveys and research

ICES advice for the 2010 fishing period estimates fishing mortality (F_{age2-6}) to have been relatively stable at 0.34 over the last 3 years, and is expected to be around 0.31 in 2012. The overall trend is below the precautionary target reference point which is F_{pa} = 0.4, however above the management plan target which is 0.22. On the positive, spawning stock biomass has increased annually. Most recent estimates of biomass are 35,200t and 36,550t for years 2010 and 2011 respectively, indicating that the stock has been above MSY B_{trigger} for the last few years. Therefore, the biomass is now within the target region. In 2012, the SSB is expected to continue increasing above the trigger points (35,000t) and be at around 45,000t in 2013. Current stock assessment surveys and estimates indicated recruitment in 2010 to be 153 million, and future levels are expected to be above the long-term average of 94 million. The sole population is currently dominated by the strong 2005 year class which were age 5 in 2010 (around 13 million).

North Sea Sole Allowable Catch

The advice for 2010 given by the ICES advisory committee (ACFM) was based on the assessment made by WGNSSK – Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak in 2009. The agreed harvest control rule in the EU management plan recommended a TAC for 2010 of 14,100t (**Figure 4**), which was the quota accepted by the national fisheries for 2010 (ICES WGNSSK REPORT 2010).

The official catch for 2010 is reported to be 12,603t, which is 90% of the agreed TAC. For 2011, a similar level TAC of 14,100t is set and agreed for North Sea sole stock. TAC of no more than 15,700t

is advised for 2012 fishing season, based on stage 1 guide of the management plan (ICES WGNSSK REPORT 2011, and ICES Advice 2011, Book 6 – June 2011).

Figure 4: North Sea Sole 2010 TAC and actual catch

Stock	Year	2010 TAC (t)	Actual Catch (t)	Difference (t) / %
North Sea Sole	2010	14,100	12,603	1,497 / -10%

Actual NS sole catch by gear is approximately 90% by trawl fleet and 10% by static gear fleet

Source: compiled from ICES WGNSSK Reports 2010-2011

Catch for the gill net component of the Dutch sole fleet was 109t in 2010 and 106t at the end of 2011 fishing season. With regards to the Dutch national fleet, landings for the 2010 North Sea sole fishing season were 1,428t below their allowable catch (National TAC was 10,142t; Actual catch was 8,714t). A National TAC of 10,485t is agreed for 2011 fishing season. At the time of this report actual landings were 6,717t, which is 3,768t below the agreed TAC (**Figure 5**).

Figure 5: North Sea Sole fishery and DFO gill net sole fishery catch data (2010)

North Sea Sole Fishery	Sole (t)
TAC for most recent fishing year 2010:	14,100
Unit of Certification (ICES area IV) share of TAC for the fishing year 2010:	*N/A
Dutch National fleet share of TAC (including swaps) in fishing year 2010:	10,142
Total green-weight catch taken by Dutch National fleets in calendar year 2010:	8,714
Total green-weight catch taken by Client fleets in calendar year 2010:	109

Sourced from Client and Ministry of Economic Affairs, Agriculture & Innovation

*N/A is the representation because the Client allowable catch is a "Purchase as needed" allowable quota from the Producers Organization whose allowable quota is a sub-set of the Dutch National quota that is controlled, enforced, and monitored by the Dutch Ministry of Economic affairs, Agriculture and Innovation.

2.3 Ecosystem Considerations

Sole and Plaice are known to occupy similar areas within the mixed demersal fisheries and are commonly exploited by fishers targeting sole stocks. For this reason, mixed fishery ecosystem management is recommended for sustainable exploitation of these stocks; particularly stocks in poor condition and those largely impacted by reduced reproductive capacity.

Recent ICES reports, has indicated that changes in sea water temperature is being considered as an element that has contributed to early maturity and genetic-shifts within sole and plaice stocks. In offshore areas of the North Sea, benthic biomass and biodiversity has been reported to be impacted from trawling activity. However, little reference is made with regards to static gear fleet such as set net which exploits approximately 10% of catches (ICES 2011 Reports from WGNSSK and WKFLAT).

