Assessment against SEG Standard:
Component 1: Core requirements
Component 4: Eel buying and trading
Component 5: Eel Farming

Completed by
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From 25 to 26 January 2022

Final Version

Reviewed and Approved by Certification Body:
David Bunt, Sustainable Eel Group, 29 March 2022

1. Introduction

This document is the report of the audit from 25 to 26 of January 2022 carried out for the Gurruchaga Marée group, at its main site in Hendaye. The audit concerned the application of the specifications of the SEG (Sustainable Eel Group) (version 6.0a, December 2019) in pursuit of re-certification. This assessment was carried out for components 1, 4 and 5 of the standard.

The Hendaye site is separated into two distinct entities:

- The "fish tank" part, which consists of a glass eel trade with purchase, storage and resale;
- The "glass eel farm" part, which is in fact an aquaculture farm for growing glass eels.

The glass eels passing through the " Fish tank " section come from local fisheries (Adour and coastal waterways) as well as from all over France. The Gurruchaga Marée group (hereinafter referred to as GM) owns or is in association with 4 centres collecting glass eels for the group (Guérande, Charron, Epargnes, Bourcefranc-le-Chapus). The glass eels collected in these tanks must pass through the Hendaye tank (except for French restocking). The glass eels are then sent to GM's various clients. There are many recipients, including aquaculture farms, direct consumption and European restocking operations. Some of the glass eels purchased by GM are put on the grow-out in the glass eel farm (12% in 2020-2021), after a minimum of 8-10 days in fresh water in the tanks (quarantine period).

Once in the glass eel farm, the glass eels grow for a maximum of 4 to 10 months, until they reach a weight of 5 to 15 grams per eel. An extension of the glass eel farm is underway and will be operational this season. This will give a production capacity of 9 lines of 8 tanks, i.e. 72 tanks in all. Each line is a closed circuit system and is therefore independent of the others. The objective is to produce approximately 100 tonnes of 5-15g eels per season. The facilities can hold 27 tonnes of live fish simultaneously.

When a batch of glass eels is introduced into the grow-out section, the 8 tanks in the line are filled with glass eels for a total of 350-400 kg initially, i.e. about 45-50 kg per tank. This constitutes a single batch. There can therefore be 9 different batches at the same time, one per production line.

Then, during the grow-out phase, the eels are sorted and selected every 30 days or so. These eels are then distributed according to their size, while not mixing the batches. One line is dedicated to eels that grow more slowly than the others.

2. The assessment

The evaluator was Nicolas Belhamiti for Fish-Pass. The audit was carried out in the form of a discussion with Mr Betti Gurruchaga (technical referent of the site) and Mrs Immeln, secretary of the group. The president of the group, Jérôme Gurruchaga, was absent because he was stuck in Morocco (the borders were closed because of the COVID). The audit was conducted on the basis of the documents presented and a complete visit of the site was also made.

3. Client Contact Details

Client Contact Name	Gurruchaga Marée
Client Address	88 route de la corniche, 64700 HENDAYE
Client Email	gurrumaree@wanadoo.fr
Client Phone Number	05 59 56 68 91

4. Results of the assessment

The outcome of this assessment is as follows:

Component 1: General Requirements	**Auditor's findings**	**Weighting**	**Score**
1.1 Commitment to Legality	Responsible	1	1
1.2 Contribution to eel conservation projects (bonus)	Responsible	1	1
1.3 The organisation trades in certified responsibly sourced eels	Responsible	1	1
1.4 Traceability:			
1.4.1 Incoming products, separation and segregation	Aspiring	1	0
1.4.2 Outgoing products	Responsible	1	1
1.4.3 Record keeping and documentation	Responsible	1	1
1.5 Biosecurity & welfare –			
1.5.2 Eel buying & trading: Biosecurity is present and disease is treated rapidly and appropriate	Responsible	1	1
1.5.3 Eel farming: Biosecurity is present and disease is treated rapidly and appropriately	Responsible	1	1
1.5.4 Restocking : The risk of restocked eels introducing disease into wild populations has been assessed and is minimal	Responsible	1	1
	Total	9	8
	Percentage Responsibility Score 7/8:	**89%**	

Finding: For Component 1, a generic requirement, the score is 89% leading to a Responsible assessment.

Component 4: Eel buying and trading	**Auditor's findings**	**Weighting**	**Score**
4.0 Segregation of certified and uncertified eels	Not met	2	0
4.1 The glass eel holding facility is a registered aquaculture production business	Responsible	1	1
4.2 Mortality in storage facility	Aspiring	2	0

4.3 Mortality during transport and initial holding if transported to farm	Aspiring	2	0
4.4 Water quality	Responsible	1	1
4.5 Handling and welfare	Responsible	1	1
4.6 Transport	Responsible	1	1
4.7 The required percentage of glass eels is being used for restocking	Responsible	2	2
	Total	12	6
Percentage Responsibility Score:		**50%**	

Finding: The Bourcefranc storage site for Gurruchaga Marée obtained a score of **50%** for component 4 and can therefore be considered responsible according to the SEG specifications. However, one criterion, 4.0 is not met.

Component 5: Eel farming	**Auditor's findings**	**Weighting**	**Score**
5.0 Segregation of certified and uncertified eels	Aspiring	2	0
5.1 The total mortality rate during the culture is low	Responsible	2	2
5.2 The fish meal/oil ingredients in the feed come from a responsible source	Aspiring	1	0
5.3 Feed is used as efficiently as possible	Responsible	1	1
5.4 Water Quality	Responsible	1	1
5.5 There are minimal ecological impact from effluent discharge	Responsible	1	1
5.6 Grading, slaughter and transportation are carried out with respect to welfare	Responsible	1	1
5.7 The farm provides eel for restocking	NA	NA	NA
5.8 The farm provides eel for are not graded out slow-growers	NA	NA	NA
	Total	9	6
Percentage Responsibility Score:		**67%**	

Finding: The Gurruchaga Marée Group's glass eel farm obtained a score of **67%** for component 5 and can therefore be considered Responsible under the SEG specifications.

Summary of assessment and scoring

Component	Not Met	Aspiring	Responsible
1	**0**	**1**	**8**
4	**2**	**4**	**6**
5	**0**	**3**	**6**
Total	**0**	**8**	**20**
Total Responsibility Score: = 20/30			**67%**

Summary finding:
The Gurruchaga Marée group for glass eel and eel grow-out, with a score of 66% and one criterion not met, does not meet the criteria for obtaining SEG certification.

5. Recommendations:

1. With a score on the responsibility criteria of 67% and one criterion not met, Gurruchaga Marée did not reach the level required to be considered responsible. However, the group has sold less SEG glass eels than it has purchased and has a target of 100% SEG. Thus, a provisional certificate can be issued. A check before the start of the next season will be necessary to issue a final certificate.

2. Regarding criteria 1.4.1 (incoming products) and 4.0 (separation of certified and non-certified eels): Several mixtures of SEG and non-SEG batches took place during the 2020-2021 season. From now on, SEG and non-SEG batches should be properly separated. Gurruchaga Marée has an objective of 100% SEG, but as long as some purchases are made from non-SEG fishermen, one or two pools should be dedicated to these glass eels.

3. Concerning criterion 1.4.2 (outgoing products), it would be interesting to indicate the mortality associated with the batches on the exit vouchers or the transport vouchers of the storage centres during transfers to Hendaye.

4. About criterion 4.3: During a transport for a sale in Greece, a mortality of 19% of the total order occurred. This mortality was caused by a long journey time and very high outside temperatures. After this experience GM decided not to send glass eels so far. This type of problem should not be repeated.

5. Regarding the separation of certified and non-certified eels in the glass eel farm (criterion 5.0), it would be good to introduce only SEG glass eels in all systems. In this way, the responsibility criterion can be met.

6. Concerning criterion 5.1: In order to be able to assess mortality more accurately (conversion of weight into numbers), it would be interesting to separate mortality by eel size.

6. Next Audit

Question	Performance of the Client at Audit	Yes	No
1	Has the client been part of any external investigation which may be of concern to SEG AND/OR been suspended from any other certification standard?	Enhanced Surveillance	**Go to Q2**
2	Has the client received a borderline pass for a Component in its previous audit?	Enhanced Surveillance	**Go to Q3**
3	Does the client only buy and sell product (does not physically handle it?)	Minimum Surveillance	**Go to Q4**
4	All other scenarios	Standard Surveillance	

	Certification Audit	Year 1	Year 2	Year 3	Year 4 Recertification Audit
Minimum Surveillance	On-Site Audit	No Audit	Remote Audit	No Audit	On-Site Audit
Standard Surveillance	On-Site Audit	No Audit	On-Site Audit	No Audit	On-Site Audit
Enhanced Surveillance	On-Site Audit	On-Site Audit	On-Site Audit	On-Site Audit	On-Site Audit

Based on the results of the audit, enhanced surveillance is recommended. Thus, a control audit should take place before the beginning of the next season (by the end of October – beginning of November). The purpose of this audit will be to verify that there has been no mixing between certified and non-certified glass eels from the date this report was sent. This can be done remotely.

