

Surveillance Report for Norwegian North East Arctic and North Sea Saithe Fisheries

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FISHERY	CERTIFICATE NR.	ISSUE DT.	VALIDITY DT.
Saithe Trawl Fishery	DNV-NOR-MSC-F-60001-2009	24.08.2009	15.06.2013
Saithe Purse-Seine Fishery	DNV-NOR-MSC-F-60003-2009	24.08.2009	15.06.2013
Arctic Saithe Danish-Seine Fishery	DNV-NOR-MSC-F-60004-2009	24.08.2009	15.06.2013
Arctic Saithe Gill-Net Fishery	DNV-NOR-MSC-F-60005-2009	24.08.2009	15.06.2013
Arctic Saithe Handline Fishery	DNV-NOR-MSC-F-60006-2009	24.08.2009	15.06.2013
Arctic Saithe Purse-Seine Fishery	DNV-NOR-MSC-F-60007-2009	24.08.2009	15.06.2013
Arctic Saithe Trawl Fishery	DNV-NOR-MSC-F-60008-2009	24.08.2009	15.06.2013
Saithe Danish-Seine Fishery	DNV-NOR-MSC-F-60009-2009	24.08.2009	15.06.2013
North Sea Saithe Gill-Net Fishery	DNV-NOR-MSC-F-60010-2009	24.08.2009	15.06.2013
North Sea Saithe Handline Fishery	DNV-NOR-MSC-F-60011-2009	24.08.2009	15.06.2013

The objective of this project has been the second surveillance audit of the Norwegian Saithe fisheries – North East Arctic Saithe (NEA) and North Sea Saithe (NS), caught by Trawl, Purse seine, Gill nets, Hand line, Danish Seine, Long line and others.

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Abbreviations

CEFAS Centre for Environment, Fisheries and Aquaculture Science

CPUE Catch per unit effort

DNV Det Norske Veritas

EEF Norwegian Seafood Export Council

ETP Endangered, threatened and protected species

EU European Union

HCR Harvest Control Rule

ICES International Council for the Exploration of the Sea IMR Institute of Marine Research, Bergen, Norway

MSC Marine Stewardship Council

NEA North East Arctic

NFVOA Norwegian Fishing Vessel Owners Association (Fiskebåtredernes Forbund)

NGO Non-Governmental Organization
NINA Norwegian Institute for Nature Research

NS North Sea

NSI Norwegian Seafood Industry

PI Performance Indicator
TAB Technical Advisory Board

TAC Total Allowable Catch



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1 GENERAL INFORMATION

This report contains the findings of the second surveillance audit for the Norwegian Saithe fisheries – North East Arctic Saithe (NEA) and North Sea Saithe (NS), caught by trawl, purse seine, Gill nets, Hand line, Danish Seine, Long line and others. The client for this certification is the Norwegian Seafood Industry and the certification is being coordinated by the Fiskebåtredernes Forbund (Norwegian Fishing Vessel Owners Association) and Norwegian Seafood Export Council (EFF).

The purpose of this annual Surveillance Report is:

- 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 the progress made to comply with any "conditions" raised and described in the Public Report of June 2008 and in the corresponding Action Plan drawn up by the client;
- 3. To monitor any actions taken in response to any "recommendations" made in the Public 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 "conditions" raised

As conditions are closed out (i.e. actions are completed), future surveillance assessments will focus more and more on the overall ongoing operation of the fishery in relation to the MSC Principles and Criteria.

1.1 Name and contact information for the certified fishery:

Client name Norwegian Seafood Industry (NSI)

c/o Fiskebåtredernes Forbund (Norwegian Fishing Vessel Owners Association) and Norwegian Seafood Export council

(EFF)

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1.2 General background about the fishery.

The Norwegian Fishing Vessel Owners Association is both an interest body and an employer's organization for the vast majority of Norwegian deep-sea fishing boats over 27.5 meters. In this context they coordinate the process of certification and certificate maintenance for NEA and NS saithe for the Norwegian Seafood Industry and on behalf of the Norwegian Seafood Export Council. The Norwegian Fishing Vessel Owners Association in this respect represents the whole Norwegian fleet.

NFVOA send out information to their members whenever there is a change in regulations, and also inform them when they are pushing for regulative changes. NFVOA is active in a number of reference groups and sees this as an opportunity to contribute to further development in the field, eg in terms of input for data modelling. Cooperation between the Ministry of Fisheries and Coastal Affairs, the Directorate of Fisheries and the Institute of Marine Research is reported as being good. NFVOA has a running correspondence with IMR, and give input on research topics. They also try to influence the government to grant more resources for stock assessments since this is crucial to the setting of quota, and promote the view that sustainability and accuracy is in the interest of the fisheries industry as well.

The Ministry of Fisheries and Coastal affairs also involve the fishing industry in hearings when all new proposals are discussed, but there have been no cases registered for saithe in the past one and a half years.

Various gears are used in the fishery. Saithe in the North Sea are mainly taken in a directed trawl fishery in deep water near the Northern Shelf Edge and the Norwegian Deeps. Norway has 52 % of the total allowable catch, and in a typical year, about 78 % of the Norwegian catch originates from bottom trawl, 13 % from gillnet and long-line, 9 % from purse seine and 1 % from other fishing gears.

For arctic saithe the average over the last ten years is about 40 % of the Norwegian catch originating from bottom trawl, 25 % from purse seine, 20 % from gill net and 15 % from other conventional gears (long line, Danish sine and hand line). The gill net fishery is most intense during winter, purse seine in the summer months while the trawl fishery takes place more evenly all year around.

The North Sea tuning series has bee concluded. Biological samplings are poorer in more recent years. Industrial fisheries for blue whiting and pout are bycatch issues in the saithe fisheries. A mandatory sorting grid has been introduced to reduce saithe bycatch and thereby to enhance saithe catch numbers in the North Sea. New proposals are being prepared for a closer look at vessel sizes and where to allow fishing activities. The saithe quota has been reduced for two consecutive years.

