

MSC SUSTAINABLE FISHERIES CERTIFICATION

On-Site Surveillance Visit - Report for Danish and Swedish Nephrops (Danish Component) Fishery



1st Surveillance audit

March 2016

Certificate Code	F-FCI-0046
Prepared For:	Danmarks Fiskeriforening Producent Organisation
Prepared By:	Acoura Marine
Authors:	Rod Cappell, Julian Addison & Lucia Revenga



Assessment Data Sheet

Certified Fishery	Danish and Swedish Nephrops
Fishery Management Agency	CFP with TACs and regulations implemented by Member States
Species	Nephrops (<i>Nephrops norvegicus</i>)
Fishing Method	Demersal Trawl and Creel
Certificate Code	F-FCI-0046
Certification Date	27 th January 2015
Certification Expiration Date	26 th January 2020
Certification Body	Acoura Marine Ltd 6 Redheughs Rigg Edinburgh EH12 9DQ, Scotland, UK Tel: +44(0)131 335 6601 MSC Fisheries Department Email: fisheries@Acoura.com Web: www.Acoura.com
Surveillance Stage:	1 st Surveillance audit
Surveillance Date:	22 nd March 2016

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Introduction

The purpose of the annual Surveillance Report is fourfold:

1. to establish and report on whether or not there have been any material changes to the circumstances and practices affecting the original complying assessment of the fishery;
2. to monitor the 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) – as captured in any “conditions” raised and described in the Public Report and in the corresponding Action Plan drawn up by the client;
3. to monitor any actions taken in response to any (non-binding) “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 any “conditions” raised.

Please note: The primary focus of this surveillance audit is assess changes made in the previous year. For a complete picture, this report should be read in conjunction with the Public Certification Report for this fishery assessment.

1 General Information

1.1 Certificate Holder details

Fishery name	Danish and Swedish Nephrops		
Unit(s) of assessment	ICES Division IIIa Danish/Swedish Nephrops		
Date certified	27 th January 2015	Date of expiry	26 th January 2020
Surveillance level and type	Normal surveillance - Onsite		
Date of surveillance audit	22 nd March 2016		
Surveillance stage (tick one)	1st Surveillance	✓	
	2nd Surveillance		
	3rd Surveillance		
	4th Surveillance		
	Other (expedited etc)		
Surveillance team	Lead assessor: Rod Cappell Assessor(s): Julian Addison, Lucia Revenga		
CAB name	Acoura Marine		
CAB contact details	Address	6 Redheughs Rigg Edinburgh EH12 9DQ	
	Phone/Fax	0131 335 6662	
	Email	fisheries@acoura.com	
	Contact name(s)	Billy Hynes	
Client contact details	Address	Danish component: Danske Fiskeres Producent Organisation (DFPO) Nordensvej 3, Taulov. DK-7000 Fredericia, DENMARK	
	Phone/Fax	0045 761 096 53	
	Email	bj@dkfisk.dk	
	Contact name(s)	Jonathan Jacobson	

2 Background

2.1 Changes in the management system

The management system for the Nephrops fishery has not changed, beyond the control adaptations to the new regulations outlined below.

Under the Marine Strategy Framework Directive (MSFD), Member States are required to ensure the good environmental status of the marine environment. The new Environment Agency in Denmark has decided to explore which mud areas (hosting Nephrops) require protection from trawl effects. These are largely extensions to areas that are already protected, but some new areas are proposed. Following discussions with stakeholders the closed areas are to come into force in 2016.

2.2 Changes in relevant regulations

The first phase of the EU Landing Obligation was introduced in January 2016, with the requirement for target species to be landed. Vessels operating gear with the Seltra trawl and Swedish grid have been exempted from this requirement.

As a result of the Landing Obligation, the minimum landing size (MLS) of 13cm total length (TL) has been replaced by a minimum conservation reference size (MCRS) of 10.5cm TL. This equates to a reduction in MLS from 40mm carapace length (CL) to 32mm CL, which is still higher than the North Sea (25mm CL). A paper for the North Sea Advisory Council explored the implications of a reduction to 25mm CL in the Skagerrak and Kattegat for consistency with the North Sea, but found no biological basis to do so as only a small proportion of females would be mature at that size (Valentinsson et al, 2015). Instead it recommended that "A more modest reduction in MCRS can most likely meet the basic regulation objectives to take account of maturity and to create incentives to avoid capture of juveniles. At the same time discards will be reduced." Following this research and further discussion between industry and regulators, 32mm CL was adopted. In market terms, this has not changed in Sweden as the minimum market size is still 13cm TL. The smaller individuals now caught by the Swedish fleet are mostly sold into Denmark, which purchases all sizes of Nephrops.

2.3 Changes to personnel involved in science, management or industry

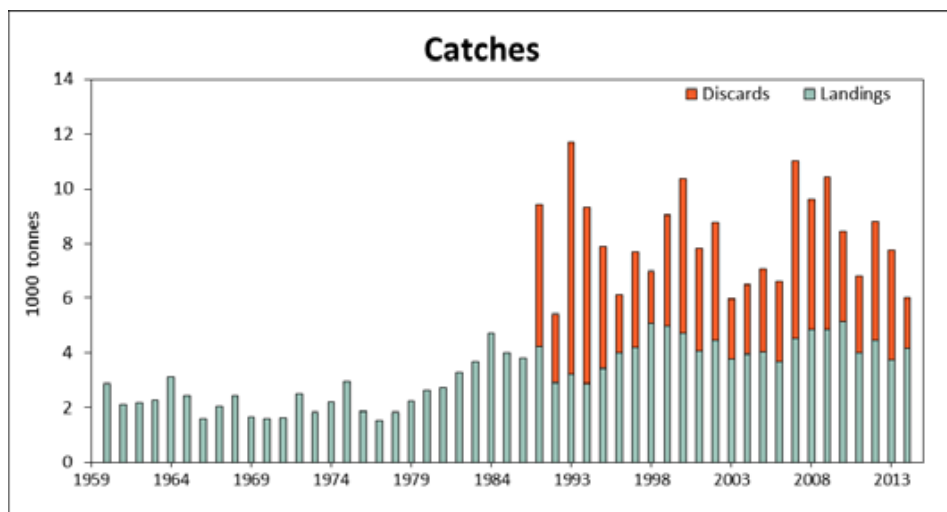
The number of vessels operating under the certificate has grown since certification to around 400 vessels. A current vessel list is provided on the MSC website on the Danish/Swedish Nephrops fishery webpage: <https://www.msc.org/track-a-fishery/fisheries-in-the-program/certified/north-east-atlantic/danish-and-swedish-nephrops/assessment-downloads>

2.4 Changes to scientific base of information including stock assessments

Since the original certification report, there has been no change to the stock assessment methodology described in detail in the Public Certification Report. However there have been two more underwater television (UWTV) surveys providing fishery-independent estimates of stock biomass, and an updated stock assessment was carried out at the ICES Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK) in April/May 2015 (ICES 2015a).