7. The Assessment

The tables below give the standard and a rationale for the scores given above. The score is highlighted in the appropriate colour.

Component 1 – Generic requirements (Weighting : 1 for each criterion)	
Criterion 1.1: Commitment to legality	
Responsible indicators	For at least the past two years: the organisation has not been found guilty for any offences relating to eel fishing or trading.
Aspiring indicators	For at least the past 12 months: the organisation has not been found guilty for any offences relating to eel fishing or trading.
Discussion	A major inspection was carried out on 11 February 2021 on all the storage centres (Guérande, Epargnes, Charron, Bourcefranc) as well as the head office in Hendaye by the customs services. This was followed by a free hearing of Jérôme Gurruchaga, the group's president, on 23 September 2021. The documents from this inspection and the minutes drawn up following the hearing were made available for consultation. The checks carried out at the storage centres "did not reveal any anomalies". The inspection of the Hendaye site revealed a discrepancy of -3.55% between the weight of glass eels purchased and the weight of glass eels weighed. This discrepancy is explained by the usual mortality and weight loss. After the investigations and the open hearing, no further action was taken and the case is therefore closed. The criterion has therefore been met.
Score	Responsible

Criterion 1.2: Contribution to Eel Conservation Projects. (Optional bonus score) (The intention is for this to be mandatory from summer 2020)	
Responsible indicators	The organisation donates at least 2% of its profits or at least 20% of its corporate responsibility programme to projects that make a positive contribution to eel conservation or population enhancement, such as Eel Stewardship Funds, River Restoration projects, conservation and education projects.
Aspiring indicators	The organisation donates 1 – 1.99% of its profits or 10 - 20% of its corporate responsibility programme to projects that make a positive contribution to eel conservation or population enhancement, such as Eel Stewardship Funds, River Restoration projects, conservation and education projects.
Discussion	The Gurruchaga Maree organisation has made a significant investment in France over the last 2 years to supply nets and educate fishers to fish and catch glass eels with much lower mortality. This investment not only represents a large financial investment, but is also a major benefit to the eel stock as there is less mortality and fewer glass eels of this precious resource are wasted.
Score	Responsible

Criterion 1.3: The organisation trades in certified responsibly sourced eel	
Responsible indicators	The organisation trades in at least 50% (by number) of certified responsibly sourced eel and has the documentation to demonstrate that.
Aspiring indicators	The organisation trades in 10 – 49.9% (by number) of certified responsibly sourced eel and has the documentation to demonstrate that.
Discussion	The percentage of glass eels certified as SEG has been steadily increasing for the last 4 seasons. Thus, this percentage was 24.5% in 2017-2018, 30.3% in 2018-2019, 32.1% in 2019-2020 and 60.1% in 2020-2021. GM's objective is to get as close as possible to 100% SEG glass eels. The criterion has therefore been met.
Score	Responsible

Criterion 1.4: Traceability	
1.4.1: Traceability - Incoming product, separation and segregation	
Responsible indicators	• Certified and uncertified eel products can be clearly and easily traced back to their source. • Where a fishery or buyer, an electronic tele-declaration system is used. • It operates a clear system which ensures that the product remains separated at all stages from arrival to dispatch from non-certified eel products. • The organisation ensures that any products wishing to make a claim as certified do not contain any non-certified eel-based ingredients. • If resolved through mass- or number- balance calculations, the margin of error does not exceed 2%.

Aspiring indicators	• Certified and uncertified eel products can be traced back to their source. • If segregation is not possible, there are clear and auditable records of the numbers of certified and uncertified eels entering the organisation at each facility. • It can demonstrate through auditable records that the number of certified eels exiting the organisation in a year did not exceed the number that entered. • If resolved through mass- or number- balance calculations, the margin of error does not exceed 5% or if a farm, the 2800 pieces per 1 kg of glass eels is applied.
Discussion	All purchases made by Gurruchaga Marée are systematically transferred to the Hendaye fish tanks, with the exception of French restocking. All the group's purchases are declared via Visiomer by the Hendaye site. The traceability system makes it possible to know the origin of all the glass eels making up a batch, as well as the basins in which they were located: in the storage centre; in the fish tank truck; in Hendaye, and their final destination. It is also easy to know the mortality suffered by each batch at the Hendaye site. The traceability is very well done and makes it possible to easily retrace the path of the glass eels in the batch sold. It would just be necessary to add the mortality of the batch suffered at the storage centre to the transport sheets between the storage sites and Hendaye. The traceability study showed that there were mixtures of SEG and non-SEG glass eels in several cases and at different times during the 2020-2021 season. In addition, more SEG glass eels were purchased than were sold SEG (7% difference) Although traceability is impeccable, the fact that SEG and non-SEG glass eels are mixed together results in this criterion being classified as aspiring.
Score	Aspiring

1.4.2: Traceability - Outgoing product	
Responsible indicators	• Where a fishery or buyer, an electronic tele-declaration system is used • Documentation is well maintained with a maximum of 2% error in the following: • The organisation correctly uses batch-coding for labelling certified product, which can be on the packaging for the product, or included in the documentation (e.g. invoice) with the assignment • All product to be sold as certified by an organisation is accompanied by an invoice which meets the following criteria: - Includes an appropriate batch code - Includes a record of the quantity (no. & weight) of product and to whom it was sold
Aspiring indicators	• Documentation is well maintained. If resolved through mass- or number- balance calculations, the margin of error does not exceed 5% in the following (or if a farm, the 2800 pieces per 1 kg of glass eels is applied): • The organisation correctly uses batch-coding for labelling certified product, which can be on the packaging for the product, or included in the documentation (e.g. invoice) with the assignment. • All products to be sold as certified by an organisation are accompanied by an invoice which meets the following criteria: - Includes an appropriate batch code. - Includes a record of the quantity (no. & weight) of product and to whom it was sold.

Discussion	All glass eels are transported to the main site of the Gurruchaga marée company in Hendaye, except in the case of French restocking. In the case of sales in France, a remote declaration is made on Visiomer and in the case of sales abroad, the TRACES (TRAde Control and Expert System) remote procedure is used. In all cases, an invoice and a delivery note with the batch number and the quantity by weight (kg) of glass eels are issued and associated with the fishing forms corresponding to the batch. All the traceability information for the batch is kept in a folder with the batch number clearly noted. The mortality suffered in Hendaye is also recorded in the folder. Each invoice contains the batch code. If the batch is a SEG certified batch this is stated on the invoice. The associated fishing sheets and a summary table of these sheets make it possible to verify the origin of the SEG glass eels. When, for the same sale, part of the batch is SEG and the other part is not, this is specified on the invoice with the weight of each category of glass eel (SEG or Non SEG). In view of these elements, this criterion is met.
Score	Responsible

1.4.3: Traceability - Record keeping and documentation	
Responsible indicators	• The organisation operates a system that allows the tracking and tracing of all eel from purchase to sale and including any steps in between. In the case of live eels this should include the ability to track each batch delivered to a buyer to be connected back to a water, a time period (maximum duration one month) and specific fisherman/vessel. • If a fisherman or buyer, a tele-declaration system is used to report catches and trade. • The organisation operates a system that also allows for the completion of a batch reconciliation of eel product by weight over a given period. • The organisation maintains records for a minimum of three (3) years.
Aspiring indicators	The above requirements are met except that: • Records have been maintained for less than three (3) years • If a fisherman or trader, a tele-declaration system is planned to be used to report catches and trade in the next season
Discussion	The traceability system used by the GM group allows eels to be tracked from purchase from the fisherman through storage in Hendaye and in the various storage centres to sale. The Hendaye site has documentation of all glass eels bought and sold by the site in paper and digital form. The fishing records are kept in Hendaye. The Gurruchaga marée organisation keeps the records for more than three years. The purchase of glass eels is tele-declared on the FranceAgrimer website (Visiomer) in accordance with French legislation. Thus, this criterion can be considered responsible.
Score	Responsible