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2 THE CERTIFICATION/ASSESSMENT PROCESS

2.1 Previous Assessments.

2.1.1 Summary of the original assessment

The intent of the Norwegian Seafood Industry to become MSC certified was announced in February 2006, and they received their certificate on 16th June 2008.

Four conditions were set at the initial certification covering the two fisheries and specified gears.

The conditions set relate to the following issues:

- 1. ALL FISHERIES: Uncertainties in assessment relating to estimation of recruitment and the effect of migration in and out of the stock
- 2. ALL FISHERIES: A need for more detailed data on the by-catch of all species and a need for sampling programmes to estimate consequences on the stock and ecosystem
- 3. NORTH SEA ALL GEARS & NEA GILLNET and HANDLINE: Promotion of rebuilding of the coastal cod stock through separate recordings of all catches of coastal cod in saithe –directed fisheries, and evaluation in terms of its contribution on impacts on cod stocks
- 4. An assessment of potential impact of saithe directed fishing within the coral protection areas and identification and implementation of appropriate management measures to prevent impact if it is found to be significant

One recommendation was set at the initial certification covering the two fisheries and specified gears and relating to sufficient protected coral areas.

2.1.2 The first surveillance audit in 2009

The first surveillance audits were held by Sandhya Chaudhury and Line Døhlen and conducted by a telephone meeting with the client and stakeholders on Tuesday 11th August 2009, as well as a meeting in Bergen with other stakeholders on Monday 17th August 2009. Graham Piling, a member of the original assessment team, was consulted and contributed with information on changes that had occurred in the year since certification as well as proposals for follow- up actions on the conditions from the full assessment.

The conclusions of the first surveillance audit was that NSI had taken appropriate measures to address the conditions of certification raised during the MSC certification assessment and therefore remained complaint with its MSC certification. Satisfactory and timely progress had been made in progressing the conditions for the certification.

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2.2 The second surveillance audit process

The assessment process for this surveillance audit was performed according to the requirements set out in the MSC Fisheries Certification Methodology. The default assessment tree, according to the Fisheries Assessment Methodology (FAM) version 1, was used for this certification.

The surveillance audit was announced on the MSC website on 9th April 2010 followed by a supporting notice to stakeholders issued by the MSC on the same date. Direct email notification was also sent to the stakeholders that had previously been identified for this fishery on 10th April 2010, inviting interested parties to contact the audit team.

Sandhya Chaudhury, DNV Lead auditor and Independent expert Graham Piling conducted an on-site meeting first with the Institute for Marine Research and the Fisheries Directorate in Bergen, Norway on Tuesday 11th May 2010. The meeting with the client took place on Wednesday 12th May 2010 in Oslo, Norway followed by a meeting with the Ministry for Fisheries and Coastal Affairs. Graham Piling is a member of the original assessment team. Further details of meetings as well as details of other information consulted in the assessment process can be found under chapter 4 (information sources).

The four conditions and one recommendation set at the initial certification were re-evaluated by the assessment team. The response by NSI to Conditions of Certification has been reproduced in this report, as appropriate. For each condition, the report sets out progress to date. This progress has been evaluated by the DNV team against the commitments made in the Action Plan from 2008. The scoring allocated to the relevant Performance Indicators in the original MSC assessment have also been re- evaluated. Where the requirements of a condition are met, the Performance Indicators are re-scored and if the score is 80 or more, then the condition is closed. The effects of any overall legislative and management changes in the fishery are also taken into consideration.



3 RESULTS, CONCLUSIONS AND RECOMMENDATIONS

3.1 Development in the North Sea and Northeast Arctic saithe stocks, the fishery on the stock and the management of the fishery.

The initial assessment report was mainly based on the ICES Advice for 2006, and in the time period up until this second surveillance audit new advice has been issued (2008, 2009 & 2010). The 2010 ICES assessment shows a positive development in the stock in most recent years. The fishing mortality has declined and is assessed by ICES to be below F_{MSY} . The spawning stock biomass is predicted to be close to Bpa in 2010 and is expected to increase in 2011.

Underreporting and misreporting of landings have declined and the total catch in the human consumption fishery was, in 2009, below the TAC agreed for this fishery. ICES considers (ICES, 2010) that the management plan has been effective in limiting catches in accordance with the harvest control rule.

The Surveillance team re-evaluated the stock status relative to target and limit reference points (PIs 1.1.1 and 1.1.2) based on ICES new advice on MSY reference points and the MCS Policy Advisory 12. The conclusions are as follows:

Saithe in Sub-areas I and II (Northeast Arctic)

	1	
PI	Score	Rationale
1.1.1	100	The latest ICES stock assessment and ACOM advice suggests that SSB is greater than both B_{lim} and B_{pa} . Taking account of the level at which B_{pa} is set and the current estimated SSB level, it is considered that there is a high degree of certainty that the stock is above the point where recruitment would be impaired (B_{lim}) on the basis of the latest assessment. This fulfils the requirements of the first scoring issue under SG100.
		No explicit B_{MSY} target has been estimated for the stock. F_{med} used within the HCR for management of this stock is set at $F=0.35$, with the aim of maintaining 'high long-term yield'. $F_{0.1}$, an F_{MSY} proxy, is estimated at $F=0.16$. Current F ($F_{2006-2008}$) is estimated at $F=0.19$, having increased slightly since 2005.
		Current F has fluctuated around the $F_{0.1}$ in recent years (since 1997), and is below the HCR management target considered consistent with high long-term yields. This is considered to meet the SG100 level (see FAM v2 para 6.2.9).
		Therefore it is considered that the first and second scoring issues under SG100 are fully met, resulting in an overall score of 100 for the PI.
1.1.2	85	Reference points are appropriate for the stock and can be estimated: A biomass limit reference point has been established using stock-recruit data as the point where impaired recruitment is likely. B_{pa} and F_{pa} have