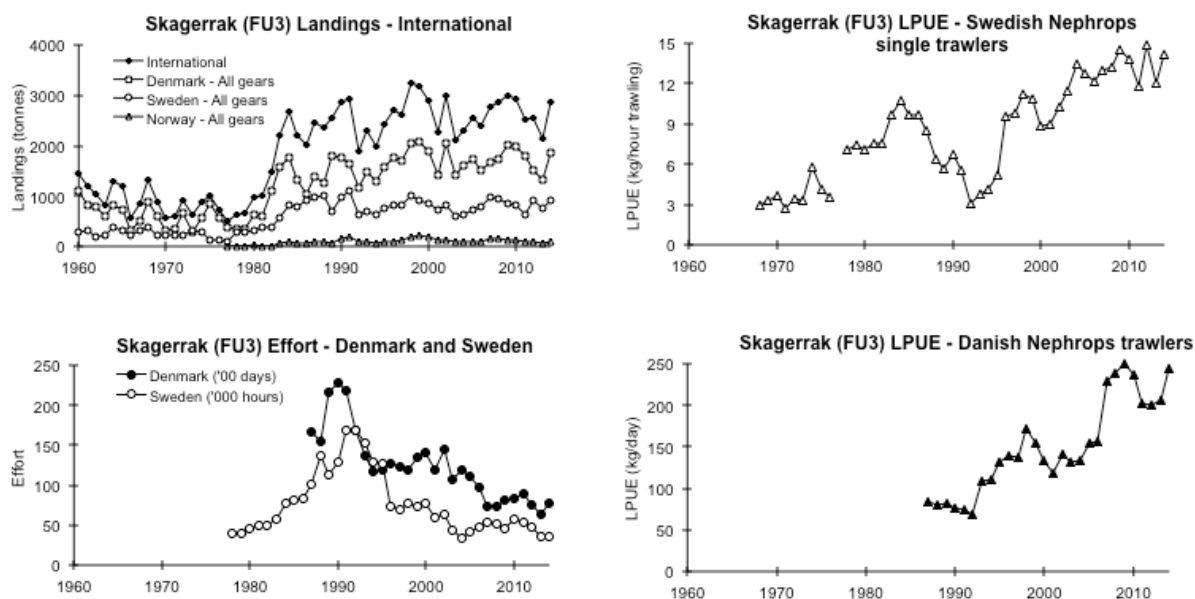
The total landings of Nephrops in Division IIIa in 2014 were 4150 tonnes, a similar level to recent years, although discards were lower in comparison with previous years (Figure 1). Trends in fishing effort and landings per unit effort (LPUE) based on log book returns show similar patterns in both the Swedish and Danish fleets and in both the Skagerrak and Kattegat, with LPUE increasing significantly in recent years (Figures 2 & 3). Danish LPUE data from log books has been standardised to account for changes in fishing power due to changes in the physical characteristics of the Nephrops fleet. LPUE in the Skagerrak has continued to increase over the last 15 years (Figure 4), but after a significant increase from 2000 to 2010, LPUE in the Kattegat has declined (Figure 5). Mean sizes of Nephrops caught in both the Skagerrak and Kattegat have remained constant over recent years.

Figure 1 Total catches (landings + discards) of Nephrops in ICES Division IIIa from 1959-2014

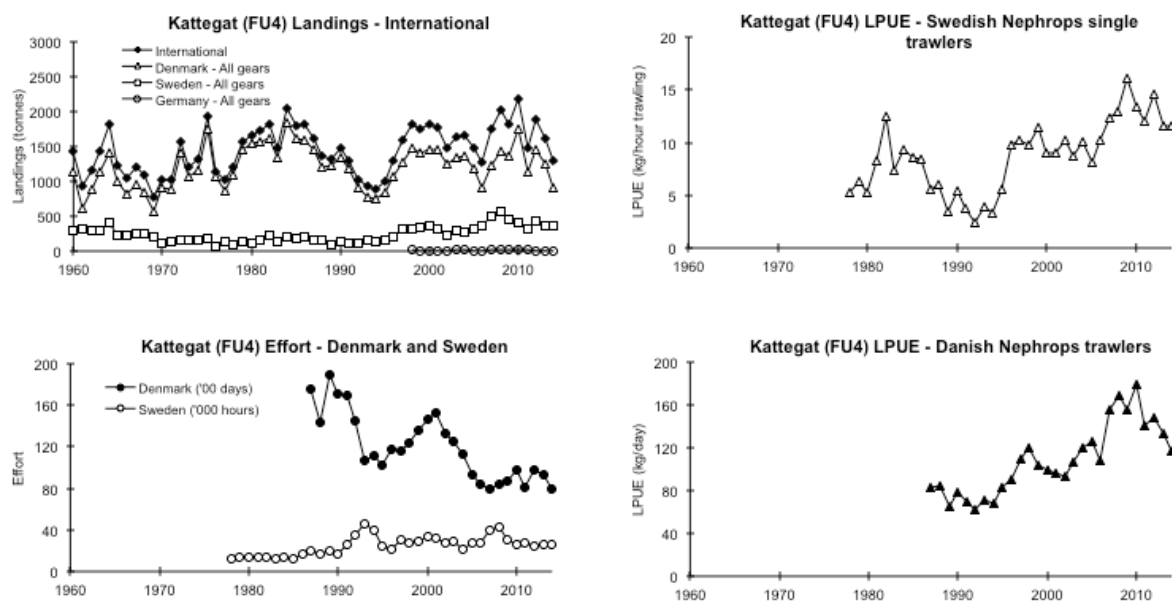


(source: ICES, 2015b)

