

**Marine Stewardship Council (MSC)
Year 1 Surveillance Report**

Mussel translocation into the Oosterschelde

MEC-F-039

**On behalf of the Vereniging van Importeurs van
Schelpdieren**

Prepared by ME Certification Ltd

May 2017

**Authors: Chrissie Sieben
Jo Gascoigne**

Contents

| | |
|---------------------------------|---|
| Contents | 1 |
| 1. General Information | 1 |
| 2. Background..... | 2 |
| 2.1. Principle 1 | 2 |
| 2.2. Principle 2 | 3 |
| 2.3. Principle 3 | 4 |
| 3. Assessment Process | 5 |
| 4. Results and Conclusion | 5 |
| 5. References | 6 |

1. General Information

| | | | |
|--------------------------------------|---|--|-----------------|
| Fishery name | Mussel translocation into the Oosterschelde | | |
| Unit(s) of assessment | Species: <i>Mytilus edulis</i> Geographical range: Northwest Europe Method of capture: Dredge Stock: N/a Client group: Members of the Vereniging van Importeurs van Schelpdieren. Other eligible fishers: None | | |
| Date certified | 27 January 2016 | Date of expiry | 27 January 2021 |
| Surveillance level and type | Surveillance level 1, review of information audit. Please note this surveillance level was revised in line with the FCRv2.0 as the standard surveillance level stated in the Public Certification Report conformed to the CRv1.3 | | |
| Date of surveillance audit | 8 March 2017 | | |
| Surveillance stage (tick one) | 1st Surveillance | x | |
| | 2nd Surveillance | | |
| | 3rd Surveillance | | |
| | 4th Surveillance | | |
| | Other (expedited etc) | | |
| Surveillance team | Lead assessor: Chrissie Sieben Assessor(s): Jo Gascoigne | | |
| CAB name | ME Certification Ltd. (MEC) | | |
| CAB contact details | Address | 56 High Street Lymington SO41 9AH Hampshire United Kingdom | |
| | Phone/Fax | Tel: 01590 613007 Fax: 01590 671573 | |
| | Email | info@me-cert.com | |
| | Contact name(s) | Gavin Fitzgerald | |
| Client contact details | Address | Vereniging van Importeurs van Schelpdieren Coxstraat 41 Kapelle NL 4421 DC | |
| | Phone/Fax | 0031617105738 | |
| | Email | coraseip@gmail.com | |
| | Contact name(s) | Cora Seip | |

2. Background

This certificate covers all translocation activities of mussels into the Oosterschelde by members of the Vereniging van Importeurs van Schelpdieren. These mussels are imported from MSC-certified fisheries elsewhere in Northwest Europe, and are placed in the Oosterschelde on holding plots for short periods of time for purposes of depuration/stockage where they become part of the MSC certified “Netherlands blue shell mussel fishery” (MEC-F-021). At the time of the initial assessment, the mussels were imported from the following MSC-certified fisheries:

- North Menai Strait mussels (Wales, UK)
- Exmouth mussels (Devon, UK)
- Irish bottom-grown mussels (Ireland)
- Northern Irish bottom-grown mussels (Northern Ireland, UK)
- Denmark blue-shell mussel dredge (Denmark)
- Isefjord and East Jutland blue-shell mussel (Denmark)
- Royal Frysk Jutland blue-shell mussel dredge (Denmark)
- Seafood Romo East Jutland and Isefjord blue-shell mussel dredge (Denmark)
- VMI East Jutland blue-shell mussel dredge (Denmark)
- Germany lower Saxony mussel dredge and culture

The Exmouth mussel fishery withdrew its certification in September 2016 – although mussels from this fishery are still being imported into the Oosterschelde, they are no longer sold as MSC.

The Schleswig-Holstein blue shell mussel was certified in October 2016 and is now also being used as a source fishery. To date no mussels from this fishery have been sold as MSC; however it is being added to the above list. No changes in scoring are required based on the geographical proximity of this new fishery to other already assessed fisheries in Lower Saxony and Denmark.

In light of the changes mentioned above, a new certificate is being issued.

This fishery certificate relates to translocation activities only – harvesting is covered by the aforementioned source and end fisheries. No catch data are therefore presented here. The mussel fisheries are not managed by Total Allowable Catch (TAC).