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been set at a level above B_{lim} and its corresponding F_{lim}, taking uncertainty into account. This fulfils the requirements of the first scoring issue under SG100. The limit reference point (B_{lim}) is set above the level at which there is an appreciable risk of impairing reproductive capacity, selected at the lowest point at which no affect on recruitment was observed. This is reasonable practice, and provides a low risk of impairing reproductive capacity. Therefore the 80 scoring guidepost is met for this scoring issue. There is no explicit biomass target reference point, nor corresponding F_{MSY} level. The fishing mortality target adopted in the multi-annual management plan is consistent with F_{pa} , and has been tested to be consistent with the objective of maintaining high long term yield. This fulfils the requirements of the third scoring issue under SG80. This species is not a low trophic level species. Therefore the fourth scoring issue is not assigned a score. Therefore this PI receives a score of 85 because the requirements of one scoring issue are fulfilled at the 100 level, and two at the 80 level.

Saithe in Sub-area IV. Division IIIa and Subarea VI

Saithe in Sub-area IV, Division IIIa and Subarea VI				
PI	Score	Rationale		
1.1.1	100	An update assessment could not be run by ICES in 2010 due to missing and incomplete indices for 2009. The assessment of the 2009 working group meeting was therefore used as a basis for a forecast run that was extended to 4 years. The latest ICES stock assessment and ACOM advice that results suggests that SSB is greater than both B _{lim} and B _{pa} . Taking account of the level at which B _{pa} is set and the current estimated SSB level, it is considered that there is a high degree of certainty that the stock is above the point where recruitment would be impaired (B _{lim}) on the basis of the latest assessment. This fulfils the requirements of the first scoring issue under SG100. F _{MSY} and B _{MSY} targets have now been estimated for the stock (ICES advice June 2010). Current F is considered below F _{MSY} and biomass above B _{MSY} . This is consistent with previous years. This is considered to meet the SG100 level (see FAM v2 para 6.2.9).		
1.1.0	00	SG100 are fully met, resulting in an overall score of 100 for the PI.		
1.1.2	90	Reference points are appropriate for the stock and can be estimated: A biomass limit reference point has been established using stock-recruit data as the point where impaired recruitment is likely. B_{pa} and F_{pa} have been set at a level above B_{lim} and its corresponding F_{lim} , taking uncertainty into account. This fulfils the requirements of the first scoring issue under SG100.		

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The limit reference point (B_{lim}) is set above the level at which there is an appreciable risk of impairing reproductive capacity, selected at a the lowest point at which no affect on recruitment was observed. This is reasonable practice, and provides a low risk of impairing reproductive capacity. Therefore the 80 scoring guidepost is met for this scoring issue.

The new ICES MSY reference points provide target reference points such that the stock is maintained at a level consistent with B_{MSY} or some measure or surrogate with similar intent or outcome. This fulfils the requirements of the third scoring issue under SG80.

This species is not a low trophic level species. Therefore the fourth scoring issue is not assigned a score.

Following the FAM V2 guidance, this PI receives a score of 90 because the requirements of two scoring issues are fulfilled at the 100 level, and one at the 80 level.

3.2 Status of certification recommendations

NEA & NS Saithe – ALL GEARS

CONDITION 1 Uncertainties in assessment

Action required: The assessment was considered to display considerable retrospective bias, recruitment is poorly estimated and there is an unknown effect of variable migration of animals into, and out of, the stock. If not accounted for appropriately, these uncertainties could give rise to TACs being set above precautionary levels.

To address these areas, the potential causes of the retrospective bias should be examined, alternative assumptions and model structures should be explored and the impacts of the uncertainty in inputs quantified in terms of uncertainty over the current status, projections of future stock status, and consistency of the current reference points and harvest rules with a precautionary approach. It is acknowledged, however, that this may require extensive resource allocation (indeed, extensive work on recruitment variability has been undertaken by IMR in the past which has failed to resolve this particular issue).

Therefore, two options would be considered acceptable in addressing this uncertainty: a) Ideally, a plan to address any areas of data collection or research required to quantify and reduce uncertainty, and/or to implement actions to ensure that management is sufficiently precautionary to deal with the observed levels of uncertainty, should be developed and initiated within 3 years of certification. The plan should include realistic timescales for completion.

b) Alternatively, and acknowledging the potential technical and resource difficulties in resolving the above issues, annual TAC setting should explicitly incorporate an appropriate degree of precaution (including for an evaluation of assessment uncertainty and error in light of historical patterns, and its impact on estimates of stock status).

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Timescale: Under option a) the initial review of the assessment and its uncertainties and options for dealing with it should be carried out within 12 months of certification. Ensuing plan development should be completed and implementation initiated within 36 months of certification. Under option b), TAC's set each year should be reviewed according to their adherence with ICES advice and a precautionary harvest strategy.

Relevant Scoring Indicators: 1.1.5.2, 1.1.5.5

ACTION PLAN:

1. During the first annual surveillance audit NSI will, together with relevant stakeholders, present to the certifier work undertaken within IMR/ICES addressing the issues raised under Condition 1, particularly addressing ICES Working group reports for 2007 and later. On the basis of this and the CBs assessment of the condition in light of new information, plans for vitalising or re-vitalising past and present work will be developed as appropriate.

Timeline: 1st surveillance audit

2. As long as the condition stands (and indeed beyond) and acknowledging the technical and resource difficulties in the issues concerned, NSI commits to an annual TAC setting that incorporates an appropriate degree of precaution, takes into consideration assessment uncertainties and error in light of historical patterns, and their impact on estimates of stock status, through annually reviewing TAC's according to their adherence with ICES advice and a precautionary harvest strategy

Timeline: At time of 2009 TAC determination

OBSERVATIONS:

NSI has involved itself in a range of activities to reduce uncertainties in assessment. NFVOA arranged for the saithe stocks assessment to be on the agenda of the general meeting of the Norwegian Trawlers Association June 4th 2009. Many expressed the opinion that they are sceptical to the means delegated to research being spread across too many fish species, if this means that money is diverted from the more valuable species like saithe and haddock. Norwegian Trawlers Association is also pushing for more resources and means being delegated to research on saithe, which will benefit the NFVOA.