Criterion 1.5: Biosecurity & welfare – Eel and eel products are provided with minimal risk of diseases, parasites and alien species	
1.5.2 Eel buying & trading: Biosecurity is present and disease is treated rapidly and appropriately	
Responsible indicators	• The use of chemicals follows legal requirements of the appropriate EU regulations and of the country concerned. • The facility has the appropriate permissions to operate from the relevant licensing authority. • An effective and documented biosecurity plan is in place and there is evidence that it is being followed. • Records are available showing regular monitoring of health and a possible sign of stress according to the facility's plan (including the completion of microscope parasite checks) and daily mortality is recorded. • Records are maintained according to the Medicines Regulations for use of any medicines and/or chemicals used in the facility.
Aspiring indicators	• The use of chemicals follows legal requirements of the appropriate EU regulations and of the country concerned. • The facility has the appropriate permissions to operate from the relevant authority • An effective and documented biosecurity plan is in place and there is evidence that it is being followed. • Eels are regularly monitored for health and possible signs of stress (although this might not be documented) and daily mortality is recorded. • Records are maintained according to the Medicines Regulations for use of any medicines and/or chemicals used in the facility.
Discussion	The facility is fully licensed. The animal health approval number is FR 64 260 001 CE. The only chemical product used is Halamid, a universal disinfectant specific for aquaculture. The cleaning of the tanks, trucks and premises is carried out regularly and recorded. Mortality is recorded daily and dead glass eels are placed in a freezer and rendered at the end of the season. Continuous monitoring of oxygen, pH and temperature parameters is carried out using probes connected to computers. In addition to this, daily monitoring is carried out and recorded. Biosafety instructions are posted on the wall and can be easily consulted. There is a real HACCP (Hazard analysis and critical control points) approach with a document written with the support and critical advice of a veterinarian. No medication is used. The criterion is therefore met.
Score	Responsible

1.5.3 Eel farming: Biosecurity is present and disease is treated rapidly and appropriately	
Responsible indicators	• The facility has the appropriate permissions to operate from the relevant authority. • The use of chemicals follows legal requirements of the EU and of the country concerned. • An effective and documented biosecurity plan is in place and there is evidence that it is being followed. • Daily records are available showing monitoring of fish health and signs of stress and daily mortality is recorded.

	• Records are maintained according to the Medicines Regulations for use of any medicines and/or chemicals used in the facility. UV is used at an appropriate level and separation between tanks.
Aspiring indicators	• The facility has the appropriate permissions to operate from the relevant licensing authority. • The use of chemicals follows legal requirements of the EU and of the country concerned. • An effective and documented biosecurity plan is in place and there is evidence that it is being followed. • Eels are regularly inspected for disease (although this may not be documented) and daily mortality is recorded. Records are maintained according to the Medicines Regulations for use of any medicines and/or chemicals used in the facility.
Discussion	The installation has the appropriate authorisations to operate from the competent authority. The eel farming part is a Classified Installation for the protection of the environment (AP 64 2019 09 24 005). During the cleaning of a series of 8 basins, the following procedure is followed (as a reminder, each system of 8 basins is independent of the others): 35 kg of caustic soda is injected into the water circulation system for 24 hours in order to increase the pH to 11.5. The system is then completely rinsed with clean water. For the other equipment, Halamid is used for disinfection. Each system of 8 tanks has its own equipment. There is a biosecurity plan that is followed and all cleaning operations are recorded. The HACCP document is very comprehensive and contains a Risk Analysis which has enabled preventive measures to be put in place to minimise the possibility of biosecurity problems occurring. Ponds are monitored daily and mortality is carried out every two hours. This monitoring is recorded. There is no medication used on the farm. The only exception to this would be the occurrence of a microbial disease. In this case veterinary advice would be taken and the application of an appropriate treatment submitted for approval (oxytetracycline). The water is continuously recirculated in the circuit and passes through a UV steriliser as well as a drum filter and a biofilter. In view of all these elements we consider this criterion to be responsible.
Score	

1.5.4 Restocking: The risk of restocked eels introducing disease into wild populations has been assessed and is minimal	
Responsible indicators	Eels are tested before restocking and found to be free of disease AND/OR eels are from a known source which is tested on at least an annual basis and known to be free of disease.
Aspiring indicators	Eels are tested before restocking when first sourced from a new area, and periodically (at least annually) thereafter to ensure they are free from disease.
Discussion	Each batch of glass eels for restocking is tested. The test result is then sent directly to the project leader.
Score	Responsible

Summary scores for Component 1	
Not met	0
Not applicable	0
Aspiring	1
Responsible	8
Total possible	9
% Responsibility (Responsible / Total possible)	**89%**

Component 4 - Eel buying and trading	
Criterion 4.0: Segregation of certified and uncertified eels	
Weighting: 2	
Responsible indicators	Certified and non-certified are kept separated, from point of collection through holding to sale and onward transport.
Aspiring indicators	None.
Discussion	At the Hendaye site, there are 4 tanks dedicated to restocking and 6 tanks dedicated to consumption. However, there are no tanks specifically dedicated to SEG glass eels. During the audit, it was noted that for the 2020-2021 season, there was a mixture of SEG glass eels with non-SEG glass eels in various cases: • Batch not sold SEG with SEG glass eels in these batches. In this case, this is not a problem with regard to the standard. • Batch with separation of SEG sold weight and non SEG sold weight. In this case it happens that the whole batch is in the same pool, and therefore SEG and non-SEG glass eels are mixed. • Overlapping of several orders in the same pools with sometimes SEG and non SEG orders simultaneously. • Sale of a 100% SEG batch with a share of non-SEG glass eels in it. For the 2020-2021 season, this concerns 5 batches with an average of 15% of non-SEG glass eels in these batches. In the end, there were more glass eels bought from SEG than sold to SEG. This difference is 7%. Despite the fact that there were no more SEG glass eels sold than purchased, there was some mixing. Segregation was not respected and therefore this criterion was not met.
Score	Not met

Criterion 4.1: The Glass eel holding facility is a registered Aquaculture Production Business	
Weighting: 1	
Responsible indicators	The Glass eel holding facility is a registered Aquaculture Production Business.
Aspiring indicators	The facility is not a registered Aquaculture Production Business, but has credible plans to register within the next 6 months.
Discussion	The company has an aquacultural zoosanitary approval: FR 64 260 001 CE
Score	Responsible

Criterion 4.2: Mortality in storage facility	
Weighting: 2	
Responsible indicators	Mortality rate over the season is less than 2% on average.
Aspiring indicators	Mortality rate over the season is less than or equal to 5% on average but greater than or equal to 2%.
Discussion	The overall mortality rate of glass eels purchased by GM is 2.2% in 2019-2020 and 3.6% in 2020-2021. This rate corresponds to the total mortality (mortality taken into account for the different storage centres and for the Hendaye site) This criterion is therefore aspiring.
Score	Aspiring

Criterion 4.3: Mortality during transport and initial holding if transported to farm	
Weighting: 2	
Responsible indicators	• Buyers source at least 90% of their eels from certified suppliers. **OR** • Mortality during transport and for the first week at the farm is less than 2% on average.
Aspiring indicators	• Buyers source 50% - 89.9% of their eels from certified suppliers. **OR** • Mortality during transport and for the first week at the farm is less than or equal to 3% on average but greater than or equal to 2% on average.
Discussion	All glass eels purchased by GM are sent from the Hendaye site. In 2021 there was a large mortality during a transport to Greek customers. This was an unprecedented transport and the journey was too long and too hot, resulting in 75kg mortality out of 395kg, or 19% mortality. This incident was well documented and resolved with the Greek authorities. GM does not wish to repeat this unfortunate experience and will not send any more glass eels this far. In parallel 3 clients (grow-out farms), were randomly selected and contacted to find out the mortality rates. Two farms responded to our request: - The NOORD company found a transport mortality of 0.95% at the last shipment. The average mortality of orders in the first week at the farm is 1%. - The Gotting company reported a mortality of 0.72% following transport and 1% after the first week on the farm. Last year there was an episode with a very high mortality, but this was not due to the quality of the fish, but to a logistical fault. In view of the mortalities obtained from the farms contacted, we consider this criterion to be sensitive. However, the Greek episode should not be repeated.
Score	Aspiring

Criterion 4.4: Water quality	
Weighting: 1	
Responsible indicators	• A system is in place that is expected to keep key water quality parameters within suitable tolerances for healthy eel survival (e.g. Ammonia, Suspended Solids, pH, Oxygen). • Water quality management procedures are in place including regular monitoring of relevant parameters which shows that water quality is always high and stable.

