

## Eel Assessment – Palingrokerij Vlug BV

### Assessment against:

Component 1: Core requirements  
Component 4: Eel buying and trading  
Component 7: Processing, wholesale and retail supplies

**Completed by**  
Richard Wailes

21<sup>st</sup> January 2019

## FINAL REPORT

### Introduction

This document represents the report completed following the 2019 audit carried out under the Sustainable Eel Standard (Version 6.0, June 2018) against Palingrokerij Vlug BV. This assessment has been completed against Components 1, 4 & 7 of the Standard only.

The assessment is of a Processor / Retailer located in Broek op Langedijk, Netherlands. They handle between 3000kgs and 5000kgs per week of raw material utilizing 14 staff.

### 1. The assessment

The assessor was Richard Wailes of Control Union Pesca Ltd, who visited Palingrokerij Vlug BV on the 21<sup>st</sup> January 2019. The audit included interviews with Marc Vlug and his brother.

### 2. Client Contact Details

<b>Client Contact Name</b>	Marc Vlug (CEO)
<b>Client Address</b>	Dulleweg 30, 1721 PM Broek op Langedijk, Netherlands
<b>Client Email</b>	info@palingrokerijvflug.nl
<b>Client Phone Number</b>	+31 226 316 017

### 3. 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 Palingrokerij Vlug BV 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	Pass	1	1
1.2 Contribution to eel conservation projects	Pass	1	1
1.3 The facility trades in certified responsibly sourced eels	Pass	1	1
1.4 Traceability:			
1.4.1 Incoming products, separation and segregation	Pass	1	1
1.4.2 Outgoing products	Pass	1	1
1.4.3 Record keeping and documentation	Aspiring	1	0
1.5 Biosecurity & welfare – eel and eel products are provided with minimal risk of diseases, parasites and alien species	Pass	1	1
Total		7	6
Percentage Responsibility Score:		86%	

That Palingrokerij Vlug BV 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	N/A	1	0
4.2 Mortality in storage facility	Pass	2	2
4.3 Mortality during transport and initial holding if transported to farm	Pass	2	2
4.4 Water quality	Pass	1	1
4.5 Handling and welfare	Pass	1	1
4.6 Transport	Pass	1	1
4.7 The required percentage of glass eels is being used for restocking	N/A	2	0
Total		10	7/10
Percentage Responsibility Score:		70%	

That Palingrokerij Vlug BV has scored the following for Component 7: Processing, wholesale and retail supplies, and therefore **should** be considered **RESPONSIBLE** under the SEG standard.

<b>Component 7: Processing, wholesale and retail supplies</b>	<b>Score</b>
Comments: The company was one of the first to gain the SEG Standard and believes passionately in the responsible sourcing and processing requirements. From intake, care of the eels in tanks, humane slaughtering and processing, efficient brining, up to date smoking and to finally the latest in packing techniques the operation is slick. The quality of the finished product speaks for itself and it is proud to show the ESF label on its products. Effectively all sales are from certified (or soon to be) sources. Traceability is assured	Pass - 1

### Summary of assessment and scoring

<b>Component</b>	<b>Aspiring</b>	<b>Responsible</b>
1	1	6
4		7
7		1
<b>Total</b>	<b>1</b>	<b>14</b>
<b>Total Responsibility Score</b>		<b>93%</b>

### Recommendations:

The final Mass Balance paperwork needs to be tidied up and formalized but overall a very well run responsible operation.

#### 4. 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 <sup>1</sup> 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 bracket, the next audit will be due on the 21<sup>st</sup> January 2021 (in 2 years' time) and shall be an on-site audit.**

<sup>1</sup> 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.