Overall changes in fishing effort from northern to the southern North Sea where sole and juvenile plaice are estimated to be in high abundant, is suggested to have resulted increased discarding of small plaice. However on the positives, there have been increases in sole growth rates, the duration of its growing period, and availability of nursery areas due to temperature and ecosystem changes (ICES Advice Book 6, 2011).

Discarding, By-Catch, and IUU (Illegal Unreported and Unregulated catch)

Discarding is considered to be relatively low in this fishery due to the selective nature of the gear. Information on discarding is primarily from the Dutch discard sampling program which samples the beam trawl fleet. In the recent pass discarding has decreased, 2006 was 13%, 2007 was 10%, 2008

was 6%. At the time of this report, no official estimate was available for 2009 and 2010; however levels are likely to be similar or less than 6%. There are some reports of discarding of undersized plaice, and potential discarding due to quota restrictions. Improvement in mesh size and mesh-square configuration is suggested as an approach to improve fishing gear selectivity and thereby, reduce catches of undersize plaice, but might result in loss of marketable size sole (ICES WGNSSK REPORT 2011). Catch composition and retained species information (from the 1st surveillance report) for the sole gill net fleet indicates very little discarding of catch.

Due to their natural behaviours and sharing of habitats, sole and plaice are exploited within a mixed demersal fishery resulting in by-catch of both commercial and non-commercial species. The working group (WGNSSK) considered it not necessary to include discard and by-catch data into recent assessments because of the minor effect it would have on stock indicators.

With regards to ETP species, there has been collaboration involving the Dutch Fisheries Association, the expert group on set net fishery, and the Dutch winter set net fishermen in order to monitor by-catch and share experiences. This is a pilot project aimed at mitigating by-catch of harbour porpoise (*Phocoena phocoena*), however is particularly focused on winter set net fishery targeting cod, turbot, and brill. Whereas, other set net fishing takes place annually spring through to autumn. It is hoped that knowledge gained through the pilot project will lend itself to improvements in the overall sole fishery (Marije Siemensma 2011).

IUU catch is not considered an issue within this fishery. A comparison of ICES estimates and official catches revealed they are within close range, and reported catch are less than the agreed annual TAC.

2.4 Management Systems Considerations

Both North Sea sole and plaice stocks have been within safe biological limits in the last 2 years. ICES has evaluated the long-term management plan ([Council Regulation \(EC\) No. 676/2007](#)) for plaice and sole (Miller and Poos 2010) and found it to be in agreement with the precautionary approach. The plan consists of two stages. The first phase aims to ensure the return of the stocks of plaice and sole to be within safe biological limits for two consecutive years. This has been achieved. The plan is entering into the second stage in which stocks should be fished at a level that yields high long-term sustainable yields.

Management of the North Sea sole and plaice stock continues to include technical measures such as; MMS for trawl (80mm) and set nets (92mm), MLS of 24cm, fishing area restrictions such as MPA, and effort restrictions in the form of limited days at sea, fleet capacity reduction, and kw-days limitations.

Administrative changes

The client organization for this fish has changed effectively from August 25th 2011, in order to consolidate resources and operational efficiencies. The Dutch Fisheries Organisation is now a part of the new Co-operative Fisheries Organisation (Coöperatieve Visserij Organisatie). Mr Derk Jan Berends retains his role as the operational secretary and client contact for this certified fishery.

Control and monitoring of fishing activities

Community fisheries joint deployment management plans are being implemented in this fishery as an effort to enhance information sharing and cooperation on control of fishing activities. Additionally, satellite based vessel monitoring system (VMS), electronic-logbook, and electronic notification of catch data are being implemented on vessel larger than 12 metres with installation incentives as of January 1, 2010(

3. Progress in meeting the conditions of certification

Figure 6: Condition 1: Target Stock Status / Rebuilding (Source Public Certification Report)

Condition 1: Target Stock Status / Rebuilding	
Performance Indicators:	1.1.1 & 1.1.3
Timelines	Within the 5 year lifespan of the certificate [formerly was within 2 years of certification; see justification below]
Summary of issues	It is not currently possible to state with a high degree of certainty that the recently agreed rebuilding strategy in place for the fishery is effective. Once it can be demonstrated that the stock is being rebuilt, and the rebuilding strategy has been effective then 1.1.3 will be rescored above 80.
Suggested Action	The rebuilding strategy (which includes the harvest control rule) should be re-evaluated, followed by an appropriate management response.