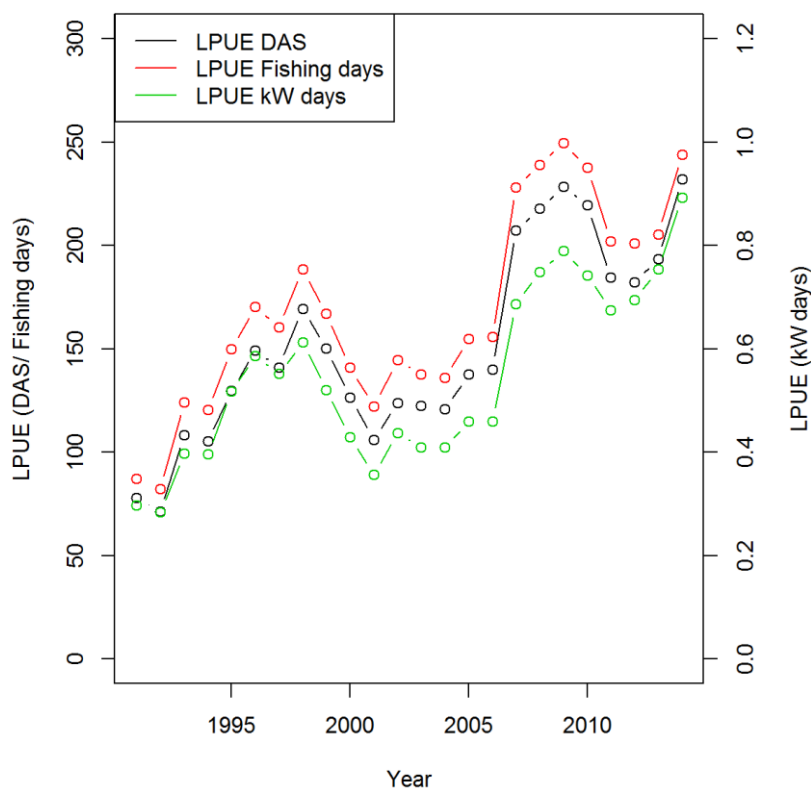
Figure 2. Long term trends in landings, effort and LPUE for Nephrops in the Skagerrak



(source: ICES, 2015a)

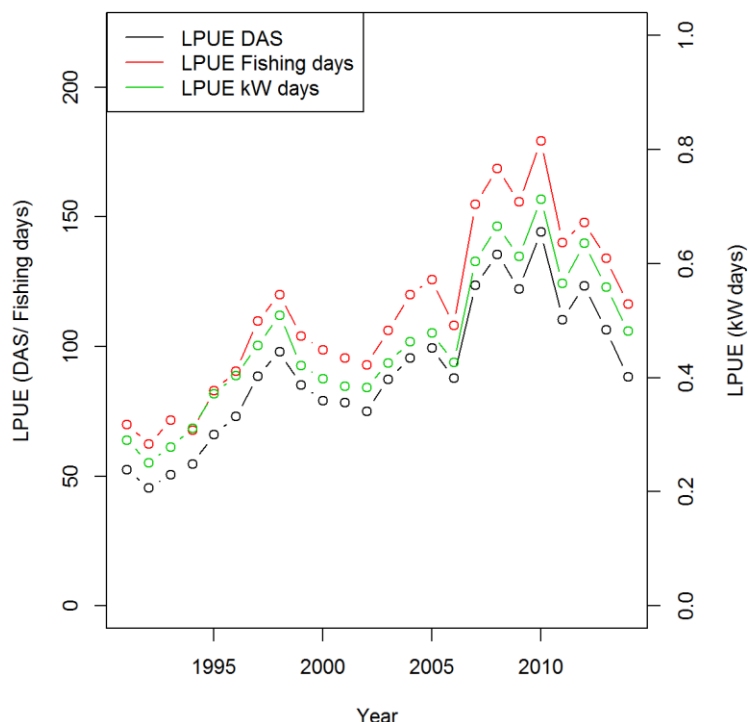
Figure 3. Long term trends in landings, effort and LPUE for Nephrops in the Kattegat

(source: ICES, 2015a)

Figure 4. Standardised LPUE data for the Danish fleet in the Skagerrak

(source: ICES, 2015a)

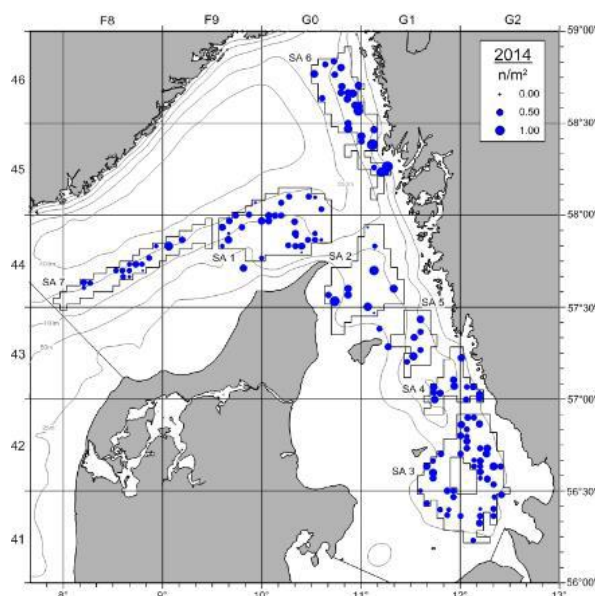
Figure 5. Standardised LPUE data for the Danish fleet in the Kattegat



(source: ICES, 2015a)

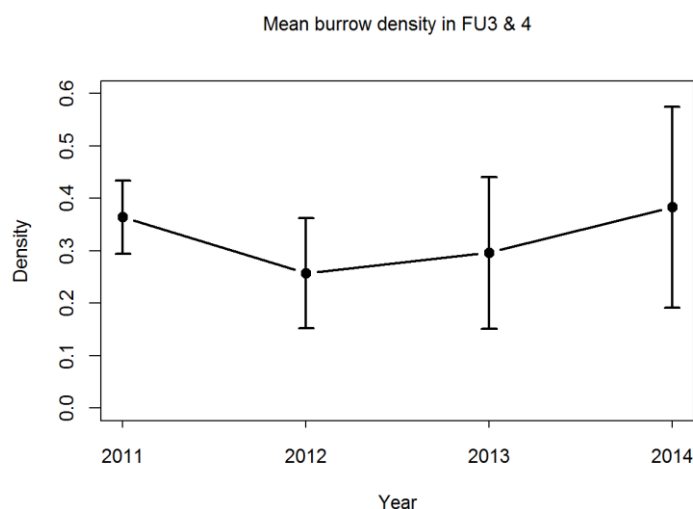
In 2014, the TV survey was extended to cover western areas of the Skagerrak (Figure 6), but there are still some important areas of the distributional range of Nephrops that are not covered by the TV survey, for example the creeling grounds on the Swedish coast, so the TV survey inevitably provides an underestimate of overall abundance. Mean burrow density as estimated from the TV survey increased in 2013 and 2014 (Figure 7). The 2015 TV survey has been completed, but at the time of this surveillance audit, the data had yet to be fully analysed.