2.1. Principle 1

For Principle 1, only the Performance Indicator (PI) 1.1.4 (Genetic outcome) was scored in this fishery. Three species of *Mytilus* occur in Western Europe – the common, blue, blue-shelled or European mussel *Mytilus edulis*, the Mediterranean mussel *M. galloprovincialis* and the Baltic mussel *M. trossulus*. The source areas present a mixture of genotypes – those from the North Sea and Irish Sea are largely or completely *M. edulis*, while those from the Channel and the west coast of Ireland may include some *M. galloprovincialis* or hybrids. There is, however, for the moment, no evidence of *M. galloprovincialis* individuals in wild mussel populations from the Oosterschelde or the Wadden Sea, despite the fact that

mussels have been coming into the Oosterschelde from the UK and Ireland for several decades. It is noted however that some *M. galloprovincialis* alleles are present in the population at low frequency, while *M. trossulus* alleles may also be present (see MEC, 2016 for more detail).

In 2015 a survey programme was conducted, focusing on the genetic profiling of the mussel populations in the Netherlands (Dutch Delta region and the Wadden Sea), to enable the detection of changes in the genetic composition within these populations over time. The study examined 47 sites along the Dutch coast, including the Oosterschelde. Although the percentages of *galloprovincialis* alleles (~5 %) detected in the Oosterschelde and Wadden Sea populations were similar to those found in other studies (see MEC, 2016), much higher percentages of up to ~50% *galloprovincialis* alleles were detected in relatively calm waters with minimal tidal influences. This may not necessarily indicate a recent change as these latter areas were not represented in previous studies. The study's findings do not give an indication that the mussel industry has had any influence on the genetic profiles of mussel populations in The Netherlands. The presence of *galloprovincialis* alleles appears to be the result of introgression and not the introduction of an alien species (Gittenberger, 2016a). This study is being continued with an increased sample size.

2.2. Principle 2

For Principle 2, only the Translocation Component was assessed in this fishery. Mussels are harvested from the source areas and loaded from the vessel into large bags ('Big Bags'). They are transported to the Netherlands in refrigerated lorries. On arrival, after checks they are relayed onto plots in the Oosterschelde set aside for this purpose by each of the mussel processing companies. They are generally present in the Oosterschelde for a few days or weeks for depuration or storage, before being re-harvested for sale.

A Shellfish Import Monitoring Protocol, developed by GiMaRIS is in place to monitor the risk of importing non-native species into the Oosterschelde. The protocol consists of a three-yearly SASI (Shellfish-dependent species inventory) which involves a species inventory of samples taken *in situ* at the source fishery; a 'Big Bag' species inventory (BB) is also carried out, involving sampling of the Big Bags upon arrival in Yerseke. For the BB inventory, 2-3 samples per region per import were taken at the time of initial assessment – since then, however the sampling protocol has been revised and sampling is now carried out for 2.5% of all imports from a given source fishery (see Gittenberger, 2015). Currently, this still comes out as roughly 2-3 samples per region. Note that samples are still being carried out from January-June and July-December (each period with its own reports). The results of the sampling feed into a risk-based assessment process, which can stop imports or can increase (or reduce) the level of sampling in response to the perceived risk of undesirable introductions. The results are also sent to the Ministry of Economic Affairs as part of the licenses conditions (see below).

The translocation activity is subject to licensing by the ministry of Economic Affairs. Licences were increased to 4 years (3 years during initial assessment) to give enough time for the SASI cycle to be completed. In order to be awarded a licence initially, a SASI is used as the basis for an 'appropriate assessment' (the Oosterschelde being a Natura 2000 area). The licence application and appropriate assessments are reviewed by the Ministry of Economic Affairs, and made available for stakeholder comment.

Since the initial assessment, the following monitoring has been carried out:

- SASI in Castlemaine Harbour, Ireland - June 2016: none of the 70 species identified in the SASI were considered to be problematic for the Oosterschelde (Gittenberger et al., 2016a)
- SASI in Lime Bay UK – September 2016: none of the 58 species identified in the SASI were considered to be problematic for the Oosterschelde (Gittenberger et al., 2016b)
- Big Bag inventory for mussels from the UK and Ireland - Autumn 2016: none of the 62 species identified in the BB inventory were considered to be problematic for the Oosterschelde (Gittenberger et al., 2017a)
- Big Bag inventory for mussels from Denmark - Autumn 2016: none of the 8 species identified in the BB inventory were considered to be problematic for the Oosterschelde (Gittenberger et al., 2017b)

An appropriate assessment (AA) was carried for the import licence application of Irish mussels for the period February 2017 – March 2021. The AA determined that no problematic species were identified in any of the sites in Bantry Bay, Dunmanus Bay, Kenmare River, Connemara Bay, Mulroy Bay and Castlemaine Harbour. Any species that were found not to occur in the Oosterschelde, do occur in the rest of Northwestern Europe and as such are unlikely to have established themselves in the Oosterschelde due to unfavourable conditions (Seip-Markensteijn, 2016).