Source original assessment 2010

Progress in meeting Condition 1

It is not yet possible to conclude with a high degree of certainty that the rebuilding strategy in place for the fishery is fully effective. This is largely the result of uncertainty over the spawning stock biomass and trends. However, it appears likely that the stock will rebuild above the trigger and the overall trend in the longer term will increase the stock to the MSY target. However, rebuilding is taking longer than expected primarily because the landings have not been reduced in line with the target fishing mortality.

Most recent estimates of biomass are 35,200t and 36,550t for years 2010 and 2011 indicating that the stock has been above MSYB trigger for the last few years. Therefore, the biomass is now within the target region.

Fishing mortality was estimated to be around 0.34 year⁻¹ for the most recent years 2008-10. This is below F_{pa} (0.4), but remains well above F-target (0.22). There has been no decrease in fishing mortality over the last three years, which has slowed up the recovery. This has been the result of the landings remaining relatively constant, while recent recruitment has been below the long term average. The landings have reduced from around 14,000t in 2008 and 2009, to 12,600t in 2010.

The management plan has been fully reviewed and it has been confirmed that it is consistent with the precautionary approach. Therefore, the working group is confident that the stock will reach its target in the medium to long term as fishing mortality is reduced.

As predicted in the previous surveillance audit, the spawning stock has increased above the MSY trigger (SSB = 35,000t) in line with the part of the requirements of this condition. However, since fishing mortality remains above the target level and has not decreased recently, the condition has not been wholly met.

Status of condition 1 ('on target', 'ahead of target' or 'behind target'): Behind target

On-going reductions in fishing mortality are required to show the rebuilding and management plan are successful.

Consequential Re-Scoring of performance indicators

There are no changes to the performance indicator scores. While rebuilding is slower than anticipated, it remains likely it will be well within time limits required by PI 1.1.3 SG80.

Remedial Action: The clients is encouraged to continue all efforts such as collaboration with fishery management authorities and scientist, thereby increasing information in this fishery that validates stock rebuilding aligned to target levels in the agreed management plan.

Justification to extend Condition1 Timeframe

The Conformity Assessment Body - CAB (Food Certification International) for this fishery has authorized changes to this condition (complying with MSC Certification Requirements (CR), sections 4.6.1 and 27.22.10) deliverables timeframe from year two of certification to year five of certification. This decision is justified by the P1 expert assessor recommendation that:

- The working group for this fishery is confident that the stock has reached its target biomass, but fishing mortality has remained high. Recent strong recruitment has allowed a slower reduction in fishing mortality (TAC) than would otherwise be required.
- Extending deliverables timeframe from year 2 of certification to year 5 of certification will allow appropriate time for F to reach its target (FMSY), particularly seeing that SSB is estimated to be constantly increasing over recent years and is now above BMSY. Nonetheless, it is worth mentioning that the success of the stock rebuilding appears to have been dependent on strong survival from a few good year class recruitments, rather than directly due to management intervention. This is acceptable as long as the long term exploitation level continues to be approached. The extension would allow closer on-going monitoring to ensure this is the case and underlines the importance attached to sustaining the stock above the trigger level.

As well as monitoring SSB to ensure it remains above the trigger SSB, the TAC set for 2013 will be used to assess performance against this condition.

Managers of this stock are therefore encouraged to take further actions (such as reducing annual TAC) in order to achieve the targets outlined in the management plan and progress this condition to on target or closed out status.