Figure 6. Sampling locations and Nephrops burrow density in the Skagerrak and Kattegat in 2014 (154 stations)



(source: ICES 2015a)

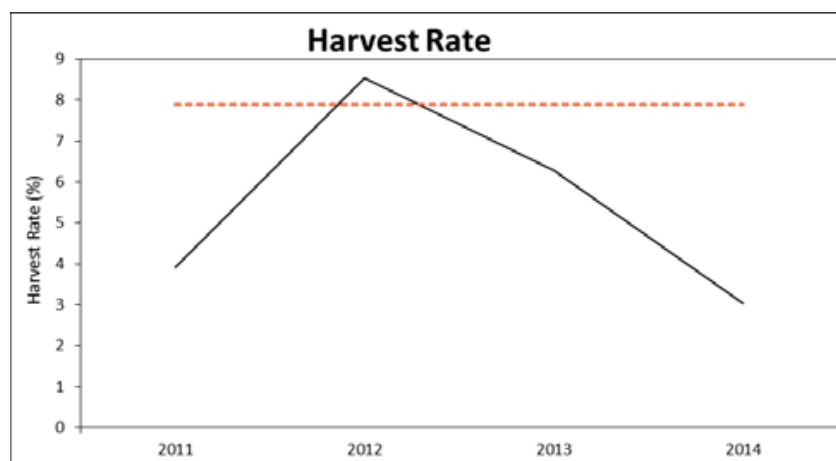
Figure 7. Mean burrow density of Nephrops in the Skagerrak and Kattegat as estimated from TV surveys



(source: ICES 2015a)

The estimate of the total abundance of Nephrops from the 2014 survey was 3762 million individuals, which with total removals (landings + dead discards) estimated at 114 million results in an observed harvest rate of 3.0%. This harvest rate for 2014 is well below the Fmsy proxy harvest rate of 7.9%, so it can be concluded that the Nephrops stock currently shows no signs of overexploitation (Figure 8).

Figure 8. Observed harvest rates of Nephrops in the Skagerrak and Kattegat estimated from total fishery removals and observed abundances from TV surveys (red line is the Fmsy proxy harvest rate of 7.9%)



(source: ICES 2015b)

On the basis of this updated stock assessment, ICES published new advice on this stock in June 2015. Assuming a Fmsy proxy harvest rate of 7.9%, ICES advises that when the MSY approach is applied, total catches (landings + dead removals) should be no more than 11,793 tonnes. Assuming that discard rates do not change from the average over the last three years, this implies landings of no more than 7827 tonnes in 2016. This figure is well above recent observed landings in the fishery.

As noted above, the stock assessment in 2015 used the same methodology and assumptions as in previous years. However there are two current actions/deliberations that may have implications for future stock assessments. Firstly in conjunction with the derogation for Nephrops from the landings obligation due to the relatively high estimated survival rates observed in Nephrops (STECF 2015), the

previous minimum landing size (MLS) of 13.5 cm TL (equivalent to 40 mm CL) has been replaced with a Minimum Conservation Reference Size (MCRS) of 10.5 cm TL (equivalent to 32 mm CL). This change which more closely aligns the mesh size and the minimum landing size will allow the landing of smaller Nephrops and so reduce the very high discard proportions previously observed in this fishery, but may require a reduction in quota to guard against increased fishing mortality and at the new MCRS, only a small percentage of the female Nephrops will be mature (Valentinsson et al., 2015). Secondly there is an upcoming ICES benchmark in 2016 for Nephrops in Division IIIa which will consider the whole stock assessment process, and many issues such as revised estimates of Nephrops discard survival rate (see para below), review of growth rate data, reconsideration of Fmsy proxies and extension of the TV survey to the east of sub-area 2 as recommended by WGNPS (ICES, 2014) may have significant consequences for future stock assessments.

With the landing obligation has come renewed research focus on survivability of trawl-caught Nephrops. Until now the assessments have used a figure of 25% survival for discarded prawns (based on Scottish research from many years ago). Recent work by the Swedish University of Agricultural Sciences (SLU) on the three main gears (grid, seltra trawl and creel) used in the Swedish fisheries for Nephrops showed higher survival rates than those used currently in stock assessments (Valentinsson and Nilsson, 2015). For fisheries using a grid, Nephrops survival was estimated at 42% in the summer and 75% in the winter, and for fisheries using the seltra trawl, survival was 38% in the summer and 59% in the winter. In the creel fisheries survival was estimated at 95% in the summer and 98% in the winter. Based on historical patterns in gear use and discard rates across the fishery, Valentinsson and Nilsson (2015) provided an overall estimate of Nephrops survival of 55% following discarding. However this estimate does not include any unknown post-discard predation mortality, which was incorporated into the previous mortality estimates used in the current stock assessments. This new estimate of overall discard survival rate in the Swedish fisheries is similar to estimates from other countries presented at the North Sea Advisory Council¹ (van der Reijden and Molenaar, 2015).

2.5 Any developments or changes within the fishery which impact traceability or the ability to segregate between fish from the Unit of Certification (UoC) and fish from outside the UoC (non-certified fish)

No changes within the fishery that impact traceability.

2.6 TAC and catch data

Table 2.6 TAC and Catch Data

TAC	Year	2015	Amount	3,909 t
UoA share of TAC	Year	2015	Amount	100%
UoC share of TAC	Year	2015	Amount	74%
Total green weight catch by UoC	Year (most recent)	2015	Amount	1,674 t
	Year (second most recent)	2014	Amount	

¹ <http://www.nsrac.org/wp-content/uploads/2016/01/International-discard-survival-studies-Karin-van-der-Reijden.pdf>

2.7 Summary of Assessment Conditions

Table 2.7 Summary of Assessment Conditions

Condition number	Performance indicator (PI)	Status	PI original score	PI revised score
1	1.1.2	Open	75	Not revised
2	1.2.2	Open	65	Not revised
3 (UoC 8 only)	2.1.1	Open	60	Not revised
4 (UoCs 7, 8)	2.4.1	Open	70	Not revised
5 (UoCs 7, 8)	2.4.2	Open	75	Not revised

3 Assessment Process

3.1 Details of 1st Surveillance Audit Process

As a result of the assessment, a number of conditions of certification were raised by the assessment team, and maintenance of the MSC certificate is contingent on the Swedish Nephrops fishery moving to comply with these conditions within the time-scales set at the time the certificate was issued.

3.2 Scope & History of the Assessment

3.2.1 Surveillance team details

This on-site surveillance visit was carried out by Rod Cappell, Lucia Revenga and Julian Addison; the team which undertook the original assessment. The Team Leader was Rod Cappell.

3.2.2 Date & Location of surveillance audit

The audit was held on the 22nd March 2016 in Gothenburg, Sweden.

3.2.3 Stakeholder consultation & meetings

During the site visit, consultation meetings were held with:

a. Danish PO (client)

Updated team on changes over the year (see section 2) and progress against conditions (section 4)

b. Mats Ulmestrand, ICES scientist involved in the Nephrops stock assessment

- Lower recruitment levels seen in 2014
- Size distribution differs between areas for various reasons; gyre, sediment, food availability.
- Only reference points are Fmsy, may soon have definition of Btrigger – will be discussed at benchmarking meeting
- Minimum landing size has changed from 40 to 32mm carapace length. So will have to re-run calculations of Fmsy proxies as the calculations were based on length cohort analysis.
- May also look at different survivability ratios in the next assessment (think it may be somewhere between 50% and 75% survivorship) but depends on env. conditions at haul.