	• The facility operates a back-up system to ensure that water quality will not adversely affect survival rates in the case of an equipment failure.
Aspiring indicators	• A system is in place that is expected to keep key water quality parameters within suitable tolerances for healthy eel survival (e.g. Ammonia, Suspended Solids, pH, Oxygen). • The facility has a minimum of a back-up generator and oxygen supply.
Discussion	The water used is drinking water. The pools are organised in two series in a closed circuit. The water is continuously recirculated and 10% of the water is renewed every day. An oxygenation system is installed in each pool and can be activated manually. There is always someone present on site. The water temperature, oxygen level, pH and salinity are monitored automatically by means of sensors. This is connected to a computer and there are alarms for oxygen and temperature. In the event of a power failure, a back-up unit takes over after 20 seconds. During this time, the pools are connected directly to a 12,000 m3 oxygen tank. In addition to computer monitoring, daily visual monitoring is carried out. The practices observed are good and recorded. The criterion is therefore met
Score	Responsible

Criterion 4.5: Handling and welfare	
Weighting: 1	
Responsible indicators	• Systems are in place and the facility is designed to keep handling to an absolute minimum. • Documented procedures are in place for handling, and handling, where necessary, is careful. • The infrastructure is designed to avoid injuries, and so that the use of nets is rarely necessary. When used, nets are small-mesh (1mm maximum). • Eels are moved without being allowed to dry out.
Aspiring indicators	• The facility may not be optimally designed, but systems are in place to avoid handling as much as possible within the constraints of the facility. • Handling, where necessary, is carefully planned and executed. • The infrastructure has been optimised as far as possible to avoid injuries. • Nets are small-mesh (1mm maximum). • Eels are moved without being allowed to dry out.
Discussion	The installation has been designed to handle the glass eels as little as possible. The transport truck can be parked near the ponds. For the purchase of the glass eels, the sieve is made of fine-mesh stainless steel. The glass eels are transported in fine-mesh sieves. The glass eels are collected by emptying the pond completely through a bottom valve. The glass eels then arrive on fine mesh screens and are transferred to the fish tankers. When the glass eels are placed in polystyrene boxes, they pass through a chute system to remove the water and arrive directly in the boxes. A plastic landing net is used to recover dead glass eels. There is a written protocol available. The criterion is therefore met.
Score	Responsible

Criterion 4.6: Transport	
Weighting: 1	
Responsible indicators	• There is a Transport Plan in place to minimise travel time – this meets the Transport requirements for vertebrates. • Packing is done in a way that minimises handling, time and stress. • Eels are kept cool and wet with an adequate supply of oxygen. • The operator holds the relevant transport authorisations.
Discussion	The fish are transported via a fish tanker with an oxygen supply. In some cases, glass eels are transported in polystyrene boxes with an ice bottle and oxygen placed inside. This is a standard method and works well for moderate distances. All batches have transport vouchers. The staff have accreditation for the transport of live animals. The criterion is therefore met.
Score	Responsible

Criterion 4.7: The required percentage of glass eels is being used for restocking	
Weighting: 2	
Responsible indicators	• The buyer can provide documented evidence that they have sold at least 60% for restocking the required target percentage of its glass eels from the last season for the primary purpose of conservation / escapement. • The eels for restocking are representative of the stock – slow growers are not selected.
Aspiring indicators	• The buyer can provide documented evidence that they have reserved or made available at least 60% of the required target percentage of its glass eels from the latest season available for the primary purpose of conservation / escapement, **OR** • The buyer can provide documented evidence that it has made available glass eels to the maximum level possible within the constraints of the implementation of the EMP in that country **OR** • The buyer can provide credible evidence that re-stocking will occur in the forthcoming season. • The eels for restocking are representative of the stock – slow growers are not selected.
Discussion	The percentage of glass eels bought and sold for restocking was around 50-55% over the previous 3 seasons. It is 59.9% for the 2020-2021 season. This rate is very close to 60% and the restocking market is often limiting for fish traders. At national level, the restocking quota is never 100% consumed, which reflects the difficulties of this market. Taking this into consideration, and in view of the increase in the rate of glass eels sold for restocking, this criterion is considered responsible.
Score	Responsible

Summary scores for Component 4	
Not met	2
Not applicable	0
Aspiring	4
Responsible	6
Total possible	12
% Responsibility (Responsible / Total possible)	**50%**

Component 5 – Eel farming

Criterion 5.0: Segregation of certified and uncertified eels

Weighting: 2	
Responsible indicators	• Certified and non-certified are kept separated, from point of collection through holding to sale and onward transport
Aspiring indicators	• Through mass-balance calculations (by number), the organisation can prove that no more than the same percentage of certified eels were output as were input, whilst taking mortality into consideration. A formula of 2,800 pieces per 1 kg of glass eels can be applied
Discussion	Certified and non-certified eels are mixed. However, no more certified eels were sold than purchased.
Score	Aspiring

Criterion 5.1: The total mortality rate during the culture process is low

Weighting: 2	
Responsible indicators	• The Percentage Mortality Rate of eels in culture is less than or equal to 10% on average in the current and previous year OR as an average of the previous five years • An accurate daily log is maintained of the number and causes of mortality
Aspiring indicators	• The Percentage Mortality Rate of eels in culture is between 10 and 15% on average in the current and previous years OR as an average of the previous five years. • An accurate daily log is maintained of the number of mortalities
Discussion	The percentage mortality rate of farmed eels has ranged from 2 to 15% for the past four years. On average over the last 4 years, the mortality rate is 8.9%. This rate was calculated by examining the number of eels entering the farm in relation to the number of eels exported and the number of eels remaining on the farm. This calculation is based on 2800 glass eels per kg. A daily record of mortalities is kept by weight but the size of dead eels is not available. Mortality by eel cohort or size should be recorded. This criterion is considered to be responsible for
Score	Responsible

Criterion 5.2: The fish meal/oil ingredients in the feed come from a responsible source	
Weighting: 1	
Responsible indicators	Fish meal/oil in the feed (including juvenile feeds) is certified by IFFO or MSC or shown in some other way to be from responsible or sustainable sources
Aspiring indicators	Fish meal/oil in the feed (including juvenile feeds) is not certified by IFFO or MSC or shown to be from responsible sources, but there are credible plans to move to such a supplier within 2 years
Discussion	The farm has two feed suppliers, Biomar and Klooster. Klooster supplies cod roe, which is used to feed the glass eels exclusively for the first 8 days of rearing, after which Biomar dry feed is gradually introduced. The supplier Biomar states that there is no specific ASC standard for eel feed. However, Biomar continually evaluates the purchasing criteria necessary to ensure and document that marine and non-marine raw materials meet the ASC requirements for social responsibility. Biomar uses raw materials that can be traced back to their source of origin and a significant part of which is IFFO and MSC certified. For the time being, information on the sustainability of the fish eggs used has not been collected. Pending this information, this criterion is classified as aspiring.
Score	Aspiring

Criterion 5.3: Feed is used as efficiently as possible	
Weighting: 1	
Responsible indicators	The average feed conversion ratios in the farm are as follows: glass eel to fingerlings: 1.1 or less fingerlings to 200g: 1.6 or less large eels: 2.0 or less
Aspiring indicators	The average feed conversion ratios in the farm are as follows: glass eel to fingerlings: 1.3 or less fingerlings to 200g: 1.8 or less large eels: 2.2 or less
Discussion	The average conversion rate on the farm is around 1.41 The eels are sold at around 5-15 grams a piece and are therefore eels weighing less than 200 grams. The responsible criterion is therefore met
Score	Responsible

Criterion 5.4: Water quality	
Weighting: 1	
Responsible indicators	• A system is in place that is expected to keep key water quality parameters within suitable tolerances for healthy eel survival (e.g. Ammonia, Suspended Solids, pH, Oxygen) • Water quality management procedures are in place including regular monitoring of relevant parameters which shows that water quality is always high and stable • Water quality monitoring is linked to an alarm-based system in the event of a sudden drop in water quality • The facility operates a back-up system to ensure that water quality will not adversely affect survival rates in the case of a power supply failure.
Aspiring indicators	• A system is in place that is expected to keep key water quality parameters within suitable tolerances (e.g. Ammonia, Suspended Solids, pH, Oxygen) • Water quality management procedures are in place and there is regular monitoring of relevant parameters which shows that water quality is always high and stable.
Discussion	Each series of 8 tanks is independent of the others and operates in a closed circuit. Everything is linked to the computer, which allows the temperature, acidity, oxygenation and conductivity parameters to be controlled automatically. In its circuit, the water first passes through an oxygen cone and then through an ultraviolet filter before entering the pools. Then, when the water exits the tanks, it passes through a drum filter to separate the excrement from the water. This water falls back into the pit before passing through a 4 metre high biofilter, which denitrifies the water and keeps the ammonia at a suitable level. The biofilter is connected to an aerator which removes CO2 from the water and maintains the desired temperature. The water is renewed at a rate of 3 to 5% per day. The pH is maintained by a dosing pump with the acidity requested by computer. The target pH is 6 for glass eels and when they have grown, the pH is lowered to 4-5. The water temperature is maintained at 26°C throughout production. The installation has 330 alarms and all parameters are monitored. In the event of a power failure, a back-up unit takes over after 20 seconds. During this time, the tanks are connected directly to a 12,000 m3 oxygen tank. In view of all these elements, this criterion is responsible.
Score	Responsible

Criterion 5.5: There are minimal ecological impacts from effluent discharge	
Weighting: 1	
Responsible indicators	• The system is closed-circuit and has no discharge OR • Effluent discharge is regularly tested by the farm AND • Effluent discharge complies with all local and national requirements AND • Has not been found to be non-compliant in the past 5 years.
Aspiring indicators	• Effluent discharge is regularly tested by the farm AND/OR • Has been found to be non-compliant on no more than 1 occasion in the past 5 years.