NFVOA has elected to work towards reducing uncertainties in assessment in a threefold manner:

- 1. Developing, implementing and revising management strategies: As described under point 2 (stock status) the management strategies for both NS and NEA Saithe have been reviewed by ICES and found to be in accordance with the precautionary approach.
- 2. Improving science: There is an ongoing process with both ICES and IMR for improving the accuracy of stock assessments of saithe in general, which would have an impact on both NS and NEA saithe.
- 3. Developing and implementing other precautionary measures: NEA saithe: no proportion of the TAC was transferred from 2008 to 2009 as mentioned previously, and reported landings have been below TAC in the recent years. The Ministry is in the process of considering a re-examination of the management strategy.

NS saithe: Establishing a mandatory real time closure system by EU and

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Norway for juvenile protection. Reported landings have been below TAC in recent years.

Both fisheries: minimum size for leisure fishing to be implemented.

Source of data for stock assessments for NEA and NS saithe:

The IMR's source of data for the estimation and assessment of the saithe stock is based on official catch data for different gears and fishing grounds. To divide the catch into different age groups biological test-data collected by IMR is used. Catch data gives a fairly accurate picture of the stock and the age groups that have been part of the fishery. To estimate the stock time series of catch per unit effort (CPUE) from both commercial fisheries and research surveys are used. One of the biggest challenges for research missions is that they are dependent on finding a dense population of the stock. This becomes more difficult the larger the stock is, and thus the uncertainty increases.

The CPUE index from recent research surveys conducted in October 2008 showed a decrease for all age classes, and revealed that the last strong year-class was 2002. This is expected to have an impact on the fisheries. It was also found that there is an increase in saithe south of Lofoten. One possible explanation for this is long term variations in the distribution along the coast, such as greater recruitment success in the south. Additionally, the indexes for all the age groups were below average.

The IMR has several ways of collecting biological test-data. Up until now, the most important and accurate source has been a "sampling/test boat" that collects samples from landing sites, in addition to being used for research surveys. Due to recent economic circumstances, however, the boat is no longer in use. This has caused the reference fleet and catch data information to become the basic factors in stock assessments. The data from the reference fleet is confined to few readings and it is not possible to influence the collection of data that maybe more viable for assessment purposes. Commercial data is also not optimal for stock assessments. Other sources of data include the coast guard and the surveillance service, but as they often originate from conflicts this data may not be representative. The IMR gave the impression that stock assessments will be difficult to complete in a satisfactory manner without the "test boat"

Reference fleet catch-weight for Saithe in 2008 was:

Gillnet 21%

Longline 1 %

Danish Seine 4%

Trawl 74% ????? Doesn't add to 100%...71% more likely..

NEA saithe:

One of the difficulties with the stock data is migration. According to IMR, taking this into account is impossible in practice because it would involve separating and distinguishing individuals.

In relation to this years' ICES advice, IMR sees problems with the marked increase in total CPUE from 2006 to 2007 and 2008 that is probably not related to a corresponding increase in the stock, and the strong decrease in research survey indexes. Furthermore, there has been a tendency to underestimate the exploitation level and overestimate the stock. One of the reasons could be that the methodology for assessment has been

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designed to show stability and not be affected by outside factors. The result is that data gives a retrospective pattern, and that the TAC is set too high. While this may lead to the current pattern of under-fishing the TAC, the survey results and testing of the harvest control rule suggest that the TAC levels are being set with precaution.

NS saithe:

The challenges related to assessment uncertainty mainly have to do with measuring the strength of the incoming year-classes. It is not possible to do this accurately before the fish is 2-3 years old, and that is when it enters the fishery. This is made more difficult by the lack of understanding of the patterns or motivation for migration.

One factor that was mentioned by IMR was that a large share of the stock moves from fish farm to fish farm, and there is a question of whether this will affect its migratory patterns since food is available the whole year near fish farms.

The fishery is stable in terms of landings, which could be because the fish are well protected in the first 1-3 years. The stock is well within precautionary limits, but there is a slight decreasing trend. However, no definite conclusions can be drawn on whether this is due to natural variations or fishing.

Overall, the Ministry for fisheries and Coastal affairs and IMR are not concerned about either the NS or NEA stocks although there is a slightly decreasing trend. There is not considered to be any uncertainty about the stock at the moment.

NFVOA reports that the stock data reveals conflicting trends for the last year, and uses it as an example of how data from the fishing fleet should perhaps be utilised more since it does not correlate to the data brought forth by research. Whilst research surveys have shown a decline in the stock, data from the fleet still shows an increase. The reason is possibly that the fleet has focused its fishing for saithe while the catch rates were good and have had to leave the fishing ground earlier because fishing became unprofitable. Saithe has a marginal profit rate and is mainly a way of upholding activity when the fleet is not fishing cod. When bunker prices increase fishing becomes more unprofitable, so that the fleet focus on the most profitable period and then leave earlier/quicker as the fuel prices increase. It could also be that a fishing boat will only stay in the fishing area if the catch rate is maintained, and since they leave the fields earlier the data looks better or higher than it is in reality. An alternative explanation is that these fishers operate locally and do not have an overview of the situation as a whole.

The advice from ICES published since 2006 supports the view that the stocks are in good condition and that the fishery is sustainable. Recruitment is traditionally stable and thus provides a buffer even though the uncertainty of the stock has increased slightly. In addition, TAC is kept quite low compared to possible yield. It is too early to conclude whether the trend is long or short term, and whether it is caused by natural fluctuations in the stock.