2.3. Principle 3

Besides the changes in licensing frequency mentioned under Principe 2, there have been no notable changes in the management framework for this fishery.

No sanctions have been issued or licences withdrawn since the initial assessment.

3. Assessment Process

This fishery was certified on the 27th January 2016. The initial assessment team consisted of Dr Jo Gascoigne (Team Leader, Principle 1), Chrissie Sieben (Principle 2) and Ulf Löwenberg (Principle 2, Principle 3).

Based on the fact that this fishery is a low-risk fishery taking place within EU waters and within a well-defined management framework, and in the absence of any conditions, a surveillance level of 1 was awarded in accordance with the MSC FCR v2.0 (7.23.2). Level 1 is the minimum level of surveillance requiring 1 on-site audit, 1 off-site audit and 2 reviews of information.

The year 1 surveillance audit consisted of a review of information audit. A phone call took place on the 13th March 2016 between Cora Seip-Markenstijn and Chrissie Sieben (Team Leader) with remote support from Jo Gascoigne. The surveillance audit was formally announced on the 9th February 2017 followed by an email to stakeholders on the 10th February. No stakeholders have come forward.

The aim of the audit was to review any changes that may have occurred since the initial assessment and which may lead to changes in the scoring. Each Principle was discussed in detail, the results of which are presented in the sections above.

This fishery does not overlap with any others in the MSC programme; harmonisation was therefore not required.

4. Results and Conclusion

This fishery was certified with no conditions. As indicated in Section 2, there have been no significant changes warranting a rescoring of performance indicators. Other than the changes in source fisheries mentioned, there have also been no material changes in the traceability system for this fishery, including its ability to segregate MSC from non-MSC mussels.

The audit team confirms that this fishery continues to conform to the MSC Principles and Criteria for sustainable fishing. No new conditions or recommendations have been raised. No Performance Indicators have been rescored. The surveillance plan has not been revised and remains at Level 1.

The audit team recommends that this fishery should remain certified.

5. References

- Gittenberger. 2015. Schelpdier import monitoring protocol. Report commissioned by de Vereniging van Importeurs van Schelpdieren. GiMaRIS rapport 2015_53. 11pp.
- Gittenberger. 2016a. Genetic profiling of mussel populations in the Netherlands. Report commissioned by de Vereniging van Importeurs van Schelpdieren. GiMaRIS report 2016_05. 10pp.
- Gittenberger, A.; Rensing; M. and Stegenga, H. 2016a. Schelpdier Afhankelijke Soorten Inventarisatie: SASI van de mosselen bij Castlemaine Harbour, Ierland, juni 2016. GiMaRIS 2016_20. november 2016
- Gittenberger, A.; Rensing; M. and Stegenga, H. 2016b. Schelpdier Afhankelijke Soorten Inventarisatie: SASI van de mosselen bij Lime Bay, Verenigd Koninkrijk, september 2016. GiMaRIS 2016_41. november 2016
- Gittenberger, A.; Korthof, R.E.M; Schrieken, N; Stegenga, H and Rensing, M. 2017a. Inventarisatie van de soortendiversiteit in tarra van mosselen uit het Verenigd Koninkrijk en Ierland, najaar 2016. GiMaRIS 2017_01. januari 2017
- Gittenberger, A.; Korthof, R.E.M; Stegenga, H and Rensing, M. 2017b. Inventarisatie van de soortendiversiteit in tarra van mosselen uit Denemarken, najaar 2016. GiMaRIS 2017_02. januari 2017
- MEC. 2016. MSC Public Certification Report for the Mussel translocation in the Oosterschelde fishery by members of the Vereniging van Importeurs van Schelpdieren. 77pp.
- Seip-Markensteijn, C. 2016. Passende beoordeling behorend bij de aanvraag van de Vereniging van Importeurs van Schelpdieren voor een vergunning op grond van de Nb-wet voor het uitzaaien in de Oosterschelde van mosselen afkomstig uit Ierse deelgebieden in de periode van 1 februari 2017 t/m 1 maart 2021. H & S Consultancy B.V. Report commissioned by the Vereniging van Importeurs van Schelpdieren.