<b>Component 1 – Generic requirements</b>	
<b>Criterion 1.1: Commitment to legality</b>	
<b>Responsible indicators</b>	For at least the past two years: the organisation has not been found guilty for any offences relating to eel fishing or trading.
<b>Aspiring indicators</b>	For at least the past 12 months: the organisation has not been found guilty for any offences relating to eel fishing or trading.
Discussion	There have never been any issues regarding illegal eel trading
Score	1 - Responsible
<b>Criterion 1.2: Contribution to Eel Conservation Projects. (Optional bonus score)</b>	
<b>Responsible indicators</b>	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.
<b>Aspiring indicators</b>	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	Palingrokerij Vlug BV is committed to being responsible – check website and also it pays about 4% of its profits to the Eel Stewardship Funds through DUPAN
Score	1 - Responsible
<b>Criterion 1.3: The facility trades in certified responsibly sourced eel</b>	
<b>Responsible indicators</b>	The organisation trades in at least 50% (by number) of certified responsibly sourced eel and has the documentation to demonstrate that.
<b>Aspiring indicators</b>	The facility trades in 10 – 49.9% (by number) of certified responsibly sourced eel and has the documentation to demonstrate that.
Discussion	Palingrokerij Vlug BV does not buy any non-responsibly certified eels, buying entirely from four farms who are all undergoing recertification. Note that until the certification of these farms is confirmed they will not write these supplies down as sustainable. In fact 100% of supplies will then be from certified sources.
Score	1 – Responsible
<b>Criterion 1.4: Traceability</b>	
<b>1.4.1: Traceability - Incoming product, separation and segregation</b>	

<b>Responsible indicators</b>	<ul style="list-style-type: none"> <li>• Certified and uncertified eel products can be clearly and easily traced back to their source.</li> <li>• Where a fishery or buyer, an electronic tele-declaration system is used</li> <li>• It operates a clear system which ensures that the product remains separated at all stages from arrival to dispatch from non-certified eel products.</li> <li>• The organisation ensures that any products wishing to make a claim as certified do not contain any non-certified eel-based ingredients.</li> <li>• If resolved through mass- or number- balance calculations, the margin of error does not exceed 2%</li> </ul>
<b>Aspiring indicators</b>	<ul style="list-style-type: none"> <li>• Certified and uncertified eel products can be traced back to their source.</li> <li>• It operates a system which ensures that the product remains separated at all stages from arrival to dispatch from non-certified eel products.</li> <li>• The organisation ensures that any products wishing to make a claim as certified do not contain any non-certified eel-based ingredients</li> </ul>
	<ul style="list-style-type: none"> <li>• If resolved through mass- or number- balance calculations, the margin of error does not exceed 5%</li> </ul>
Discussion	<p>When eels arrive at the premises they are given a unique batch number which links directly to the delivery note/invoice from the supplier. This Batch code follows the product through the holding tanks (separate for each farm), stunning operation, processing and packing and is finally shown on the labels on each pack. There is no non-certified eels held and so there can be no issues regarding claiming certification. Note that if one of the suppliers was not to be certified it would be dropped immediately.</p>
Score	1 - Responsible
<b>1.4.2: Traceability - Outgoing product</b>	
<b>Responsible indicators</b>	<ul style="list-style-type: none"> <li>• Where a fishery or buyer, an electronic tele-declaration system is used</li> <li>• Documentation is well maintained with a maximum of 2% error in the following:</li> <li>• 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</li> <li>• All product to be sold as certified by an organisation is accompanied by an invoice which meets the following criteria: <ul style="list-style-type: none"> <li>- Includes an appropriate batch code</li> <li>- Includes a record of the quantity (no. &amp; weight) of product and to whom it was sold</li> </ul> </li> </ul>
<b>Aspiring indicators</b>	<ul style="list-style-type: none"> <li>• Documentation is well maintained with a maximum of 5% error in the following:</li> <li>• 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</li> <li>• All products to be sold as certified by an organisation are accompanied by an invoice which meets the following criteria: <ul style="list-style-type: none"> <li>- Includes an appropriate batch code</li> <li>- Includes a record of the quantity (no. &amp; weight) of product and to whom it was sold</li> </ul> </li> </ul>
Discussion	<p>The traceability is excellent overall with each batch being identified clearly right up to final label on the packaging. This links up with the invoices through date and a record</p>