CONCLUSIONS of the 1st Surveillance Audit:

Having opted for Option b) in the proposed actions required, ICES TAC advice for 2009 and 2010 are based on appropriate degree of precaution which fulfills the

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condition within the required timeframe. ICES evaluated that the HCR is consistent with the precautionary approach, providing the assessment uncertainty and error are not greater than those calculated from historical data. However, recent developments in data collection increase assessment uncertainties. The assessment team therefore deems it necessary to follow the assessment in future surveillance audits and will abstain from rescoring at this point. NFVOA should demonstrate continuous adequate data collection to achieve suitable and comparable stock assessment performance before next surveillance audit.

CONCLUSIONS of this Audit:

ICES working groups continue to examine the uncertainties within the assessments, and there is evidence that the client has been active in increasing the dialogue between fishers and scientists (see meeting 4th June 2009).

The stocks are currently fished at or below target levels, and TAC setting is based upon the implemented harvest control rule and management plans. TACs set for 2010 have been consistent with the resulting ICES advice:

North East Arctic Saithe

"ICES evaluated the Harvest Control Rule and concluded that it is consistent with the precautionary approach, providing the assessment uncertainty and error are not greater than those calculated from historical data. This also holds true when an implementation error (difference between TAC and catch) equal to the historical level of 3% is included."

"ICES advises on the basis of the existing management plan which results in a TAC of 204 000 t in 2010."

Management strategy I Harvest control rule:

No change.

TAC decision for 2010:

204.000 tons, consistent with ICES advice.

North Sea Saithe (ICES IV. IIIa, VI):

ICES advice:

"Considering the options below, ICES advises on the basis of the agreed management plan that the landings should be no more than 118000 t in 2010."

Management strategy I Harvest control rule:

No change.

TAC decision for 2010:

118.150 tons, consistent with ICES advice.

The harvest control rule has been shown to be robust to the uncertainties arising within the assessments. Continued monitoring of the consistency of TACs with the ICES advice should occur through the future audits, the certifying body notes that the HCR effectively addresses the concern behind the condition. Rescored to 80 and condition closed.

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ALL FISHERIES

CONDITION 2 By-catches

Action required: Sampling programmes should be initiated to provide statistically robust estimates of the by-catch of all species, including estimates of discards and slippage. Information should be sufficient to allow an assessment of the impacts of by-catches in relation to the distribution, ecology and abundance of the species and populations affected (commercial and non-commercial fish, mammals and birds).

The potential impact of non-target species removals on the populations affected and the wider ecosystem should be evaluated.

Where assessments of impacts on by-catches are shown to be significant, and for all species identified as PET, appropriate measures to reduce bycatches to acceptable and precautionary levels shall be developed and implemented.

Timescale: Sampling programmes should be designed and initiated within 12 months of certification and an initial evaluation of any potential impacts completed within 3 years of certification. Where mitigation measures are required to reduce or avoid impacts, these should be identified within 3 years of certification and fully implemented within 5 years of certification.

Relevant Scoring Indicators: 2.1.2.1, 2.1.2.2, 2.1.4.1, 2.1.5.2, 2.1.5.4 (gear specific), 2.2.1.2 (gear specific), 2.2.1.3, 3A.3.4

ACTION PLAN:

Within 12 months following final certification NSI shall propose further developments of the reference fleet programme to include a programme of registration of non-target species removals in the saithe directed fisheries. Non-target species in this context being non-commercial species, in particular any PET species that may occur, and not catches of other commercial species that by the nature of the fishery occurs in the normal course of the fishery.

Within 3 years potential impacts of such non-target removals shall be assessed. Where negative impacts are found, potential mitigating measures shall be identified.

Within 5 years identified necessary mitigating measures should be implemented.

Timeline:

Proposal by June 2009.

Evaluate extent and potential mitigation measures, if any, by June 2011. Mitigation measures, if any, implemented by 2013.

OBSERVATIONS:

NFVOA has forwarded a proposal to IMR, Ministry and Directorate February 17th 2009, ref. Attachment 2, letter from Fiskebåt to the above that date.

A proposal was sent to IMR, Ministry and Directorate on February 17th 2009 that concerned the registration of by-catch in Norwegian fisheries in general, which is also relevant for saithe fishery. NFVOA suggested that an earlier registration system should be fully implemented for the reference fleet. Today all by-catch is registered every day

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on one of the boats representative for the fleet. Excerpts are taken of this for all fleet groups throughout the year and registered by IMR, but systemization would enhance the usability of the data. Today the method exists for line, which is the most difficult to register correctly because it has the highest by-catch in terms of number of other species. If implemented for other gear as well, it could be used to isolate what proportion of by-catch are north sea cod and coastal cod by-catches.

IMR and the Ministry have been in dialogue with a research group called NINA at the Directorate for Nature Management. They are conducting a study to find reasons for the decrease in the stock of seabirds, and IMR are supplying them with data. However, the outcome of the study is unlikely to show that saithe fishery is a cause of any decline in by-catch stocks.

Although no data shows that by-catch is a significant problem in saithe fishery as the stock is today, this should be re-evaluated as the stock changes. Should the NEA or NS saithe stock decline, it might cause an increase in capture of non-target species as well as fish that do not meet minimum size requirements. Saithe is a clean fishery because the stock is large, which makes it easier to obtain a clean catch.

By-catch is not considered a significant problem by any of the stakeholders, but there are developments planned for research and data collection that will give a more extensive and detailed overview.

CONCLUSIONS 1st Surveillance Audit:

This condition has different timescales and has achieved the set timescale for the first step. Rescoring will not be performed before all timescales are met.

CONCLUSIONS of this Audit:

The Regulations amending the regulations relating to sea-water fisheries, Section 48, prohibits the discarding of fish and now excludes the discarding of a large number of dead and dying fish. These catches must now be enumerated. This new legislation provides the statistically robust sampling system required.