The ramifications of any shortfalls with regards to this condition is expected to include implementation of The MSC – CR section 27.22.9; explained as:

MSC – CR 27.22.9 In the event that the CAB determines that progress against conditions is inadequate and/or a condition is not back ‘on target’ within 12 months of falling ‘behind target’, the requirements of 7.4 (suspension or withdrawal) shall be applied. [83]

Comments submitted by the Client on these matters included:

“F for Sole is approximately F 0,32, which is well under Fpa 0,4. Fmsy has been set by MSC (assessment team) as the new target instead of Fpa. Fmsy for Sole has been tied down by ICES at 0,22. SSB is now for 2 consecutive years above Bpa. F is now for 2 consecutive years below Fpa. Following the LTMP phase 2 should be implemented. Article 5 states that the Council of Ministers (EU) first has to make a decision based on a proposal by the European Commission. The Commission will ask STECF for advice. Until now STECF has not come up with an advice. Propably by 2012 the Council will decide on this. In 2015 the Sole stock could then be managed at MSY level. Therefore we urge the assessment team to stretch out the timeline by 3 years instead of 2”.

Figure 7: Condition 3: Condition 3: Discarding and ETP Information (Source Public Certification Report)

Condition 3: Discarding & ETP Information	
Performance Indicators:	2.2.3, 3.3.3
Timelines	By the 3 rd surveillance visit
Summary of issues	Although it is anticipated that discarding level is low, there is no independent corroboration of this available to assessors. Discard levels (both species and quantity) should be independently assessed by research project(s). Any such on-board observations should also take the opportunity to record interactions with ETP species. IMARES and other national environmental groups with relevant expertise should be consulted in the design of any such program.
Suggested Action	Analysis of focused research on discard levels and interaction with ETP species in the Dutch sole gill net fishery should be made available to MSC assessors.

Source original assessment 2010

Progress in meeting condition 3

Some progress has been made in complying with this condition. A gill net sole fishery group was created with the aim of monitoring discards from this fishery (guided by the scientific data collection regulation). The discard data collection and monitoring plan included self-sampling by skippers, and use of on-board CCTV cameras. A total of 10 fishing trips were self-sampled in the 2011 fishing. This data was recorded in the EU logbooks and shared with IMARES. A draft report provided by the client indicated that the most abundant discarded species were crabs (green shore, flying, and edible). Other species being discarded in small quantities included fish such as dab, whiting, turbot and flounder. In general these species were caught in 80% of the hauls in varying proportion to the target catch. This self-sampling indicates that approximately 43% of catches are discarded, particularly green crab (~35%) and flying crab (~18%). It is therefore of interest that the discard monitoring plan also includes evaluation of survival rates of catch return to the sea, and supports any necessary improvements.

Further progress to monitor discarding and interaction with ETP species included the use of Closed Circuit Television cameras (CCTV) during 6 fishing trips of the 2010 fishing season. The dominate catch was in the flatfish grouping; however some turbot catches were recorded in small quantities.

No interaction with marine mammals or ETP species was reported from the self-sampling and CCTV reports. In addition a meeting with fisheries control authorities in Scheveningen corroborates that there are no known issues with the sole gill net fishery with regards to harming marine mammals and ETP species. Personal communication with independent individuals with interest in this fishery who have recently observed the at-sea fishing operation confirmed no untoward issues or interaction with ETP species. There are indications that levels of discarding and interaction with ETP species is low.

In spite of this apparent good progress, and in particular the excellent contribution of the skippers and crew in compiling this information, the level of information so far presented still falls short of the expectation of the assessors. It is critically important that this catch profiling work be both independent and scientifically robust – which includes careful research design to ensure adequate coverage in order that findings capture any important interactions. The requirement of this condition and agreed client action is for the DFO to collaborate with IMARES and other national environmental groups with relevant expertise to design the discard monitoring and ETP interaction program. In addition, to include independent validations on these matters such as through at-sea observers, and provide independent analysis and reports.

In complying with this condition, the DFO is required to make this information available in the form of analysed independent project outputs to the assessors on or before the 3rd annual surveillance audit of this fishery that is planned for 2012.

This research work therefore needs to be fast tracked if this timeline is to be met. Given that the level of research has yet to be conducted at the level of rigor intended at the time of setting the condition, the assessment team do not intend to re-score this fishery PI 2.2.3 and 3.3.3 from 75, and therefore this condition will continue and must be addressed by the time of the next surveillance audit.

