Eel Assessment – SAS Estuaires

Assessment against SEG Standard:

Component 1: Core requirements
Component 4: Eel buying and trading

Completed by
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4th January 2019

FINAL

1. Introduction

This document represents the report completed following the 2018 audit carried out under the Sustainable Eel Group (SEG) Standard (Version 6.0, June 2018) against SAS Estuaires. This assessment has been completed against Component 1: Core Requirements & Component 4: Eel Buying and trading of the Standard only.

The assessment is of the SAS Estuaires Facility located in Cordemais, France. The facility came into operation in February 2018. Its construction was funded in part by OP Estuaires, in part by the founding group of fishermen who have already undergone the SEG certification process to catch SEG certified glass eels, and in part by regional funding provided for construction materials. It is now run by the founding group, headed up by its president Mr Mickaël Vallee. In late December 2018, the decision was made to employ Ms Vickie Andriambatsiarisoa. As the facility is so new and has been constructed and set up with the vision to deal with glass eels sold by the founding group of certified fishermen, the procedures for the facility have been put in place with the SEG standard in mind for the most part. However, this does mean that the quantity of historical data available is limited for the facility in some respects.

2. The assessment

The assessor was Alex Senechal of MacAlister Elliott and Partners Ltd, who visited SAS Estuaires on the 4th January 2019. The audit included interviews with Miss Alexandra Collias, Mr Mickaël Vallee and Miss Vickie Andriambatsiarisoa. The audit began with a tour of the facility, tanks, systems in use and daily routine at the facility by Miss Collias and Ms Andriambatsiarisoa. This was followed by verification of paperwork and procedures in the office where Miss Collias was joined by Mr Vallee. At the time of the visit, one (1) tank of 6 was in use with glass eels in it and another with water with air bubbled through it to remove chlorine from the mains water supply to the

facility. Any information required for mortality traceability was gathered from its clients from the 2017/18 season.

3. Client Contact Details

Client Contact Name	**Alexandra COLLIAS**
Client Address	SAS Estuaires 2, rue Colbert 85100 Les Sables d'Olonne
Client Email	sas.estuaires@gmail.com
Client Phone Number	0033 (0) 2.51.96.15.67 0033 6.78.05.07.27

4. Results of the assessment

The outcome of this assessment is as follows;

A responsible score will result in 1, an aspiring score in 0. Score weighting will be taken into consideration for each element.

That SAS Estuaires has scored the following for Component 1: General Requirements and therefore **should** be considered **RESPONSIBLE** under the SEG standard.

Component 1: General Requirements	Auditor's findings	Weighting	Score
1.1 Commitment to Legality	Responsible	1	1
1.2 Contribution to eel conservation projects	N/A	N/A	N/A
1.3 The facility trades in certified responsibly sourced eels	Aspiring	1	0
1.4 Traceability:			
1.4.1 Incoming products, separation and segregation	Responsible	1	1
1.4.2 Outgoing products	Responsible	1	1
1.4.3 Record keeping and documentation	Responsible	1	1
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	Responsible	1	1
1.5.4 Restocking	Responsible	1	1
	Total	7	6/7
	Percentage Responsibility Score:	86%	

that SAS Estuaires has scored the following for Component 4: Eel buying and trading and therefore **should** be considered **RESPONSIBLE** under the SEG standard.

Component 4: Eel buying and trading	Auditor's findings	Weighting	Score
4.1 The glass eel holding facility is a registered aquaculture production business	Responsible	1	1
4.2 Mortality in storage facility	Responsible	2	2
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	10	8/10
	Percentage Responsibility Score:	80%	

Summary of assessment and scoring

Component	**Aspiring**	**Responsible**
1	1	6
4	2	8
Total	**3**	**14**
Total Responsibility Score		**14 / 17 = 82% or**

Recommendations:

1.3 It is recommended that the organisation ensure that by the next audit, it is dealing in at least 50% by number of responsibly sourced (SEG certified) eels.

4.3 It is recommended that the organisation encourage its clients to maintain accurate records of the mortality figures for its sold fish for a period no shorter than 7 days after purchase. This will enable improved record keeping of mortality and drive the requirement for improved quality fish. Following this evaluation, it is recommended that mortality figures after the first 7 days following onward sale are provided to the auditor at the end of the 2018/19 season to ensure that mortality figures for SAS Estuaires glass eels are within the parameters of the standard.

5. Next Audit

At the completion of the audit the client was assessed against the risk assessment set out in the Methodology. This is set out in the table below.

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[1] 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	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

As the client has been seen to fall into the standard surveillance bracket, the next audit will be due on the 4th January 2021 (in 2 years' time) and shall be an on-site audit.

[1] A borderline pass, under versions 1.0 to 5.0 of the standard, was considered a pass when one less amber indicator is received then would be required to fail (i.e. 5 green indicators and 4 amber indicators) or when a client is certified with equal number of amber and green indicators.