Implementation of the new legislation is currently being tested through the Norwegian 'reference fleet', which will provide information on the best method to implement this regulation across all vessels. This reference fleet includes pelagic vessels comparable with those of the current certification. Full implementation of the regulation on saithe vessels over the coming years will allow the initial evaluation of the potential impact of non-target species removals on the populations affected.

The results from the audit indicate that this condition is currently on target through the implementation of the new regulations from April 2009. As indicated in the condition, the analysis of the data should be performed within 3 years to identify bycatch levels of concern, and progress towards this will be reviewed during the next audit.

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NEA GILL NET / HANDLINE

CONDITION 3 Coastal cod

Action required:

Interactions of this gear with coastal cod populations are expected to occur. Coastal cod is recognized as being in a depleted state and so MSC certified fisheries are required to be prosecuted so as to promote rebuilding. Accordingly, those vessels participating in the saithe-directed fishery should be identified and catches of coastal cod in these 'saithe-directed fisheries' recorded separately.

The coastal cod by-catch in the saithe directed fishery should then be evaluated in terms of its relative contribution to impacts on cod stocks.

It is recognized that new regulations have been introduced to achieve rebuilding of the coastal cod stocks, but that these have not yet been tested. If the new regulations are not effective in recovering stocks, restrictions on by-catches of coastal cod in saithe directed fisheries should be implemented, consistent with a recovery plan.

Timescale: Separate recording of coastal cod by-catches in saithe-directed fisheries, and evaluation of the significance of these, should be initiated within 6 months of certification. The effectiveness of costal cod rebuilding regulations should be evaluated within 3 years of certification (when sufficient data on the effectiveness of the regulations is available) and, if determined necessary, restrictions on coastal cod by-catches should be implemented within 3 years of certification.

Relevant Scoring Indicators: 2.3.1.3

ACTION PLAN:

Within 6 months following final certification NSI shall propose further developments to the reference fleet programme to obtain adequate recording of coastal cod by-catches in the North East Arctic directed fishery for saithe with gill net and handline.

Within 12 months the significance of such by-catches shall be evaluated and, if necessary, an appraisal of opportunities for by-catch reductions completed.

Within 3 years the effectiveness of costal cod rebuilding regulations should be evaluated, and, if necessary, further restrictions on coastal cod by-catches in the saithe directed fisheries should be implemented.

Timeline:

Proposal by December 2008. Evaluate significance and, if necessary, conduct appraisal of coastal cod by-catch reductions, by July 2009. Evaluate effectiveness of coastal cod rebuilding regulations and, if necessary, consider further restrictions, by July 2011.

OBSERVATIONS:

New recovery measures for coastal cod proposed by a coastal cod protection working group (industry, NGOs, IMR, Directorate) adding to existing coastal cod protection measures, was implemented from 1. January 2009. The trend in recent years is that the measures of protection are becoming more extensive. A coastal cod rebuilding plan has been implemented in 2010. The plan has been tested by ICES, and formal ICES evaluation of the plan will be presented by October 1st 2010. A new set of coastal cod protection measures were announced September 2nd 2010, to be implemented by

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January 1, 2011, adding to the various measures already in place.

IMR have initiated a project with 3-4 saithe landing sites to examine by-catch in general and report all by-catch that exceeds a given percentage of the total catch. Other than that data is given by the reference fleet, but as of today it is not processed to show the amount of coastal cod by-catch. IMR also has an agreement with some trawlers obliging them to report by-catch in exchange for permissions to fish closer to the coast.

Saithe is a mixed fishery and most vessels have quotas for other species as well as saithe. Based on this it is unlikely that they would avoid landing coastal cod if they did catch it. The reference fleet has not reported significant cod by-catch, and there is little of it on research surveys as well. According to IMR implementing a new system for registration of by-catch of coastal cod in saithe fisheries would be extremely resource-consuming, as the whole cod fishery would have to be included and coastal cod and spring cod would have to be separated by biological sampling.

There is still a need for a better overview of how by-catch of coastal cod is affecting the rebuilding process of the stock. However, saithe is a very clean fishery with little by-catch, and the proportion of coastal cod is expected to be very low. The Fisheries Directorate does not have any statistics for coastal cod by-catch but the by-catch figures for cod in the Saithe fisheries in 2008 were as follows:

	NEA	NS
Conventional	10%	11%
Seine	0%	0%
Trawl	18%	2%

CONCLUSIONS 1st Surveillance Audit:

As mentioned in condition 2, NFVOA has forwarded a proposal jointly to the Ministry for Fisheries and Coastal Affairs, the Fisheries directorate and IMR. This proposal was not sent within the decided timescale but before this audit and is deemed a satisfactory action. Evaluations for significance and/or conduct appraisal of coastal cod by- catch reductions have not met the timescale of July 2009 and will be followed up at next audit. Proposal by coastal cod protection working group (industry, NGO's, IMR, Directorate) for continuation of existing coastal cod protection measures and new coastal cod protection measures were forwarded in November 2008 and implemented with effect 1. January 2009. Summary of existing/continued coastal cod protection measures, new coastal cod protection measures and stock status/development are satisfactory. Rescoring of this condition will not be done before July 2011 to cover the timescale for the evaluation of effectiveness of coastal cod rebuilding regulations and restrictions where necessary.

CONCLUSIONS of this Audit:

ICES notes that the absence of defined precautionary reference points means that the state of the stock cannot be fully evaluated. However, survey trends in combination with reported landings indicate that the SSB is close to the lowest observed level. Recruitment declined over the period 1995-2002 and has remained low since. Recruitment is clearly impaired at present SSB. Fishing mortality is unknown, and the harvest rate has increased in 2008 after a decline in recent years. ICES advised that:

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"given the low SSB and recruitment for this stock, no catch should be taken from this stock in 2010 and a recovery plan should be developed and implemented".