Discussion	The various lines are all in closed circuit and discharges are therefore limited. The company discharges 100 m3/day into the public sewerage system. The installation is compliant and periodically checked for discharges. Self-monitoring of discharges is carried out approximately every 15 days. The installation has not been judged to be non-compliant over the last 5 years. This criterion is therefore met.
Score	Responsible

Criterion 5.6: Grading, slaughter and transportation are carried out with respect to welfare	
Weighting: 1	
Responsible indicators	• Grading is completed in an efficient manner • Slaughter is completed by a method that provides an instant death or renders them insensible to pain, i.e. electric stunning or percussive stunning. • Procedures are in place to ensure transportation provides suitable conditions for fish welfare.
Aspiring indicators	• Other, previously acceptable methods of stunning before slaughter are used, e.g. chilling, but there are credible plans in place to invest in the latest methods within the next 2 years
Discussion	A grading is carried out approximately every 30 days. The eels are sorted with a special machine that separates the eels by size. The eels are pumped from the tanks to the grading machine, which sorts the sizes. Each sorted batch is then weighed before being returned to the tanks. The eels are never allowed to dry out during the process and are handled as little as possible. No culling is carried out at this site. This criterion is therefore met.
Score	Responsible

Criterion 5.7: The organisation provides eel for restocking	
Weighting: 2	
Responsible indicators	The organisation can provide documented evidence that 10% or more of the farm's annual eel production (by piece) **has** been provided for restocking for the purpose of conservation / escapement.
Aspiring indicators	The organisation can provide documented evidence that it makes 10 % of their annual eel production (by piece) available for restocking for the primary purpose of conservation / escapement AND/OR for new clients, the farm can demonstrate that they have bookings for re-stocking in the following year at more than 10% of the predicted annual eel production (by piece) for the purpose of conservation / escapement.
Discussion	It was decided not to consider this criterion for the following reasons: • The volume of eels that are present in this one farm is small • The Gurruchaga Marée group respects the 60% restocking quota for the glass eel fish trade

	• The farms of the Nijvis group that it supplies meet the 10% target • The organisation is very strict (and this has helped to influence the whole market) about the correct use of the restocking and consumption quotas
Score	Not applicable

Criterion 5.8: Eels for restocking are not graded out slow-growers	
Weighting: 2	
Responsible indicators	The size range and quantities in the eels for restocking reflect 100% that for the age group in the whole farm
Aspiring indicators	The size range and quantities indicate no more than a 25% supplement of those for restocking are from slower growing fish of the same age group.
Discussion	For the same reasons as for criterion 5.7, this criterion is not considered.
Score	Not applicable

Summary scores for Component 5	
Not met	0
Not applicable	4
Aspiring	3
Responsible	6
Total possible	9
% Responsibility (Responsible / Total possible)	**67%**

Eel Assessment – Gurruchaga

Assessment against:

Component 1: Generic Requirements
Component 3: Glass eel buyers
Component 4: Eel Culture
Component 7: Traceability

Completed by

Alex Senechal

17th January 2017

FINAL

1. Introduction

This document presents the report completed following the verification audit carried out under the Sustainable Eel Standard (Version 5, 21st June 2013), and Sustainable Eel Methodology (Version 1, 21st June 2013) against Gurruchaga Maree SARL (hereafter Gurruchaga). This assessment has been completed against Components 1,3, 4 & 7 of the Standard only.

The assessment is of the elver buyer Gurruchaga. Gurruchaga buy eels from a number of French and Spanish rivers ranging from Normandy in the North to the Basque country in the south. Those that are currently certified against the SEG standard are: the Arzal fishery however, no glass eels have been purchased from this fishery so far during the 2016/17 season. Elvers are purchased and stored in tank facilities for on-ward sale to clients or on-growing. The company has three holding systems in place with plans for a fourth. The locations and addresses of these are listed below:

Site Name	Address	Area Covered
Site 1 – Hendaye facility (also the Head Office Site)	88, Route de la Corniche, Quartier Haicabia, 64700 HENDAYE	Adour, Landes rivers
Site 2 – Charron Facility	Le Port du Corps de Garde, 17230 CHARRON	La Rochelle area
Site 3 – Epargnes Facility	Epargnes, Poitou Charentes	Gironde, Seudre and Charente rivers

The Hendaye facility has increased in size significantly since the last audit with a new growing facility built on site and plans to increase the growing area by a further 24 tanks in the near future.

2. The assessment

The assessors were Max Goulden and Alex Senechal of MacAlister Elliott and Partners Ltd, who visited the Hendaye facility on the17th January 2017. The visit included a tour of the Hendaye facility followed by the assessment of the paper based records held at the Hendaye central office. Included in the paper based records were purchase and sales records for the previous and current season to date. The verification audit was overseen by Mr Jerome Gurruchaga (Owner) and Office Manager Nathalie Immeln.

The audit was followed by a period of discussion and provision of evidence by Gurruchaga regarding the mortality and feed used in the culture system. This resulted in the publication of this version of the report in March 2017.

3. Client Contact Details

Client Contact Name	Nathalie Immeln
Client Address	88, Route de la Corniche, Quartier Haicabia, 64700 HENDAYE
Client Email	gurrumaree@wanadoo.fr
Client Phone Number	+33 559566891

4. Results of the assessment

The outcome of this assessment is as follows;

That Gurruchaga has **passed** Component 1: Commitment to Sustainability and legality

that Gurruchaga scored **6 green scores** and **4 amber scores** against Component 3 and therefore **should be considered sustainable under the SEG standard, Component 3: Glass Eel Buyers**.

that Gurruchaga scored 7 **green scores** and **1 amber scores** against Component 7 and therefore **should be considered sustainable under the SEG standard, Component 4: Cultured eels**.

that Gurruchaga scored **3 green scores** and **0 amber scores** against Component 7 and therefore **should be considered sustainable under the SEG standard, Component 7: Traceability**.

Recommendations

A number of recommendations were raised by the auditor. These are provided below.

RECCOMENDATION 1:

Component 3.7: It is recommended that the client should reach the 60% level for restocking which has been a requirement by the French government since the 2014-15 season so as to achieve a green score on this element.

RECCOMENDATION 2:

Component 4.2 It is recommended that the client keep a strict record of the sustainability of the feed sources that it uses at the facility to ensure that feed is from sustainable stocks so that this can be verified by the certification body. This is to include pelleted feeds and non-pelleted feeds such as cod roe.

5. Next Audit

At the completion of the audit the client was assessed for components 1, 3 and 7 against the risk assessment set out in the Methodology. This is set out in the table below.

Question	Performance of Client At Audit	Yes	No
1	Has the client been part of any external investigation which may be of concern to SEG AND/OR been suspended from any other certification standard?	Enhanced Surveillance	Go to Q2
2	Has the client received a borderline pass[1] for a Component in its previous audit?	Enhanced Surveillance	Go to Q3
3	Does the client only buy and sell product (does not physically handle it?)	Minimum Surveillance	Go to Q4
4	All other scenarios	Standard Surveillance	Go to Q5

	Certification Audit	Year 1	Year 2	Year 3	Year 4 Recertification Audit
Minimum Surveillance	On-Site Audit	Remote Audit	Remote Audit	Remote Audit	On-Site Audit
Standard Surveillance	On-Site Audit	No Audit	On-Site Audit	No Audit	On-Site Audit
Enhanced Surveillance	On-Site Audit	On-Site Audit	On-Site Audit	On-Site Audit	On-Site Audit

[1] A borderline pass is considered a pass that occurs when one less amber indicator is received then would be required to fail (i.e. 5 Green indicators and 4 Orange indicators) or when a company is certified with equal number of orange and green indicators.

As the client has been seen to fall into the Standard Surveillance bracket, the next audit will be due on the 16 January 2019 (in 2 years' time) and shall be an on-site audit.

The next audit will be to assess that the improvements made from the previous audit have continued to be observed and to assess if the recommendations from this audit for components 3.2 and 3.7 have been observed and improvements made.

It should be noted that at the time of assessment no glass eels from a SEG certified fishery were held or sold on from the facility for the 2016/17 season and that there had not been any SEG eels grown on at the facility to date.