3.2.4 What was inspected

Documents provided by the client were inspected.

3.2.5 Stakeholder Consultation

A total of 18 stakeholder organisations and individuals having relevant interest in the assessment were identified and consulted during this surveillance audit. The interest of others not appearing on this list was solicited through the postings on the MSC website.

No submissions were received other than the Danish control agency's response to questions from the surveillance team (see Appendix 2).

3.3 Surveillance Standards

3.3.1 MSC Standards, Requirements and Guidance used

This surveillance audit was carried out according to the MSC Fisheries Certification Requirements v2.0.

3.3.2 Confirmation that destructive fishing practices or controversial unilateral exemptions have not been introduced

No indication was given or suggested during the surveillance audit to suggest that either of these practices is in evidence for this fishery

4 Results

4.1 Condition 1

Performance Indicator(s) & Score(s)	Insert relevant PI number(s)	Insert relevant scoring issue/ scoring guidepost text	Score
	1.1.2	SG80b Requirement: The limit reference point is set above the level at which there is an appreciable risk of impairing reproductive capacity.	75
Condition	By the fourth annual surveillance a limit reference point for the Nephrops fishery in Division IIIa should be formally defined.		
Milestones	<p>Annual surveillance 2. Show written evidence of consultation with the relevant authorities to consider options for defining a limit reference point.</p> <p>Annual surveillance 3. Provide evidence that the definition of a suitable limit reference point has been agreed through consultation with the relevant authorities.</p> <p>Annual surveillance 4. Implementation of an explicitly defined limit reference point through consultation with the relevant authorities.</p>		
Client action plan	<p>The DFPO fully supports the further development and refinement of the ICES MSY framework for Skagerrak and Kattegat Nephrops. When a sufficient data series of the UWTV survey is available, we will encourage and support ICES in adopting a Bmsy trigger (or equivalent) reference point to ensure that the harvest rate is reduced at low stock abundance to avoid an increased risk of impaired recruitment. We will also encourage and support the refinement of the estimation of the target harvest ratio to ensure that the main uncertainties are taken into account.</p> <p>Year 2: The DFPO will show evidence of contact with the relevant national/ICES scientists to consider the options for developing a Bmsy trigger and the refinement of the estimation of the target harvest ratio.</p> <p>Year 3: The DFPO will show evidence that a Bmsy trigger (or equivalent) reference point has been agreed, and that methods for taking the main uncertainties in the estimation of the target harvest ratio into account have been investigated and agreed where applicable.</p> <p>Year 4: The DFPO will show evidence that a Bmsy trigger (or equivalent) reference point and methods for taking the main uncertainties in the estimation of the target harvest ratio into account have been implemented in the ICES advisory framework for this Nephrops unit.</p>		
Progress on Condition [Year 1]	<p>There is no formal milestone for this condition in Year 1. However considerable progress has been made in relation to meeting the milestone for Year 2.</p> <p>Since the original certification, three further UWTV surveys have been completed. The data for the 2013 and 2014 are now fully worked up providing a times series of four annual abundance estimates (see section 2.4.1), and the 2015 survey has been completed, but at the time of this surveillance audit, the survey data for 2015 had not been analysed fully. These survey results could be used in developing a biomass reference point. Through the EU INTERREG project, OBJFISK, the Client has been working with the relevant national and ICES scientists in considering options for developing a MSY Btrigger reference point. The ICES WKLIFE group has also been considering the development of reference points for stocks where the data are limited. Finally there will be an ICES benchmark of the Division IIIa Nephrops stock in 2016, which will consider refinement of the development of Fmsy proxies and the estimation of the target harvest ratio to ensure that the main uncertainties are taken into account.</p>		
Status of condition	On target		

4.2 Condition 2

Performance Indicator(s) & Score(s)	Insert relevant PI number(s)	Insert relevant scoring issue/ scoring guidepost text	Score
	1.2.2	SG80a Requirement: Well defined harvest control rules are in place that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached.	65
Condition	By the fourth annual surveillance well defined harvest control rules should be in place that are consistent with the harvest strategy and ensure that the exploitation rate is reduced as limit reference points are approached. The selection of the harvest control rules should take into account the main uncertainties.		
Milestones	<p>Annual surveillance 2. Show written evidence of consultation with the relevant authorities to consider options for controlling exploitation rate if limit reference points are approached including taking the main uncertainties into account.</p> <p>Annual surveillance 3. Provide evidence that a mechanism for controlling exploitation rate if limit reference points are approached, including taking the main uncertainties into account, has been agreed through consultation with the relevant authorities.</p> <p>Annual surveillance 4. Implementation of well-defined harvest control rules including taking the main uncertainties into account through consultation with the relevant authorities.</p>		
Client action plan	<p>The DFPO fully supports the further development and refinement of the ICES MSY framework for Skagerrak and Kattegat Nephrops. When a sufficient data series of the UWTV survey is available, we will encourage and support ICES in adopting a Bmsy trigger (or equivalent) reference point to ensure that the harvest rate is reduced at low stock abundance to avoid an increased risk of impaired recruitment. We will also encourage and support the refinement of the estimation of the target harvest ratio to ensure that the main uncertainties are taken into account.</p> <p>Year 2: The DFPO will show evidence of contact with the relevant national/ICES scientists to consider the options for developing a Bmsy trigger and the refinement of the estimation of the target harvest ratio.</p> <p>Year 3: The DFPO will show evidence that a Bmsy trigger (or equivalent) reference point has been agreed, and that methods for taking the main uncertainties in the estimation of the target harvest ratio into account have been investigated and agreed where applicable.</p> <p>Year 4: The DFPO will show evidence that a Bmsy trigger (or equivalent) reference point and methods for taking the main uncertainties in the estimation of the target harvest ratio into account have been implemented in the ICES advisory framework for this Nephrops unit.</p>		
Progress on Condition [Year 1]	<p>There is no formal milestone for this condition in Year 1. However considerable progress has been made in relation to meeting the milestone for Year 2.</p> <p>Since the original certification, three further UWTV surveys have been completed. The data for the 2013 and 2014 are now fully worked up providing a times series of four annual abundance estimates (see section 2.4.1), and the 2015 survey has been completed but at the time of this surveillance audit, the survey data for 2015 had not been analysed fully. These survey results could be used in developing a biomass reference point which will be an integral part of a harvest control rule, and through the EU INTERREG project, OBJFISK, the Client has been working with the relevant national and ICES scientists in considering options for developing a MSYBtrigger reference point. The ICES WKLIFE group has also been considering the development of reference points for stocks where the data are limited.</p> <p>There will be an ICES benchmark of the Division IIIa Nephrops stock in 2016 which will consider refinement of the development of Fmsy proxies and the</p>		

	estimation of the target harvest ratio to ensure that the main uncertainties are taken into account. The benchmark will also consider uncertainties in growth rate and survival of discarded Nephrops, which are two of the main uncertainties underlying the selection of the harvest control rule.
Status of condition	On target