The Ministry of Fisheries and Coastal Affairs in March 2010 adopted a rebuilding plan for coastal cod. In a letter dated March 12, 2010, the rebuilding plan was sent to ICES for evaluation. The aim is to rebuild the coastal cod stock complex to full reproductive capacity. The essence for the rebuilding plan is:

- Target spawning stock(s) measured as rebuilt to above 60,000 tones in two successive years
- If the survey index for SSB does not increase, regulations will aim to reduce F (ages 4-7) by at least 15% annually compared to F2009
- If the latest SSB is higher than the preceding one, or estimated F for the latest catch year is less than 0.1, regulations are unchanged.

The results of the ICES evaluation are expected later in 2010. Rescoring of this condition will not be done before July 2011 to cover the timescale for the ICES evaluation of effectiveness of coastal cod rebuilding regulations and restrictions where necessary.

North Sea – all gears

CONDITION 3 North Sea cod bycatches

Action required:

Interactions of this gear with North Sea cod populations are expected to occur and catches of North Sea cod in these 'saithe-directed fisheries' are currently recorded separately. North Sea cod is recognized as being in a depleted state and MSC certified fisheries are required to be prosecuted so as to promote rebuilding of depleted target and by-catch species.

The North Sea cod by-catch in the saithe directed fishery should be evaluated in terms of its relative contribution to impacts on cod stocks.

It is recognized that rebuilding measures (the cod recovery plan) have been implemented for North Sea cod. There are indications in the North Sea that the decline in cod stock status has recently stabilized, and that the recent year class could promote stock recovery if recruited into the fishery. Nevertheless, measures should be identified and implemented to minimize catches of North Sea cod and future catches should be reported in relation to the proportion of cod in saithe catches, data from previous years and the relative status of the cod stock. Measures should remain in force until cod recovery has been achieved.

Timescale: Evaluation of the extent and significance of cod catches in saithe directed fisheries should be initiated within 6 months of certification. If the evaluation indicates a significant effect, identification and testing of further measures to minimize cod bycatches should be completed within two years of certification. Measures should be fully implemented within 3 years of certification.

Relevant Scoring Indicators: 2.3.1.2, 2.3.1.3

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ACTION PLAN:

Within 2 years following final certification NSI shall propose further developments to the fleet reference programme to include an examination of the extent of North Sea Cod catches in the North Sea Saithe directed fisheries.

Within 2 years an appraisal of opportunities for further reductions in North Sea Cod bycatches shall be conducted if findings in the above examination leads to the conclusion that reductions are needed (by-catches are of significance). Such measures shall, if needed, be implemented within 3 years.

Timeline:

Proposal by June 2010.

Appraisal of extent of North Sea Cod by-catches, and if necessary, opportunities for reductions, by July 2012.

Mitigation measures, if necessary, to be implemented by July 2013.

OBSERVATIONS:

The actions taken by NFVOA with reference to this condition are the same as for condition 2: By-catches.

In short, NFVOA has proposed further developments to the reference fleet programme and are awaiting a response from the other parties.

CONCLUSIONS 1st Surveillance Audit:

The status of this condition and scoring of the related points remains unchanged as the first timescale set is around the next surveillance audit

CONCLUSIONS of this Audit:

A new series of coastal cod protection measures for the North Sea has been on a public hearing in 2010.

The EU Norway agreement management plan was updated in December 2008 (Annex 6.4.2). The EU has adopted a long-term plan for this stock with the same aims (Council Regulation (EC) 1342/2008). ICES evaluated both plans in 2009 and concluded they were in accordance with the precautionary approach if implemented and enforced adequately. Given that Norwegian North Sea cod bycatches are included within the TACs for this stock, and hence included within the assessment and management process, adherence with the overall TACs set should lead to a recovery of the stock. This condition will be further monitored through annual surveillance reports.

NEA – all gear except trawl and Danish seine

CONDITION 4 Cold water coral impacts

Action required:

An assessment of the potential impact of saithe directed fishing within the coral protection areas should be undertaken. If a potentially significant impact is identified, and appropriate precautionary management action should be implemented.

Timescale: An assessment should be completed in 3 years of certification. The

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identification and implementation of appropriate management measures should be completed within the term of the current certification.

Relevant Scoring Indicators: 2.1.4.1, 2.1.5.4, 3A.3.4

ACTION PLAN:

Within 2 years following final certification NSI shall propose further developments to the IMR coral reef mapping programme to include an assessment of fishing effort and impacts from fishing with gear other than trawl and Danish seine, in areas protected from fishing with these two gear types as a measure to protect cold water corals.

Within 3 years, if significant negative impacts from these other gear types are found to exist, appropriate management measures shall be developed and implemented.

Timeline:

Proposal by June 2010

Management measures, if necessary, by July 2011

OBSERVATIONS:

It is not a requirement for NFVOA to take steps to meet this condition by the first surveillance audit, but they have initiated the process by sending a letter to the Ministry for Fisheries and Coastal affairs. Webjørn Barstad is part of an informal working group on fishing in vulnerable habitats in the Norwegian zone. As part of this work they have asked their skippers to identify and map the largest concentrations of coral and forwarded these maps to IMR as a contribution to research in this area.

NFVOA have plans for the next year when they will put forth a suggestion where they will ask the government to check reefs that are known for damage and to investigate if net and line are contributing factors, as well as map new reef concentrations. If the research shows that net and line are damaging NFVOA will support regulatory measures to limit type of gear used in known coral areas.

In 2009 there has been a suggestion of extending the protected coral reef area by 3 more zones. It is not expected to have a big influence on the saithe fisheries since they are not important saithe areas. Work is also being done by the Ministry on updating the regulations for mapping and protection of the ocean floor.

CONCLUSIONS 1st Surveillance Audit:

This point will be evaluated at the next surveillance audit since the timeline does not require action this year.