The tables below give the standard and a rationale for the score given. The score is highlighted in the appropriate colour.

1. Component 1 - Commitment to Sustainability & Legality

1. Commitment to sustainability & legality (See Note 1)	
green score indicator	All trading and commercial relationships are aligned with SEG goals AND the organisation has declared to the assessor any historic conflicts of interest with regard to eel sustainability AND there is no evidence of illegal trading and/or of circumventing the EU Eel Regulation AND any evidence of illegality by commercial partners or other organisations is immediately reported to the appropriate authorities.
red score indicator	The organisation or a member of the organisation has been arrested on suspicion of illegal buying, holding, selling or trading of eels in the last 12 months, AND/OR for failure to declare eel fishing or trading activities appropriately to the authorities, AND/OR for other serious breaches of national or international eel regulations; AND/OR credible sources suggest that the organisation has been involved in serious breaches of national or international eel regulations in the last 12 months (the above applies to close business partners of the organisation, which members of the organisation must reasonably have known about, without the organisation informing the appropriate authorities); AND/OR the organisation is involved in activities which put in serious question their commitment to sustainability.
Discussion	Gurruchaga continue to show interest and the will to be aligned with the SEG requirements during the auditors visit and have indicated a desire for more fisheries to be SEG accredited so that Gurruchaga is able to market more SEG glass eels in the future. No evidence of illegal trading by Gurruchaga has been provided to MEP and Gurruchaga confirmed verbally that they have not received any prosecutions relating to eel purchase or trading, and that French authorities regularly check the activities of the company to ensure compliance with regulations. The auditors have also received proof of documentation that all purchases of glass eels are now input into the national France AgriMer system within 24 hours and paperwork is then cross checked by authorities on inspection.

	Since no evidence of illegal trading or breaches of regulation has been provided and all documentation required is in place the auditor must provide a green score indicator for Component 1.
Score	A Green score indicator is awarded

2. Component 3: Glass Eel Buyers

1. Mortality in storage facility (See Note 5)	
Weighting: 2	
green score indicator	Mortality rate over the season is less than or equal to 2% on average.
amber score indicator	Mortality rate over the season is less than or equal to 5% on average but greater than or equal to 3%
red score indicator	Mortality rate over the season is greater than 5% on average.
Discussion	Mortality records were provided for the Hendaye glass eel tanks for the 2015/16 season with a total mortality level of 2.3 % of the 17,235 kg of glass eels held in the facility. Records were proved for the 2016/17 season to date which indicated that of the 5,400kg there has been mortality of 0.8 %.
Score	A Green score indicator is justified
2. Mortality during transport and initial holding if transported to farm (See Note 9)	
Weighting: 2	
green score indicator	Mortality during transport and for the first week at the farm is less than or equal to 1.5% on average.
amber score indicator	Mortality during transport and for the first week at the farm is less than or equal to 3% on average but greater than or equal to 2% on average.
red score indicator	Mortality during transport and for the first week at the farm is more than 3% on average.
Discussion	Based on mortality of eels for the first week after transfer from the viviers to the growing tanks at the Hendaye facility average mortality was or <0.5 % by weight. The buyers Royal Danish (Danish based Farmer) and Palingkwekerij Bardoel (Dutch based farmer) have been contacted (selected at random) to provide confirmation of the mortality rates of received batches of glass eels purchased from Gurruchaga. These were confirmed by Royal Danish on 9th March 2017 who stated that batches had a mortality rate of 2.1% for the randomly selected date requested. This indicates that mortality from glass eels sold by Gurruchaga show an acceptable level of mortality level.
Score	An amber score indicator is awarded
3. Water quality	
Weighting: 1	
green score indicator	A system is in place that is expected to keep key water quality parameters within suitable tolerances for healthy eel survival (e.g. Ammonia, Suspended Solids, pH,

	Oxygen) AND water quality management procedures are in place including regular monitoring of relevant parameters which shows that water quality is always high and stable AND water quality monitoring is linked to an alarm-based system in the event of a sudden drop in water quality AND the facility operates a back-up system to ensure that water quality will not adversely affect survival rates in the case of a power supply failure.
amber score indicator	A system is in place that is expected to keep key water quality parameters within suitable tolerances (e.g. Ammonia, Suspended Solids, pH, Oxygen) AND water quality management procedures are in place and there is regular monitoring of relevant parameters which shows that water quality is always high and stable.
red score indicator	No water quality monitoring occurs AND/OR water quality is not held regularly at levels which are considered suitable for healthy eel survival.
Discussion	The 10 vivier tanks are fed 500L per hour of fresh tap water giving with a flow through system where the water is heated and aerated before going to the tanks. There is an automated system which continuously monitors, the pH and oxygen levels and has an alarm system which notifies three mobile phones if there is an issue which would cause risk to the eels held in the tanks. The facility has a backup system which is automatically activated if there is a power cut for more than 20 seconds. This system includes power generation through a 400kW external generator which is tested and run for between 20 and 60 minutes every Friday to maintain and check the system. There is also and separated liquid oxygen tank linked for automatic use should the system loose power which has an allowance of 12 hours for the entire facility.
Score	A Green score indicator is awarded
4. Biosecurity is present and disease is treated rapidly and appropriately	
Weighting: 1	
green score indicator	An effective and documented biosecurity plan (including the washing and disinfection of equipment) is in place AND records are available showing regular monitoring of health and possible signs of stress (including the completion of periodic microscope parasite checks) AND records are maintained in relation to the name, administrator, amount, dates and reason for use of any medicines and/or chemicals used in the facility AND the use of chemicals follows legal requirements of the appropriate EU regulations and of the country concerned.
amber score indicator	The facility follows bio-security measures (including the washing and disinfection of equipment) although this is not documented AND eels are regularly monitored for health and possible signs of stress (although this might not be documented) AND records are maintained in relation to the name, administrator, amount, dates and reason for use of any medicines and/or chemicals used in the facility AND the use of chemicals follows legal requirements of the appropriate EU regulations and of the country concerned.
red score indicator	The facility operates no bio-security measures (including the washing and disinfection of equipment) AND/OR there is no checking of the eels for health and possible signs of stress AND/OR records are not maintained with regards to the use of medicines and/or chemicals AND/OR legal requirements of the appropriate EU regulations and country concerned are not met for the use of medicines or chemicals.
Discussion	The matter of biosecurity was discussed with Gurruchaga when conducting the

	audit. No documented bio-security procedure was produced during the visit. However, it was explained that the water is treated to have a lower the pH (4.5-5), and that staff are experience in identifying problems if they were to arise. Should this occur, water temperature would be lowered and salt levels increased until "normal" biological levels were restored in the effected system. Each system currently uses 12.5 kg of salt per day on average. No chemicals or medicines are currently used at all during the holding process but any use would be approved by a veterinarian first. The use of a flow through system with clean (originally chlorinated) mains water reduced the risk of the introduction of biosecurity risks. Hourly logs are maintained of water conditions for each system and electronic monitoring is in constant use 24/7. Written documentation of the biosecurity procedure was provided by the client post visit which identified procedures for cleaning of the facility and records of cleaning were also presented. After each tank is emptied for packaging and sales the tanks are cleaned with caustic soda and left for 24 hours to ensure that a pH of above 11 is maintained and all biological material is destroyed.
Score	A Green score indicator is awarded
5. Handling and welfare (see notes 10 and 11)	
Weighting: 1	
green score indicator	Systems are in place and the facility is designed to keep handling to an absolute minimum AND documented procedures are in place for handling, and handling, where necessary, is careful AND the infrastructure is designed to avoid injuries, and so that the use of nets is rarely necessary. When used, nets are small-mesh (1mm maximum) AND eels are moved without being allowed to dry out.
amber score indicator	The facility may not be optimally designed, but systems are in place to avoid handling as much as possible within the constraints of the facility AND handling, where necessary, is carefully planned and executed AND the infrastructure has been optimised as far as possible to avoid injuries AND nets are small-mesh (1mm maximum) AND eels are moved without being allowed to dry out.
red score indicator	Excess, poorly planned or careless handling is likely to result in additional mortality.
Discussion	No nets are used in the facility to eliminate the risk of introduction of disease. Eels are handles as little as possible with extraction through the outflow pipe directly into containers for packaging. A through system is in place which allows for minimal handling of the eels to reduce the risk of handling and welfare issues, pipes are cleaned periodically in the through system with escaped eels being washed out. Eels are gradually lower in temperature for transportation from 7-8 degrees C when in the viviers to 5 degrees C for sorting, followed by 3 degrees C for transportation