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	
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	The SAS Estuaires has been functioning since February 2018 when it received its first glass eels from SEG certified members of which there are presently 10. To date there have not been any criminal investigations or procecutions with regards to the facility by local or national regulatory authorities, as declared by Miss A. Collias.
Score	Score: Responsible Indicator
Criterion 1.2: Contribution to Eel Conservation Projects. (Optional bonus score)	
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	As the company is only in its second season and is a grouped association with no profit to date, this criterion is not seen as applicable presently.
Score	N.A.
Criterion 1.3: The facility 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 facility trades in 10 – 49.9% (by number) of certified responsibly sourced eel and has the documentation to demonstrate that.
Discussion	For the 2017/18 season, 45% of fish being purchased by the facility has come from the 10 certified Loire fishermen and 1 Vie fisherman. Therefore 55% of fish purchased has come from non-certified or evaluated sources. For the 2018/19 season to date, only fish from SEG certified fishers on the Loire have been purchased by the facility.
Score	Score: Aspiring Indicator.

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. • It operates a system which ensures that the product remains separated at all stages from arrival to despatch 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 5%
Discussion	For the 2017/18 season 45% of glass eels arriving at the facility has been from certified sources (conditional certification for Loire and certified individual on the Vie) while the other 55% were purchased from non-certified sources but were only done so for French restocking directly from the facility. All declarations of capture and purchase are made by Telecapeche all of which are accessible by the OP and were verified electronically with Miss Collias during the audit. Total weight of eels purchased for 2017/18 season was 827.167kg. 8.6kg of which was from a SES certified fisherman from the Vie river. The others could not at the time officially be called SES certified. Electronic declaration is done daily by the facility on FranceAgriMer for the marine fishers and to the French Environment Authority for the fresh water catches.
Score	Score: Responsible Indicator
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 with a maximum of 5% 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 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	No electronic declaration of sales is done for marine fish as this is not required by the French authorities presently, however this is completed with fresh water glass eels through the Environment Ministry with the invoice number and Quantity sold. All other sales are simply recorded internally on the incoming and outgoing spreadsheets held by the SAS Estuaires. To date no batch numbering has been required as no product could be sold as SEG. However, these protocols have been discussed and further information on proper batch numbering when preparing glass eels for transportation will be provided should certification be given to the facility. Invoicing is currently done with weight of glass eels sold, date, invoice number, buyer details and if it is for consumption or restocking.
Score	Score: Responsible Indicator
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 organisation operates an excel sheet which is updated daily by staff to keep records up to date for all incoming and outgoing of fish. Sales are recorded on paper and then entered with paper documents held together as well (fiche de peche and invoices for sale for each tank). Each tank has record sheets with each batch of fish purchased and put in the tank, weight and date, then all weights of fish removed – mortality and sale. Spreadsheet maintained to show proportions in and out and from which fishermen/area the fish originate.
Score	Score: Responsible Indicator
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 possible signs 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	Agrigerm is the only product to be used at the facility and is a disinctent, anti-bacterial, fungal and viral solution. This has a user instruction which is specific and used by the facility staff to clean tanks every time they are emptied. All other equipment is cleaned using the same product and foot cleaning pads are also treated with this to ensure that no forigne pathogens are entered into the facility when external persons enter. Local authority for licencing is FR44045017CE to operate. Testing of the fish is completed prior to any restocking for France and to date all testing has come back negative. Documented procedures for biosecurity are in place and have been provided to all staff working at the facility as well as its members. Recap sessions are planned when fishers are in reunion and any buyers coming to the facility are obligated to only use equipment from the facility. Records are kept for all monitoring of water and eel condition including mortality which is recorded at least daily in hard copy and electronically. No medicines are used on site at any time and parasite checks are undertaken periodically for the restocking events
Score	Score: Responsible Indicator
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	Eels are tested prior to restocking. Tests conducted in 2018 were for 1 batch only for French restocking and were found to be negative.
Score	Score: Responsible Indicator