4.3 Condition 3 (UoC 8 only)

	Insert relevant PI number(s)	Insert relevant scoring issue/ scoring guidepost text	Score
Performance Indicator(s) & Score(s)	2.1.1	SG80c Requirement for the Kattegat cod stock: If main retained species are outside the limits there is a partial strategy of demonstrably effective measures in place such that the fishery does not hinder recovery and rebuilding.	60
Condition	By the 4 th annual surveillance the client shall ensure that demonstrably effective cod recovery measures are in place such that the fishery does not hinder recovery and rebuilding of the Kattegat cod stock.		
Milestones	<p>Annual surveillance 1: The client shall report on the efficacy of measures implemented by UoC vessels to reduce cod bycatch and to record cod catch and discards by UoC vessels in the context of Kattegat cod fishing mortality. If measures are not proven to be effective through field trials or if Kattegat cod recovery is not evident, the client is to identify what additional bycatch minimisation measures are to be applied.</p> <p>Annual surveillance 2: The client shall repeat 1st annual surveillance actions until either: - Demonstrably effective measures are implemented - Kattegat cod recovery is evident.</p> <p>Annual surveillance 3: The client shall continue to do as in the previous annual surveillance. If demonstrably effective measures are in place such that the fishery does not hinder recovery and rebuilding of the Kattegat cod stock then SG80 is met.</p> <p>Annual surveillance 4: If SG80 is not met by Annual Surveillance 3, then the client shall continue to do as in the previous annual surveillance.</p>		
Client action plan	<p>The DFPO has worked with researchers and authorities for many years in the implementation of measures to ensure that the Kattegat Nephrops fishery can reduce its impact on the cod stock to a level that would allow this stock to recover. These measures have already allowed recovery (the biomass has almost doubled over the last 4 years), but the stock is still not at the level where we want to see it.</p> <p>Year 1 (and onwards): The DFPO will implement mandatory registration of all cod discards in the Kattegat through the existing ETP by-catch data collection methods (ETP log and VDEC).</p> <p>Year 1-4: The DFPO will report annually on the efficacy of the implemented measures regarding cod catches and on the recovery of the cod stock, including collated data from the cod discard registration.</p>		

	If the measures prove not to be effective and/or cod stock recovery is not evident, the DFPO will identify, and subsequently implement, further measures as appropriate to reduce catches and/or improve documentation of total catches.
Progress on Condition [Year 1]	<p>During this first year surveillance the client should report on the efficacy of measures implemented by UoC vessels to reduce cod bycatch, and to record cod catch and discards by UoC vessels in the context of Kattegat cod fishing mortality. And if measures are not proven to be effective through field trials or if Kattegat cod recovery is not evident, the client is to identify what additional bycatch minimisation measures are to be applied.</p> <p>One of these measures is the prohibition of the 90 mm mesh in the Kattegat Sea since January 2016. This should help prevent the catch of undersized species.</p> <p>As regards ICES June 2015 Advice on Kattegat cod, the Spawning stock biomass is increasing from a historical low, however the stock is still considered to be in a poor state. Therefore, the measures taken so far could be considered effective but should be maintained (or increased) until the cod recovery is evident.</p> <p>The client should be recording both catch and discards of Kattegat cod, until Kattegat cod recovery is evident and the stock reaches a safe status. The client presented cod catches for 2015 (34 tonnes). Discard data was recorded in the ETP logbook for a few months, and some discard data is available through the EU logbook. Further data may be available through the STECF analysis of discard data. However together these may not present an accurate assessment of cod discarding in the Kattegat fishery throughout the year. The purpose of the condition is to better quantify all cod catches in the certified fishery, therefore the client is encouraged to record all cod discards on the UoC vessels (either electronically in the ETP book or manually in paper records).</p> <p>At the yr2 surveillance (as was required for yr1) the client shall report on the efficacy of measures implemented by UoC vessels to reduce cod bycatch and to record cod catch and discards by the UoC vessels in the context of Kattegat cod fishing mortality.</p>
Status of condition	Behind target.

4.4 Condition 4 (UoC 7 & 8)

	Insert relevant PI number(s)	Insert relevant scoring issue/ scoring guidepost text	Score
Performance Indicator(s) & Score(s)	2.4.1	SG80a Requirement: The fishery is highly unlikely to reduce habitat structure and function to a point where there would be serious or irreversible harm.	70
Condition	<p>By the 4th annual surveillance the client shall demonstrate that the fishery is highly unlikely to reduce habitat structure and function to a point where there would be serious or irreversible harm.</p> <p>The client shall avoid defined sensitive areas until management measures are defined for them, and shall comply with them once these are settled. The client shall provide detailed overlap habitat and / or seabed community maps of the fishing grounds, with particular focus on OSPAR sensitive locations, Natura 2000 areas and most intensively fished areas, in order for the fishery to clearly demonstrate which habitat types may be affected by the fishery. It is not intended that the client should have to produce such maps, as it is likely that</p>		