Status of condition 3 ('on target', 'ahead of target' or 'behind target'): Behind Target

4. Progress in taking forward recommendations

The assessment team has made a number of recommendations. These are not required to maintain certification but would improve the performance of the fishery against the MSC Principles and Criteria. Accordingly, the action taken and timescales are at the discretion of the client.

Figure 8: Recommendation 1: Stock Assessment

Recommendation 1	Stock Assessment includes wider uncertainties
Performance Indicators:	1.2.4
Summary of issues	Some aspects of the stock assessment are based on probability and risk evaluation. FMSY was estimated from stochastic simulations. The management plan has been evaluated probabilistically, evaluating the current non-probabilistic stock assessment approach in a stochastic simulation, suggesting the method was low-risk. While an important development, this remains somewhat implicit in addressing uncertainty.
Suggested Action	The stock assessment should take account of wider uncertainties and evaluate stock status relative to reference points in a probabilistic way (e.g. confidence intervals on key parameters of interest).

Source original assessment 2010

Update on recommendation 1

This recommendation relates to the working groups (WKFLAT, WGNSSK, and RGNSSK) stock assessment approach, where outputs are integral to this fishery's management plan and the client's allowable harvest (harvest strategy and harvest controls rules). It is understood that the client's efforts might be limited to effect change on these matters; however the client is encouraged where possible to participate in dialogue for stock assessment and management solutions.

The 2011 ICES WGNSSK report confirms that the XSA model continues to be used as the basic stock assessment method and that the SAM model should be run alongside XSA to compare model results. It is expected that the confidence bounds produced by SAM will be useful for informing management; therefore the working groups should consider switching to SAM in the future.

Both XSA and SAM methods were applied by WGNSSK in the 2011 assessment; the working group and Review Group confirm outputs from both methods were similar.

Good progress is being delivered on this recommendation by the RGNSSK and WGNSSK through application of the SAM method and the verification that outputs were similar to that when using the XSA method. The assessment team consider this as appropriate progress to close this recommendation from further monitoring within this certificate.

Figure 9: Recommendation 2: Gear Loss

Recommendation 2	Recording fishing gear loss
Performance Indicators:	2.5.1
Summary of issues	Although all stakeholder consultations suggest that gear loss was a minor issue, it would be advantageous to future scoring of the fishery if this could be quantified more accurately to confirm that it is indeed a minor problem. Records of gear loss should therefore be kept.
Suggested Action	Records of gear loss and damage should be kept for evaluation and guiding management solutions.

Source original assessment 2010

Update on recommendation 2

Some progress is being delivered on this recommendation. Sole gill net fishers are in discussion with other users of the fishing grounds in order to form a collective solution that is expected to include reporting any accidental gear damage by other users of the fishing grounds. The practice of anchoring and marking nets with identification tags and GPS equipment is still in place. During a meeting with skippers and the DFO client it was emphasized that nets are more cost effective to repair rather than replace and therefore are recovered if damaged.

The DFO client is asked to provide a log of gear loss or gear damage during the fishing seasons. It is also appropriate for this information to be independently validated; possible by the fisheries control authorities or appropriately recognised independent observer. This is a non-binding recommendation; however it is hoped that the client will act on within the 5 years life of certification.

Figure 10: Recommendation 3: Stakeholder engagement on spatial Issues

Recommendation 3	Stakeholder engagement on spatial Issues
Performance Indicators:	3.1.2
Summary of issues	The fishery should actively engage with other Dutch or North Sea marine stakeholders with an interest in both the resource and the spatial elements of the fishery. In particular the fishery should cooperate fully in any on-going efforts to develop spatial planning and stakeholder management initiatives which may result from the EU Marine Strategy Directive.
Suggested Action	A spatial overview of netting per month could help to assess cumulative spatial pressures.