	which shows which products are sold on which day from which batch. There is minimal margin for error and documentation is sufficient
Score	1 - Responsible
<b>1.4.3: Traceability - Record keeping and documentation</b>	
<b>Responsible indicators</b>	<ul style="list-style-type: none"> <li>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</li> <li>If a fisherman or buyer, a tele-declaration system is used to report catches and trade</li> <li>The organisation operates a system that also allows for the completion of a batch reconciliation of eel product by weight over a given period.</li> <li>The organisation maintains records for a minimum of three (3) years.</li> </ul>
<b>Aspiring indicators</b>	<p>The above requirements are met except that:</p> <ul style="list-style-type: none"> <li>Records have been maintained for less than three (3) years</li> <li>If a fisherman or trader, a tele-declaration system is planned to be used to report catches and trade in the next season</li> </ul>
Discussion	Full traceability in place with each stage of the process identified through batch code and whilst it is possible in theory to complete this for every batch in practice this does not happen through lack of time and staff / system availability. This needs to be tightened up. Records are kept for 5 years +.
Score	0 - Aspiring
<b>Criterion 1.5: Biosecurity &amp; welfare – Eel and eel products are provided with minimal risk of diseases, parasites and alien species</b>	
<b>Eel Fishing: Biosecurity measures are adopted</b>	
<b>Responsible indicators</b>	<ul style="list-style-type: none"> <li>The fishery conducts good biosecurity measures such as the disinfection and drying of nets and equipment between each fishing in different waters. OR:</li> <li>The fishermen only operate in the same river or estuary, with no risk of transferring diseases or alien species between catchments</li> </ul>
<b>Eel buying &amp; trading: Biosecurity is present and disease is treated rapidly and appropriately</b>	
<b>Responsible indicators</b>	<ul style="list-style-type: none"> <li>The use of chemicals follows legal requirements of the appropriate EU regulations and of the country concerned.</li> <li>The facility has the appropriate permissions to operate from the relevant licensing authority</li> <li>An effective and documented biosecurity plan is in place and there is evidence that it is being followed.</li> <li>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.</li> <li>Records are maintained according to the Medicines Regulations for use of any medicines and/or chemicals used in the facility.</li> </ul>

<b>Aspiring indicators</b>	<ul style="list-style-type: none"> <li>The use of chemicals follows legal requirements of the appropriate EU regulations and of the country concerned.</li> <li>The facility has the appropriate permissions to operate from the relevant authority</li> <li>An effective and documented biosecurity plan is in place and there is evidence that it is being followed.</li> <li>Eels are regularly monitored for health and possible signs of stress (although this might not be documented) and daily mortality is recorded.</li> <li>Records are maintained according to the Medicines Regulations for use of any medicines and/or chemicals used in the facility.</li> </ul>
Discussion	This is only applicable for the eels held in storage for up to 14 days prior to slaughter. No chemicals are used, an effective biosecurity plan is in place (and being used), daily mortality is recorded (though minimum – less than 0.1%)
Score	1 - Responsible
<b>Eel farming: Biosecurity is present and disease is treated rapidly and appropriately</b>	
<b>Responsible indicators</b>	<ul style="list-style-type: none"> <li>The facility has the appropriate permissions to operate from the relevant authority.</li> <li>The use of chemicals follows legal requirements of the EU and of the country concerned</li> <li>An effective and documented biosecurity plan is in place and there is evidence that it is being followed.</li> <li>Daily records are available showing monitoring of fish health and signs of stress and daily mortality is recorded</li> <li>Records are maintained according to the Medicines Regulations for use of any medicines and/or chemicals used in the facility</li> <li>UV is used at an appropriate level and separation between tanks</li> </ul>
<b>Aspiring indicators</b>	<ul style="list-style-type: none"> <li>The facility has the appropriate permissions to operate from the relevant licensing authority</li> <li>The use of chemicals follows legal requirements of the EU and of the country concerned.</li> <li>An effective and documented biosecurity plan is in place and there is evidence that it is being followed.</li> <li>Eels are regularly inspected for disease (although this may not be documented) and daily mortality is recorded.</li> <li>Records are maintained according to the Medicines Regulations for use of any medicines and/or chemicals used in the facility.</li> </ul>
Discussion	N/A as not a farm
Score	N/A
<b>Restocking: The risk of restocked eels introducing disease into wild populations has been assessed and is minimal</b>	
<b>Responsible indicators</b>	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.
<b>Aspiring indicators</b>	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	N/A as not a farm
Score	N/A
<b>Wholesale / Retail / Processing: Hygiene Plans are followed and there are rare examples of infection</b>	
<b>Responsible indicators</b>	Food processing hygiene plans are followed
Discussion	There is a fully approved and verified HACCP plan in place with full hygiene plans (checked on site) and there have never been any issues with infection amongst the eels and listeria on the products (continuously swabbed with monthly results)
Score	1 - Responsible