	<p>significant relevant information already exists within governments and EU research organizations.</p> <p>The client shall maintain a record of encounters with vulnerable seabed habitats and work in the identification of these species when there are interactions. The CoC should encourage vessels and fishermen to participate in the collection of information about benthos and benthic features.</p>
Milestones	<p>Annual surveillance 1: The client shall modify its Code of conduct in order to include the avoidance of sensitive areas, and shall provide overlap maps of fishing activities and sensitive areas on an ongoing basis in order to illustrate this avoidance. These maps will also serve to identify potential impacts on sensitive areas. Client shall report data on encounters with OSPAR indicator species and identification, when possible, of vulnerable seabed habitats. If there is evidence of potential impact of the fishery on vulnerable seabed habitats, the client should develop mitigation measures.</p> <p>Annual surveillance 2: The client shall update overlay maps when new information becomes available, and report data on encounters (and identification when possible) with indicator species of vulnerable seabed habitats. If there is evidence of potential impact of the fishery on vulnerable seabed habitats, the client should develop mitigation measures.</p> <p>Annual surveillance 3: The client shall continue to do as in the previous annual surveillance.</p> <p>Annual surveillance 4: The client shall continue to do as in the previous annual surveillance. SG80 will be met once there is a time series of observations from which it can be concluded that the fishery is highly unlikely to reduce habitat structure and function to a point where there would be serious or irreversible harm.</p>
Client action plan	<p>The DFPO/DFA is a very active participant in the process of creating management plans for the designated Natura 2000 areas, and we will continue to do so as these are finalized.</p> <p>Through its own Code of Conduct, the DFPO also already has in place fleet wide reporting requirements for encounters with sensitive habitats including a visual guide that enables fishermen to distinguish these.</p> <p>Year 1: The DFPO will provide evidence that known sensitive areas/positions are provided to all vessels with clear instructions to avoid fishing on these habitats:</p> <ul style="list-style-type: none"> - Encounters with indicator by-catches registered through the Code of Conduct reporting, - Mapped areas of sensitive habitats (reefs: 1170 and 1180, as well as coral gardens and sea sponge aggregations) within Natura2000 areas, and - OSPAR registrations of sensitive habitats outside Natura2000 areas. <p>As the authorities implement legal closures of e.g. Natura2000 areas, vessels will be instructed to follow these as required (if the areas are different from the currently mapped sensitive areas).</p> <p>The DFPO will provide updated overlay maps of VMS and seabed habitats.</p> <p>Year 2, 3 and 4: The DFPO will provide updated overlay maps of VMS, seabed habitats and Natura2000 and OSPAR features in order to show that the fleet as instructed avoids known sensitive areas/positions. If the overlays show that a particular vessel has fished in a sensitive area, this vessel will (as for any other breach of the Code of Conduct) receive a warning for the first instance and if repeated, it will be taken off the MSC vessel-list.</p> <p>Year 4 – or before if possible: The DFPO will show evidence that the combination of implemented public management measures and the measures implemented by the fleet itself – can provide sufficient confidence that the</p>

	combined partial strategy for habitats will work, and that the fishery is highly unlikely to cause any serious or irreversible harm.
Progress on Condition [Year 1]	<p>The client's Code of Conduct does not clearly specify the avoidance of sensitive areas. However this requirement is stated in the client's habitat strategy. While it is clear that habitat protection is taken into account by the company, the client, for the 2nd surveillance, shall modify its Code of Conduct in order to explicitly include this.</p> <p>The client provided overlap maps of fishing activities (VMS) and sensitive areas for both the Skagerrak and the Kattegat Seas, which satisfy this milestone. As regards the protection of the Kattegat Sea, the Danish Government is planning to approve nine new Marine Protected Areas in the Kattegat Sea, covering a total of 590 km², seeking the benefit of bottom- dwelling creatures such as sea pens and Haploops.</p> <p>The DFPO has reported no encounters with vulnerable habitats during 2015. A commendable development is that the DFPO, in cooperation with WWF and DTU Aqua, is undertaking an EMFF-funded expedition to identify further areas of vulnerable habitats in the Kattegat Sea (particularly corals, sponge gardens and horse mussel beds).</p>
Status of condition	On target.

4.5 Condition 5 (UoCs 7 and 8)

	Insert relevant PI number(s)	Insert relevant scoring issue/ scoring guidepost text	Score
Performance Indicator(s) & Score(s)	2.4.2	SG80b Requirement: There is some objective basis for confidence that the partial strategy will work, based on information directly about the fishery and/or habitats involved.	75
Condition	By the 4 th annual surveillance the client shall demonstrate the accomplishment of those Natura 2000 management measures designed during the lifetime of the certificate. Moreover, while the design of these measures is fulfilled by the relevant authorities, the client shall develop a spatial plan for the fishery which incorporates new habitats and integrates habitat considerations into the Code of Conduct, including measures to manage the habitat component of the fishery's footprint and to mitigate adverse and unavoidable impacts on vulnerable habitats.		
Milestones	<p>Annual surveillance 1: Have developed a habitat management partial strategy for the fishery which incorporates new habitat data and integrates habitat considerations into the CoC including measures to reduce unacceptable impacts on sensitive habitats such as gear modifications, avoidance and area closures. This should include special attention to management measures within OSPAR and Natura2000 sites to protect and maintain the biodiversity of these sites. Develop list of sensitive habitats that need to be avoided by the fleet. At fleet level the client must develop a system for annually summarizing and reporting on this data for all certified vessels.</p> <p>Annual surveillance 2: Provide evidence of implementation of the habitat management partial strategy developed in year 1.</p> <p>Annual surveillance 3: Report to the team on management responses with the aim of reducing impacts on sensitive habitats.</p> <p>Annual surveillance 4: Demonstrate implementation of a partial strategy to</p>		

	manage the habitat component of the fishery's footprint and to mitigate adverse and unavoidable impacts (such as by temporal closures of some areas for all fleets). Demonstrate due regard to OSPAR and Natura 2000 sites and capture OSPAR and Natura 2000 management requirements in the fishery spatial plan.
Client action plan	<p>The DFPO/DFA is a very active participant in the process of creating management plans for the designated Natura 2000 areas, and we will continue to do so as these are finalized.</p> <p>Through its own Code of Conduct, the DFPO also already has in place fleet wide reporting requirements for encounters with sensitive habitats including a visual guide that enables fishermen to distinguish these. Collated positions of encounters are made available to the rest of the fleet to enable future avoidance.</p> <p>Year 1: The DFPO will provide evidence that collated habitat encounter reports, implemented Natura 2000 management measures, and any new information on vulnerable habitats in the area are available to the fleet in the form of chart layers so that these areas can be avoided by all vessels.</p> <p>Year 2 and 3: The DFPO will show evidence of management responses to reduce or mitigate unacceptable habitat impacts, and of further implementation of the vulnerable habitat avoidance measures.</p> <p>Year 4: The DFPO will show evidence that Natura 2000 management measures are implemented in the fishery to the extent that this – along with measures implemented by the fleet itself – will provide confidence that the combined partial strategy for habitats will work.</p>
Progress on Condition [Year 1]	<p>The condition required the fulfilment of various activities during the first year. These activities included the development of a habitat management partial strategy, which incorporates new habitat data. The DFPO website shows the client's strategy as regards bottom trawling activity, which includes a broad summary of protected areas (paying special attention to OSPAR and Natura2000 sites) as well as the status of new proposals (by different stakeholders) for establishing new protected areas.</p> <p>Additionally, the DFPO has introduced management measures such as the protection of areas based on the following:</p> <ul style="list-style-type: none"> Scientific registrations of vulnerable habitats (corals, sponges, horse mussels, Maërl Lophelia and Sabellaria) registered in OSPAR (Oslo-Paris Convention) database (available at www.emodnet-seabedhabitats.eu) or registered in PO diary. Vulnerable habitats which are finally mapped in Danish and foreign Natura 2000 areas (reefs, bubbling and concentrations of corals and sponges) in Kattegat, Skagerrak and the North Sea, but not yet closed by the authorities. Currently, there is about 16 Danish Natura 2000 sites, and the Swedish Bratten area. When the legislative process from the EU authorities is completed, this will replace DFPO's autonomous protection of the official closed areas. The DFPO has agreed with the WWF to protect a number of areas in the Kattegat where vulnerable habitats have been found (but not yet registered in the OSPAR database). If these areas are encompassed by the area closures implemented through the Marine Strategy Framework Directive or Natura 2000, these will replace them. <p>Encounters with these species are registered in the ETP logbook, and the accomplishment of the avoidance of these areas can be checked through the VMS records. As new areas/registrations of vulnerable habitats are mapped/discovered (through the authorities mapping process, scientific explorations etc.), these will be afforded protection along the same principles.</p>