	Written documentation to confirm handling procedures was provided by the client post audit providing detailed procedures to minimise handling of eels and keep high welfare standards.
Score	A Green score indicator is awarded
6. Transport (See note 12)	
Weighting: 1	
green score indicator	Transport is carefully planned to minimise travel time AND packing is done in a way that minimises handling, time and stress AND eels are kept cool and wet with an adequate supply of oxygen.
red score indicator	Eels are washed out of the holding tanks Box system with through system
Discussion	Packing is done with minimal handling to produce 1kg quantities to be placed in trays which can be packed in polystyrene cold boxes in threes and kept cool. Each tray is designed to allow aeration but prevent spillage of the eels in transit. Transportation trays and boxes are all new and checked to be clean before use and eels are transferred to trays using pumps. Glass eels are sorted at 5 degree C and then transported at 3 degrees C.
Score	A Green score indicator is awarded
7. The required percentage of glass eels from the fishery is being used for restocking (See Note 13)	
Weighting: 2	
green score indicator	The buyer can provide documented evidence that he has sold at least the required target percentage of its glass eels from the latest season for the primary purpose of conservation / escapement.
amber score indicator	The buyer can provide documented evidence that the has made at least the required target percentage of its glass eels from the latest season available for the primary purpose of conservation / escapement, OR the buyer can provide documented evidence that it has made available glass eels to the maximum level possible within the constraints of the implementation of the EMP in that country OR that the buyer can provide credible evidence that re-stocking will occur in the forthcoming season.
red score indicator	The buyer does not make or has no evidence to show that he has made the required target percentage of its glass eels available for restocking in the last year.
Discussion	Documented evidence was provided to indicate the percentage of glass eels sold for restocking. For the year 2015/16 the restocking to sale % was 54% for restocking and 46% for sale. Restocking was in the order of 8930Kg for the year with eels going to a number of EU countries including several of Comité Régional des Pêches Maritimes et des Elevages Marins. The requirement for restocking is of 60% of the eels taken from fisheries, therefore there has been a marked increase in the quantity being restocked from 25% at the last audit visit and it would be expected that an amber indicator would be scored for this principle.
Score	An amber score indicator is awarded

3. Component 4 - Cultured Eel

1. The total mortality rate during the culture process is low (See note 14 and note 9)
Weighting: 2

green score indicator	The Percentage Mortality Rate (See note 14 for formula) of eels in culture is less than or equal to 10% on average in the current and previous year OR as an average of the previous five years (See note 9 regarding first week mortality)
amber score indicator	The Percentage Mortality Rate (See note 14 for formula) of eels in culture is between 10 and 15% on average in the current and previous years OR as an average of the previous five years. (See note 9 regarding first week mortality)
red score indicator	The Percentage Mortality Rate (See note 14 for formula) of eels in culture is greater than or equal to 15% on average in the current and previous year OR as an average of the previous five years. (See note 9 regarding first week mortality)
Discussion	The eel farm has only been open since 2014 providing mortality figures for the 2014/15 and 2015/16 seasons. Eels at the farm will stay in there for on average 70-80 days until they are sold on as fingerlings. Therefore, based on guidance note 14, the first two seasons saw 1.6% and 5.3% mortality for 2014/15 and 2015/16 respectively. The average for the past 2 years is therefore 3.45% based on the assumption that there are about 3000 glass eels to every 1kg of eels introduced to the farm at the start of the cultivation process.
Score	A Green score indicator is awarded
2. The fish meal/oil ingredients in the feed come from a sustainable source (See Note 15 and 16)	
Weighting: 1	
green score indicator	Fish meal/oil in the feed (including juvenile feeds) comes from a fishery where the stock is at or above a target or precautionary reference point (for example is certified by a standard which is aligned with the FAO Code of Conduct for Responsible Fishing).
amber score indicator	Fish meal/oil in the feed (including juvenile feeds) does not come from a fishery where the stock is at or above a target or precautionary reference point (for example is certified by a standard which is aligned with the FAO Code of Conduct for Responsible Fishing) but the product does come from fish waste from processing that would otherwise be discarded.
red score indicator	One or more of the sources of fish meal/oil in the feed (including juvenile feeds) is from a depleted stock with no rebuilding plan in place AND/OR the product comes from fish waste from processing that would otherwise be discarded.
Discussion	Gurruchaga provided evidence of the feed which is used at the facility including purchase notes. Gurruchaga has three suppliers of feed for the Hendaye farm: Frozen Cod Roe for the first week of Glass Eel growth from G.Kraan. Information was provided by Gurruchaga to indicate roe was from sustainable North Sea cod catches, however this could not be verified based on the information provided. Pelleted feed is from Biomar. The sustainability of feed produced by Biomar has previously been checked by SEG Auditors during a visit to the Biomar Factory in Denmark where evidence was produced to substantiate the claim (www.fishsource.com). Other feed is produced by Skretting France. The sustainability of the raw materials used in the production of this feed has been verified with the producer and the auditor is satisfied that there is no use of fish from the IUCN red list among others. Feeding is on timed basis, however this is monitored manually at every feeding

	time. Feed is given every other hour. Should biological indicators show concerns feeding would be reduced until the issue is resolved. Based on the information provided and sourced, it is advised that an amber score indicator should be awarded here.
Score	An amber score indicator is awarded
3. Feed is used as efficiently as possible (See note 17)	
Weighting: 1	
green score indicator	The average feed conversion ratios in the farm are as follows: glass eel to fingerlings: 1.1 or less fingerlings to 200g: 1.6 or less large eels: 2.0 or less
amber score indicator	The average feed conversion ratios in the farm are as follows: glass eel to fingerlings: 1.3 or less fingerlings to 200g: 1.8 or less large eels: 2.2 or less
red score indicator	The average feed conversion ratios in the farm are as follows: glass eel to fingerlings: greater than 1.3 fingerlings to 200g: greater than 1.8 large eels: greater than 2.2
Discussion	The quantity of feed given to each system is recorded hourly during the day and input into farm database to calculate constant input into systems and weights of eels when graded. The FCR for glass eel to sale size figures were provided for the farm from 2013-2016 as being, 1.54, 1.35, 1.38 and 1.33. It should be noted that these figures were calculated for the farm as a whole and that point of sale is less than 200g but greater than a fingerling.
Score	A green score indicator is awarded
4. Water quality	
Weighting: 1	
green score indicator	A system is in place that is expected to keep key water quality parameters within suitable tolerances for healthy eel survival (e.g. Ammonia, Suspended Solids, pH, Oxygen) AND water quality management procedures are in place including regular monitoring of relevant parameters which shows that water quality is always high and stable AND water quality monitoring is linked to an alarm-based system in the event of a sudden drop in water quality AND the facility operates a back-up system to ensure that water quality will not adversely affect survival rates in the case of a power supply failure.
amber score indicator	A system is in place that is expected to keep key water quality parameters within suitable tolerances (e.g. Ammonia, Suspended Solids, pH, Oxygen) AND water quality management procedures are in place and there is regular monitoring of relevant parameters which shows that water quality is always high and stable.
red score indicator	No water quality monitoring occurs AND/OR water quality is not held regularly at levels which are considered suitable for healthy eel survival.
Discussion	Each of the 6 systems has a separate water feed from the mains which provides 500L of fresh water per hour to the systems. There is an automated system which continuously monitors, the pH and oxygen levels and has an alarm system which notifies three mobile phones if there is an issue which would cause risk to the eels

	held in the tanks. The facility has a backup system which is automatically activated if there is a power cut for more than 20 seconds. This system includes power generation through a 400kW external generator which is tested and run for between 20 and 60 minutes every Friday to maintain and check the system. There is also and separated liquid oxygen tank linked for automatic use should the system loose power which has an allowance of 12 hours for the entire facility.
Score	A Green score indicator is awarded
5. There are no ecological impacts from effluent discharge	
Weighting: 1	
green score indicator	Effluent discharge is regularly tested by the farm AND Effluent discharge complies with all local and national requirements AND has not been found to be non-compliant in the past 5 years.
amber score indicator	Effluent discharge is regularly tested by the farm AND/OR has been found to be non-compliant on 1 occasion in the past 5 years.
red score indicator	Effluent discharge is regularly tested by the farm AND/OR effluent discharge does not comply with all local and national requirements AND/OR has been found to be non-compliant on 2 or more occasions in the past 5 years.
Discussion	All water from each of the systems at the Hendaye farm and vivier facility are replaced every hour with a feed of 500L of clean mains water. Water from the facility's systems are being returned to mains sewers. Water bills for the whole facility were provided by the client for verification. Water used by the facility from June 2015-February 2016 amounted to 25127 m^2. Regular checks are made by local authorities
Score	A Green score indicator is awarded
6. Biosecurity is present and disease is treated rapidly and appropriately	
Weighting: 1	
green score indicator	The farm operates an effective and documented biosecurity plan for the prevention and protection of fish AND daily records are available showing regular monitoring of fish health and signs of stress AND records are maintained in relation to the name, administrator, amount, dates and reason for use of any medicines and/or chemicals used in the facility AND the use of chemicals follows legal requirements of the EU and of the country concerned.
amber score indicator	The farm follows bio-security measures (although this may not be documented) AND eels are regularly inspected for disease (although this may not be documented) AND records are maintained in relation to the name, administrator, amount, dates and reason for use of any medicines and/or chemicals used in the facility AND the use of chemicals follows legal requirements of the EU and of the country concerned.
red score indicator	The farm has no bio-security measures in place AND/OR eels are not inspected regularly for disease AND/OR no records are maintained with regards to the use of medicines and/or chemicals AND/OR legal requirements of the EU and country concerned are not met for the use of medicines or chemicals.
Discussion	The matter of biosecurity was discussed with Gurruchaga when conducting the audit. No documented bio-security procedure was produced during the visit. However, it was explained that the water is treated to have a lower the pH (4.5-5), and that staff are experience in identifying problems if they were to arise.