Source original assessment 2010

Update on recommendation 3

Sole gill net fishers are in discussion with other users of the fishing area in order to form a collective solution. The DFO client and skippers explained that they are yet to receive a reply from wind-park developers on ideas such as fishing within designated wind-park areas. There are further concerns of an increased number of cargo ships being anchored within traditional fishing areas. The DFO is encouraged to engage stakeholders on these matters and provide updates at next audit.

Figure 11: Recommendation 4: Incentives

Recommendation 4	Incentives
Performance Indicators:	3.1.4, 3.2.1
Summary of issues	Assessors recommend that efforts are made to develop a clear national policy and strategy for gill net fisheries (building further on those measures announced in August 2009). In particular, this should examine the appropriate fleet size and number of nets per vessel. Within the context of the certified fishery, the assessors are of the view that the 300 net limits appears to be high, and recommend that this figure is either re-evaluated or more clearly justified in the future.
Suggested Action	Re-evaluation of the 300 net limit used in Dutch gill net sole fishery

Source original assessment 2010

Update on recommendation 4

The Dutch fishing fleet capacity is capped at current levels by nation Dutch regulations. All under 10 metres vessels are limited to a maximum of 500 nets. The certified fleet is limited to a maximum of 300 nets. A suggestion during this fishery's initial assessment was for a national net limit to be set rather than 300 and 500 for different fishers. The assessment team considers the lower limit of 300 nets to be an incentive to reduced fishing effort and therefore contribute to sustainability of the stock. It is hoped that a clear national policy on this matter is achieved within the 5 year life of this certificate.

Figure 12: Recommendation 5: Enforcement

Recommendation 5	Enforcement and under-report of catch
Performance Indicators:	3.2.3
Summary of issues	Although it is thought that the overall scale of under-reporting is low, there is a clear opportunity to remove any possibility or incentive for under-reporting. For example, if the total amount (either as kilos, or as boxes) was reported to AID, at the same time as notifying of an intention to land (2 hours prior), this would provide greater assurance that the log sheet data was correct, and filled in prior to landing.
Suggested Action	Corroboration from enforcement authorities that under-reporting of catch is not a concern in this fishery.

Source original assessment 2010

Update on recommendation 5

At a meeting with fisheries control authorities and skippers, it was confirmed that all members of the certified fleet are complying with fisheries control and reporting regulations. It was reported that there have been instances of warnings; however situations have not escalated into any infringements. VMS implementation and derogations to allow resolutions of operations faults are in place.

The DFO gill net fishers have demonstrated compliance on this recommendation for 2 consecutive years. It is therefore considered appropriate to accept that this approach is working appropriately and closed to further monitoring.

Figure 13: Recommendation 6: ETP Interactions

Recommendation 6	ETP Interactions
Performance Indicators:	2.3.2
Summary of issues	WWF and North Sea Foundation have offered to distribute guidelines (in the form of an aboard stickers) for what to do in event of a mammal by-catch. Having these displayed aboard all member vessels would contribute to the overall strategy for ETP interactions.
Suggested Action	Improve skippers and crew awareness with regards to interaction with ETP species, particularly marine mammals by-catch through collaborations with NGO such as WWF and North Sea Foundation (an example is to distribute guidelines and display stickers on vessels).

Source original assessment 2010

Update on recommendation 6

This matter has progressed to the level where the DFO had meetings with representatives of NGO (WWF and North Sea foundation) on ETP species interaction. No interaction with ETP species such as marine mammals was reported for this fishery. However the DFO is encouraged to act in good faith of this certification and therefore install stickers showing ETP species, aboard all vessels under this certification.

While this recommendation is non-binding, the client is encouraged to take steps that will improve skippers' awareness with regards to interacting with ETP species. The results of these efforts will add to the client's commitments towards sustainable fishing.

5. Conclusions

5.1. Consequential Re-scoring of Performance Indicators

Figure 14: Consequential Re-Scoring of Performance Indicators

Condition	PI	Original Score	Revised Score	Status on Progress	Condition Remaining
1	1.1.1	75	75	Behind Target	Yes
	1.1.3	75	75	Behind Target	Yes
3	2.2.3	75	75	Behind Target	Yes
	3.3.3	75	75	Behind Target	Yes

Adopted from original assessment 2010

There is insufficient evidence to support changes to the performance indicator scores and therefore no consequential re-scores of any PI of this fishery.