Component 4 - Eel buying and trading	
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 aquaculture production business registration number for the facility is FR44045017CE.
Score	Score: Responsible Indicator
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	Mortality is likely to be relatively low due to prior stocking of eels at fishers' personal residences prior to arrival at the facility. For the 2017/18 season fishers were running the facility and did not realise that they needed to note the mortality at the facility as this is not usual practice at home. However, for the 2018/19 season, this has been recorded per tank daily, by fishers and/or by Miss Vickie Andriambatsiarisoa since her employment at the end of 2018. For the 2018/19 season so far, 0.061% mortality has been recorded. This will need monitoring going forward to ensure that all quantities are recorded and logged, and that figures do not exceed those required by the standard.
Score	Score: Responsible Indicator
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	Due to the facility only having 2 clients in its first year of operation in the 2017/18 season the quantity of available data is somewhat limited. One client was for local French restocking and therefore fish were taken directly from the facility and released on the same day as transportation, therefore there were no figures for mortality. The other client has not recorded individual mortality figures for each of the lots received. However, mortality figures were recorded for aggregated lots from the facility with other SEG fish purchased from the Arzal and other sources. The figures were calculated as mortality loss at the point of sale by the client and therefore were often for a period which was longer than 7 days after purchase. For each of the lots purchased from the facility, the total aggregated lot quantity and mortality for the lot were provided. These being; 28kg/298.7kg, 31.1kg/180.59kg, 210.5kg/973.67kg, 118.25kg/186.25kg, 53.35kg/312.65kg and 49.1kg/218.64kg with mortalities of 2.0kg, 1.7kg, 6.4kg, 1.05kg, 1.0kg and 0.85kg respectively. This represents mortality rates of the following for each aggregated lot; 0.67%, 0.94%, 0.66%, 0.56%, 0.32% and 0.39%, therefore averaging 0.59%. As the mortality rates had to be calculated on aggregated totals sold by the merchant and not based only on the figures from SAS Estuaires, but that the quantity purchased from SAS Estuaires accounted for in excess of 22% of the aggregated lots, there is some certainty that the mortality figures would have been higher, throughout, if the mortality of fish from SAS Estuaires had been below what was required. It is therefore recommended that an aspiring score is provided here as it is not directly up to the client under audit to record the mortality after sale but that of a third party.
Score	Aspiring Indicator.
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	An automated system is in place to monitor the water quality of each of the tanks individually. This being for water temperature, dissolved oxygen and oxygen saturation (%). These figures are read and recorded daily by Miss Vickie Andriambatsiarisoa following visual inspection of the tanks and removal of any dead glass eels. Water for the facility is provided by mains water supply and evacuated in normal drainage as

	waste water. AS there is no feeding of the glass eels while at the facility there is no requirement for further treatment of the water before disposal. In order to ensure that chlorine in the water is lowered, tanks are filled 24h in advance and air circulated to evaporate excessive amounts. a 10-50% water changes is completed daily by SAS Estuaires members. Tanks 1-3 are also equipped with water recirculation systems where by the water can be passed through a UV filter and particulate filtration system for quantities of glass eels which are likely to remain at the facility for periods in excess of 1 week. A back-up alarm warning system is in place which notifies several persons responsible for the facility who live in close proximity and fish close by as well. The system will automatically engage the oxygen from the reserve tanks and back-up power supply from an automated generator. This is all in order to ensure that survival and fish health is maintained at all times.
Score	Score: Responsible Indicator
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 facility has documented procedure for the receiving and preparation/handling of live glass eels as they arrive at the facility and are prepared for sale. This includes minimal physical handling of the fish where ever possible. Due to space restrictions the facility is not able to be optimally designed to avoid any handling of the fish before entering tanks, therefore fish are sieved before weighing and then introduced to tanks. The use of soft dust-pan brushes is in place to direct eels from one recipient to another when weighing however, care is taken to limit damage and brushes are always wet when in use. The use of small meshed (<1mm) nets to handle small quantities is minimalised. Larger meshed nets are used to remove any dead eels from the tanks daily. These nets are dipped in an appropriately diluted solution of ARGIGERM prior to use. A valve system is used to empty tanks into large sieve boxes (one which permits live eels to pass through while retaining any dead eels or foreign species/ bodies, and the second to sieve the eels to remove excessive water) before weighing and boxing up. The welfare of the eels is maintained and condition monitored during the process to ensure minimal stress to the animals. Eels are never allowed to dry out and are monitored visually several times per day by a number of individuals to limits risk of missing changes in eel condition.
Score	Score: Responsible Indicator

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	Transportation is either done by the buyer who received the fish directly into their onboard vivier tanks or by specialist transporter company for live fish. When completed by transport company, the fish are packed into specially designed trays which do not allow the fish to try out or be spilt. The boxes may contain up to 2 trays, each with up to 2kg of fish in each. A later with frozen bottles of water is then added to each box which cannot come into direct contact with the fish at any point in the transportation process. This maintains temperatures for transportation. Once boxes are sealed, the boxes are injected with oxygen to ensure saturation during transport. Transport organised by the organisation is only for restocking which is done within the region to date and therefore only relative short distances are travelled by the fish.
Score	Score: Responsible Indicator
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	For the 2017/18 season, as the facility only opened in February 2018, the fishing for consumption had all but finished and therefore there was only 28kg for consumption, the rest being for restocking. Therefore, based on the quantity purchased, restocking amounted for 99.96% of all fish handled by the facility. As the fish sold for restocking is all glass eels which have not been fed or sorted by any means before selling on, it is therefore considered that the eels are representative of the stock when sold.
Score	Score: Responsible Indicator