CONCLUSIONS of this Audit:

Fiskebåt has sent a proposal letter on 8th April 2010 to IMR and Ministry of Fisheries. The letter requests a survey of the effects of passive gear on protected areas as an extension to the current surveys of active gears on protected areas. If the survey indicates damages, the possibilities of control regulations should be considered. There are 8 coral protected areas in the Norwegian zones and the Fiskebåt organization acknowledges that it is probably inappropriate to use resources for a survey

Recommendation 1: It is suggested that there be an evaluation as to whether the areas of coral currently protected are sufficient, in terms of population/habitat requirements to adequately protect associated biodiversity.

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Action: As an ongoing task, Norwegian Sea Industry (NSI) will commit itself to participate constructively in a recently developed informal industry-government "working group" considering issues of vulnerable habitat protection.

Within this framework NSI also commits to providing IMR with data from the fishing fleet to aid a speedy mapping of vulnerable habitat s, with the aim of developing a system where the use of protection zones is supplemented be mapped "caution" areas.

As a further concrete measure, NSI will within 6 months following final certification consider the establishment of new coral protection zones.

Observations from 1st. surveillance: Informal working group has been established in early 2008, led by the Ministry for Fisheries and Coastal affairs and comprising of members from industry, management/ & scientists. The working group has had 2 meetings in 2008 working with corals and sensitive habitat policy document. Information received from fishermen/skippers on dense coral areas have been identified on maps and handed over to IMR in June 2008.

Five regions are now closed to demersal towed gear that may touch the seabed, to protect known lophelia reef areas (section 66 of Regulations amending the regulations relating to sea-water fisheries). These are: Sularevet, Iverryggen, Rostrevet, Tilser, and Fjellknausene. Further areas are being considered.

Observations from this audit:

As of November 2009, the Ministry of Fisheries has established the closure of 3 more coral areas. These coral protected areas are Trænarevene, Breisunddjupet and an area north west of Sørøya in Finnmark. These areas are closed for fishing with trawl and Danish seine.

3.3 Any consequential rescoring of performance indicators

PI	Condition	Fisheries	Gears	Rescoring
1.1.5.2	1	NEA & NS	All	Rescored to 80
1.1.5.5	1	NEA & NS	All	Rescored to 80
2.1.2.1	2	All	All	Not rescored
2.1.2.2	2	All	All	Not rescored
2.1.4.1	2	All	All	Not rescored
2.1.5.2	2	All	All	Not rescored
2.1.5.4	2	All	Gear specific	Not rescored
2.2.1.2	2	All	Gear specific	Not rescored
2.2.1.3	2	All	All	Not rescored
3A.3.4	2	All	All	Not rescored

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2.3.1.2	3	NS	All	Not rescored
2.3.1.3	3	NS	All	Not rescored
2.3.1.3	3	NEA	Gill net /Handline	Not rescored
2.1.4.1	4	NEA	All except trawl and Danish seine	Not rescored
2.1.5.4	4	NEA	All except trawl and Danish seine	Not rescored
3A.3.4	4	NEA	All except trawl and Danish seine	Not rescored

3.4 Conclusions

NSI have taken appropriate measures to address the conditions of certification raised during the MSC certification assessment and therefore remains complaint with its MSC certification. Satisfactory and timely progress has been made in progressing the conditions for this certification. MSC Certification should therefore continue, subject to satisfactory compliance with outstanding conditions, and surveillance audits continue to the same schedule.

This can be summarized as follows:

1. Conditions where requirements are deemed to have been met on target and are closed in this surveillance audit.

Condition 1

2. Conditions which are considered to be on-target and which will be subject to full review in future surveillance audits

Conditions 2,3 and 4

3. Conditions where work is currently falling behind target and which will be subject to full review at the next surveillance audit

4 INFORMATION SOURCES

Meetings:

None

- 1) Webjørn Barstad, NFVOA -12th May 2010.
- 2) Sverre Johansen, Deputy Director General, Ministry of Fisheries and Coastal affairs 12^{th} May 2010
- 3) Anne Magnussøn, Senior Advisor, Ministry of Fisheries and Coastal affairs 12th May 2010
- 4) Thorbjørn Thorvik, Senior Advisor, The Directorate of Fisheries 11th May 2010

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- 5) Katherine Kannelønning, Legal Advisor, The Directorate of Fisheries 11th May 2010
- 6) Thord Monsen, Legal Advisor, The Directorate of Fisheries 11th May 2010
- 7) Modulf Overvik, Senior Advisor, The Directorate of Fisheries 11th May 2010
- 8) Per Wagensten, Advisor, The Directorate of Fisheries 11th May 2010
- 9) Erling Kåre Stenevik, Scientist, Institute of Marine Research 11th May 2010
- 10) Svein A. Iversen, Scientist, Institute of Marine Research 11th May 2010
- 11) Aud Vold, Scientist, Institute of Marine Research 11th May 2010
- 12) Cecilie Kvamme, Scientist, Institute of Marine Research 11th May 2010
- 13) Sigbjørn Mehl, Scientist, Institute of Marine Research 11th May 2010
- 14) Åge Fotland, Scientist, Institute of Marine Research 11th May 2010

Reports etc

- 1. ICES Advice 2009, Section 3.4.4 and 6.4.12
- 2. Action plan progress report from NFVOA dt. 16th April 2010.
- 3. NFVOA attachment 1- Basis for 2010 TAC determination North East Arctic Saithe and North Sea Saithe
- 4. NFVOA attachment 3- Overview of existing/continued and new coastal cod protection measures and stock status/development 2010 update.
- 5. NFVOA attachment 4- Dealing with uncertainty in saithe assessments 2010 update
- 6. NFVOA attachment 7.2- Protected coral areas- Letter to Ministry for Fisheries and Coastal affairs- dt. 08.04.2010

Standards and Guidelines used:

- 1. MSC Principles and Criteria for Sustainable Fishing
- 2. MSC Fishery Certification Methodology Version 6.1 May 2010
- 3. TAB Directives all
- 4. <u>www.fisheries.no</u> (portal for the Norwegian Ministry of Fisheries and Coastal Affairs)