5.2 Summary of Progress

Some progress has been delivered on this fishery's conditions of certification and recommendations. There is clear evidence of client's action, collaborating with IMARES, WWF, North Sea Foundation, and implementing self-sampling and CCTV initiatives to monitor discarding and ETP species interaction. Additionally, allowing interest group and journalist to observe at sea fishing operations. Further progress includes a more robust stock assessment in 2011 which addressed wider uncertainties, key to management advice for this fishery.

The DFO is encouraged to make further efforts such as

- Further collaboration with IMARES, to report and fully document, and quantify discarding and ETP species interaction
- To install stickers aboard vessels, in an effort to improve fishers awareness of interaction with ETP species.
- To log instances of gear loss or damage, and derive management solutions
- To continue stakeholder engagement for collective agreement on use of shared fishing areas
- To continue dialogue with national authorities for a clear and harmonized national policy on number of fishing nets

More significantly, the DFO is encouraged to make all possible efforts to bring condition 3 within compliance on or before the third surveillance audit. While condition 1 is somewhat beyond the client's independent efforts, the DFO is encouraged to collaborate and support all dialogue that is likely to deliver improvements in assessment and management of the NS Sole and Plaice stocks.

Stakeholders

Over 69 stakeholder organisations and individuals having relevant interest in this fishery's assessment were identified and consulted during this fishery surveillance audit. The interest of others not appearing on the stakeholder list was solicited through the postings on the MSC website.

Appendix 1 – Listing of Consultees and Documents Referred to

Consultees

Industry

- » Derk Jan T. Berends – Client – Operations Secretary
- » Durk W. Van Tuinen – Client – Project Officer
- » Rems Kramer – Skipper – KW 2 and Theo Wols – Skipper – SCH 7

Managers

- » Dr. Leon Bouts - Senior Policy Advisor Fisheries Control - Division Food Industry Food and Product Safety Authority, The Netherlands (Scheveningen)
- » Richard Dieke – Dutch Fisheries Control and Inspection Officer – The Netherlands (Scheveningen)
- » Piet Roos and Laura Bruinen - Dutch Fisheries Policy and Compliance - Division Food Industry Food and Product Safety Authority, The Netherlands (Scheveningen)

Scientist

- » Dr Floor Quirijns – Fisheries Scientist – IMARES

Documents referred to

- » ICES WGNSSK Reports 2009, 2010, and 2011 on Sole and Plaice (Sub-area IV North Sea)
- » ICES Advice 2011, Book 6 (Advice June 2011 on North sea Sole and on North Sea Plaice)
- » ICES WKFLAT REPORT 2011 - Report of the Benchmark Workshop on Flatfish (WKFLAT)
- » Machiels, M.A.M., Kraak, S.B.M., and Poos, J.J. 2008. Biological evaluation of the first stage of the management plan for fisheries exploiting the stocks of plaice and sole in the North Sea according to Council Regulation (EC) 676/2007. Report number CO31/08: 39 pp.
- » Miller. C.M; J. J Poos 2010. Combined Ex post and ex ante evaluation of the long term management plan for sole and plaice in the North Sea, including responses to ICES review. ICES CM 2010/ACOM: 62.
- » Siemensma, Marije. By-catch mitigation of harbour porpoise (*Phocoena phocoena*) in Dutch set net fisheries: A pilot to study the workability and efficiency of several pinger types. In the Workshop on techniques for reducing marine mammal – Gillnet by-catch. Woods Hole, MA, USA. October 17 – 20, 2011.
- » STECF (2010). Evaluation of the North Sea Sole & Plaice Management Plan. In Report of the Scoping meeting for Evaluation and Impact Assessments (SGMOS-10-06a) PREPARED IN DRAFT BY THE SGMOS 10-06A COPENHAGEN 7-11 JUNE 2010,FINALISED IN STECF PLENARY 12-16 JULY 2010