	Should this occur, water temperature would be lowered and salt levels increased until "normal" biological levels were restored in the effected system. Each system currently uses 12.5 kg of salt per day on average. No chemicals or medicines are currently used at all during the holding process but any use would be approved by a veterinarian first. The use of a flow through system with clean (originally chlorinated) mains water reduced the risk of the introduction of biosecurity risks. Hourly logs are maintained of water conditions for each system and electronic monitoring is in constant use 24/7. Each growing tank and associated pipes are cleaned each time the tanks are emptied for grading of the eels by weight. All grading is done using through pipes to reduce risk of biosecurity risks through introduction of disease by use of nets and unnecessary handling of eels. Written documentation of the biosecurity procedure was provided by the client post visit which identified procedures for cleaning of the facility and records of cleaning were also presented. After each tank is emptied for packaging and sale of the eels the system in treated with 35Kg of caustic soda and left for 24 hours to ensure that a pH of above 11.5 is maintained and all biological material is destroyed in all pipes, filters and other inaccessible areas.
Score	A Green score indicator is awarded
7. Grading, Slaughter and Transportation are carried out with respect to welfare (See note 18)	
Weighting: 1	
green score indicator	Grading is completed in an efficient manner AND slaughter is completed by a method that provides an instant death or renders them insensible to pain AND procedures are in place to ensure transportation provides suitable conditions for fish welfare.
red score indicator	Grading is not seen to be completed in an efficient manner AND/OR slaughter is completed by a method other than one that provides an instant death or renders them insensible to pain instantaneously AND/OR transportation does not provide suitable conditions for fish welfare.
Discussion	All grading is done by automated machinery which is fed by flow pipes taking eels directly from growing tanks to sorting machine. Eels are counted at each grading and separated by weight. This is repeated for each growing tank individually. No slaughter is carried out at the facility as eels are sold below slaughter size. Animal welfare is seen by all staff as paramount to ensure that the product which they sell on is of the highest quality. Conditions for transport are always optimised and monitored with journey times calculated and respected to ensure good transport conditions for eels. Eels are cooled before transportation live.
Score	A Green score indicator is awarded
8. The farm provides eel for restocking (See note 19)	

Weighting: 2	
green score indicator	The farm can provide documented evidence that 10% or more of the farms (See Note 19 for calculation) annual eel production (by piece) has been released for restocking for the purpose of conservation / escapement.
amber score indicator	The farm can provide documented evidence that it makes 10 % of their annual eel production (by piece) available for restocking for the primary purpose of conservation / escapement AND/OR for new clients, the farm can demonstrate that they have bookings for re-stocking in the following year at more than 10% of the predicted annual eel production (by piece) for the purpose of conservation / escapement.
red score indicator	The farm does not make or has no evidence to show that it has made any eels available for restocking in the last year.
Discussion	Restocking is done directly from the glass eels stored at the facility. The farm is only responsible for the onward sale of eels which have reached fingerling size. This is equivalent to the same period (70-80 days) which other farms sell eels on after a quarantine period. It is therefore suggested that the restocking numbers provided for the glass eel buyer section of the facility are taken into consideration when addressing this point and that in total the percentage of eels which are sold on from the facility which are for restocking is counted as 54% as stated in point 7 of component 3.
Score	A Green score indicator is awarded

1. Component 7 - Traceability

This section is valid for any client taking ownership of SEG certified product and who wishes to sell it as such.

1. - Incoming Product (See Note 20)	
green score indicator	The organisation/fishery operates a system which allows incoming eel products to be traced back to a certified source.
red score indicator	The organisation/fishery is unable to demonstrate that product can be traced back to a certified source.
Discussion	The Hendaye facility operates a strict system of logging each of the purchases of glass eels made within 24 hours of purchase on a national database. This system is audited by French authorities regularly to ensure compliance with national traceability legislation regarding the purchase of fish. For the year of assessment no eels from a SEG certified fishery had been bought by Gurruchaga so far. The issue of purchase and storage of SEG and non-SEG eels was discussed with Gurruchaga and considered in principle 2 below (Separation and Segregation). Gurruchaga has glass eel holding facilities along the coast which then bring eels to the Hendaye facility. Of these holding facilities, the Arzal facility is currently being reserved to hold only SEG glass eels when they become available. Plans are that in 2017 a new holding facility will be constructed in Saint Brevins les Pins for SEG glass eels only.
Score	A Green score indicator is awarded

2. – Separation and Segregation of Product (See Note 21)	
green score indicator	The organisation operates a system which ensures that the product remains separated at all stages from arrival to dispatch from non-certified eel products AND the organisation ensures that any products wishing to make a claim as certified do not contain any non-certified eel-based ingredients.
red score indicator	The organisation has no system in place to ensure that certified and non-certified product remains separate at all stages OR non-certified and certified products have become mixed OR certified products (or products wishing to be certified) contain or could contain non-certified eel-based ingredients
Discussion	Gurruchaga has glass eel holding facilities along the coast which then bring eels to the Hendaye facility. Of these holding facilities, the Arzal facility is currently being reserved to hold only SEG glass eels when they become available (none so far for 2016/17 season by time of audit). Plans are that in 2017 a new holding facility will be constructed in Saint Brevins les Pins for SEG glass eels only. On arrival at the Hendaye facility, the glass eel viviers are split into two systems, each fed by separate water and pipe systems allowing product to be kept fully separated. As previously stated no SEG certified glass eels are at the facility during the visit, however, Gurruchaga and staff have been made aware that any SEG eels should be kept separate at all time and that failure to do so would lead to a suspension of the certificate.
Score	A Green score indicator is awarded
3. – Outgoing Product (See Note 22)	
green score indicator	The organisation only labels certified products with the 'SES' ecolabel once it has been approved to do so through the signing of an 'SES' ecolabel licence agreement. All product to be sold as certified by an organisation meets the following criteria: • Any product labelling shall be accompanied by the 'SES' logo. • Products shall be accompanied by an invoice which: ▪ Includes the prefix 'SES' in the product description; ▪ Includes a record of the volume/quantity of product and to whom it was sold; ▪ Includes the certificate code on the invoice • The certificate code must be clearly related to the certified product only
amber score indicator	The above requirements are met except that: ▪ Products have O not been correctly labelled through the invoice
red indicator	Products or product invoices have been labelled as SES with the words SES

	or the SES Eco label despite not being completely derived from a certified source.
Discussion	Currently no product is being sold as SES by the fishery and so a green score is automatically provided here. The client has expressed that there is not currently demand for certified product and that he does not wish to label any product with the SEG label.
Score	A Green score indicator is awarded
4. – Record keeping and documentation (See Note 23)	
green score indicator	▪ The organisation operates a system that allows the tracking and tracing of all eel from purchase to sale and including any steps in between. In the case of live eels this should include the ability to track each eel in each batch delivered to a buyer to be connected back to a water, a time period (maximum duration one month) and specific fisherman/vessel. ▪ The organisation operates a system that also allows for the completion of a batch reconciliation of eel product by weight over a given period. ▪ The organisation maintains records for a minimum of three (3) years.
orange score indicator	The above requirements are met except that records have been maintained for less than three (3) years
red score indicator	The organisation's tracking and tracing system shows evidence that certified and non-certified product have become mixed AND/OR batch reconciliation records are unable to confirm that outgoing quantities are in line with incoming quantities.
Discussion	There is a comprehensive and clear traceability trail for all eels and documentation was provided to prove this from purchased glass eels to final invoices (through date and/or batch codes) of eels sold on both as glass eels and grown on fingerlings. Records are available for at least three years including archived records (often more).
Score	A Green score indicator is awarded

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