	<p>The client's Code of Conduct is very comprehensive and includes measures that integrate environmental considerations, however none of these measures seems to be directly related to the protection of the habitats. Therefore, the client should work in the inclusion of measures to protect habitats (such as those listed in the habitat strategy), and also on the establishment of a system for annually summarizing and reporting on this data for all certified vessels.</p> <p>The condition is on target thanks to the comprehensive habitat strategy presented by the client, which includes most of the activities included in the 1st annual milestone.</p> <p>At year 2 surveillance the client must provide evidence of implementation of the habitat management partial strategy that has been developed in year 1. Specifically the outputs from the 'system for annually summarizing and reporting on encounters with the list of sensitive habitats'.</p>
Status of condition	On target.

5 Conclusion

5.1 Summary of findings

The assessment team concludes that the Swedish Nephrops fishery should remain certified.

Table 5.1 Summary of Progress on conditions

Condition number	Performance indicator (PI)	Status	PI original score	PI revised score
1	1.1.2	On target	75	Not revised
2	1.2.2	On target	65	Not revised
3 (UoC 8 only)	2.1.1	Behind target	60	Not revised
4 (UoCs 7, 8)	2.4.1	On target	70	Not revised
5 (UoCs 7, 8)	2.4.2	On target	75	Not revised

6 References

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ICES, 2015a. Report of the Working Group on the Assessment of Demersal Stocks in the North Sea and Skagerrak (WGNSSK). 28 April - 7 May 2015 ICES Headquarters, Copenhagen. ICES CM 2015/ACOM: 13.

ICES 2015b. ICES Advice on Norway lobster (*Nephrops* spp.) in Division IIIa (Skagerrak and Kattegat). ICES Advice Book 6, 6.3.18.

STECF, 2015. Landing obligation – Part 5 (demersal species for NWW, SWW, and North Sea). STECF-15-10.

Valentinsson, D., Hjelm, J. and Ringdahl, K. 2015. Implications of reducing Norway lobster (*Nephrops norvegicus*) minimum size (MLS/MCRS) in the Skagerrak and Kattegat area (IIIa). Swedish University of Agricultural Sciences (SLU), 6pp.

Valentinsson, D. & Nilsson, H.C. 2015. Effects of gear and season on discard survivability in three Swedish fisheries for Norway lobster (*Nephrops norvegicus*). Swedish University of Agricultural Sciences (SLU), 2015-10-13, 11pp.

<http://www.nsrac.org/wp-content/uploads/2015/03/Paper-8.1-MCRS-Nephrops.pdf>

Van der Reijden & Molenaar. 2015. International recent discard survival studies: a short overview. Executive Committee Meeting North Sea Advisory Council March 10th, 2016. Karin van der Reijden & Pieke Molenaar in cooperation with other members of WKMEDS

Appendix 1 – Re-scoring evaluation tables (if necessary)

None

Appendix 2 - Stakeholder submissions (if any)

Written submission (email) from Danish control agency, Agrifish Agency, in response to surveillance team questions:

1. Were there any complaints against the Nephrops fleet vessels recorded, reviewed and actioned in the last 12 months?

We understand complaints as infringements.

There were 9 infringements in 2015. 6 regarded undersized Nephrops, 1 regarded illegal gear and 2 regarded fishing in closed area.

2. Is the Nephrops fleet compliant with the rules and regulations of the fishery?

In general yes. The fishery consists of many vessels in a one day fishery. And as there are many landings in this fishery it is often that a vessel in this fishery is subject to control.

3. Where non-compliance has been observed, how many instances (exact or estimated) and what were the infringements in relation to and what were the resulting actions?

The infringements consist of 4 fines, 4 written warnings and 1 withdrawal of license.

4. Have there been any changes to management or regulation in the last 12 months of relevance to the Nephrops fleet?

Yes a new minimum size in relation to the discard plan in 3A.


5. Were the allegations made by Blackfish submitted to the control authorities and has there been any response?

No.

See also the 2015 annual control and enforcement report of the AgriFish Agency

http://naturerhverv.dk/fileadmin/user_upload/NaturErhverv/Nyheder/2016/Fiskerikontrol_2015.pdf

Appendix 3 - Surveillance audit information (if necessary)


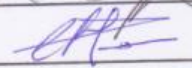
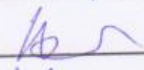
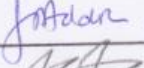

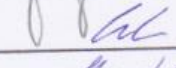




Meeting Attendance Record

Name of Fishery Danish Swedish Nephrops

Purpose of Meeting 47 surveillance

Date of Meeting 22/03/16 Location Gothenburg

Print Name	Position or Function	Signature
Rod CAPPELL	P3 TL	
LUCIA REVENGA	P2	
Anders Giesecke		
Julian Addison	P1	
JONATHAN B JACOBSEN	DFPD CLIENT REP	
Kent Carlsson	Hav och vatten	
Stefan Hellberg	Hav och vattenmyndigheten	
Per-Olof Andersson	- 11 -	

Appendix 4 - Additional detail on conditions/ actions/ results (if necessary)

N/a

Appendix 5 - Revised Surveillance Program (if necessary)

Table 5.2 : Surveillance level rationale

Year	Surveillance activity	Number of auditors	Rationale
2	<i>On-site audit</i>	<i>1 auditor on-site with remote support from 1 auditor</i>	<i>With 1 condition behind target and a number of deliverables required, an on-site surveillance is desirable, however a remote surveillance may be possible with the provision of all documentation.</i>

Table 5.3: Timing of surveillance audit

Year	Anniversary date of certificate	Proposed date of surveillance audit	Rationale
2	<i>27th January 2015</i>	<i>March 2017</i>	<i>With several outputs required, a full 12 months between surveillance audits is advised. Maintaining the same timing as the Swedish certificate enables cost savings from a joint surveillance visit.</i>

Table 5.4: Fishery Surveillance Program Revised

Surveillance Level	Year 1	Year 2	Year 3	Year 4
<i>Level 5</i>	<i>On-site surveillance audit</i>	<i>On-site surveillance audit</i>	<i>On-site surveillance audit</i>	<i>On-site surveillance audit & re-certification site visit.</i>