<b>Component 4 - Eel buying and trading</b>	
<b>Criterion 4.1: The Glass eel holding facility is a registered Aquaculture Production Business</b>	
<b>Weighting: 1</b>	
<b>Responsible indicators</b>	The Glass eel holding facility is a registered Aquaculture Production Business
<b>Aspiring indicators</b>	The facility is not a registered Aquaculture Production Business, but has credible plans to register within the next 6 months
<b>Discussion</b>	N/A as not a farm
<b>Score</b>	N/A
<b>Criterion 4.2: Mortality in storage facility</b>	
<b>Weighting: 2</b>	
<b>Responsible indicators</b>	Mortality rate over the season is less than 2% on average.
<b>Aspiring indicators</b>	Mortality rate over the season is less than or equal to 5% on average but greater than or equal to 2%
<b>Discussion</b>	Mortality in the holding tanks (23) is minimal – less than 0.1%
<b>Score</b>	2 - Responsible
<b>Criterion 4.3: Mortality during transport and initial holding if transported to farm</b>	
<b>Weighting: 2</b>	
<b>Responsible indicators</b>	<ul style="list-style-type: none"> <li>Buyers source at least 90% of their eels from certified suppliers OR</li> <li>Mortality during transport and for the first week at the farm is less than 2% on average</li> </ul>
<b>Aspiring indicators</b>	<ul style="list-style-type: none"> <li>Buyers source 50% - 89.9% of their eels from certified suppliers OR</li> <li>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.</li> </ul>

<b>Discussion</b>	Not an issue as this is a processor but mortality during transport (own approved) and in the holding tanks is negligible.
<b>Score</b>	2 - Responsible
<b>Criterion 4.4: Water quality</b>	
<b>Weighting: 1</b>	
<b>Responsible indicators</b>	<ul style="list-style-type: none"> <li>• 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)</li> <li>• Water quality management procedures are in place including regular monitoring of relevant parameters which shows that water quality is always high and stable</li> <li>• 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</li> </ul>
<b>Aspiring indicators</b>	<ul style="list-style-type: none"> <li>• 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)</li> <li>• The facility has a minimum of a back-up generator and oxygen supply</li> </ul>
<b>Discussion</b>	Checked twice annually by the local authorities and approved. This is ground water which is treated by the company for holding the eels in. There is no need for a back-up system as the tanks are and can be used/emptied immediately in case of electrical failure
<b>Score</b>	1 - Responsible
<b>Criterion 4.5: Handling and welfare</b>	
<b>Weighting: 1</b>	
<b>Responsible indicators</b>	<ul style="list-style-type: none"> <li>• Systems are in place and the facility is designed to keep handling to an absolute minimum</li> <li>• Documented procedures are in place for handling, and handling, where necessary, is careful</li> <li>• 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)</li> <li>• Eels are moved without being allowed to dry out.</li> </ul>
<b>Aspiring indicators</b>	<ul style="list-style-type: none"> <li>• 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</li> <li>• Handling, where necessary, is carefully planned and executed</li> <li>• The infrastructure has been optimised as far as possible to avoid injuries</li> <li>• Nets are small-mesh (1mm maximum)</li> <li>• Eels are moved without being allowed to dry out.</li> </ul>
<b>Discussion</b>	Facility though 25 years old is designed to minimize handling with a quick and efficient product flow. There are documented procedures in place as part of the HACCP. Eels are moved quickly and killed humanely with electricity and in small batches (150-200kg)
<b>Score</b>	1 - Responsible

Criterion 4.6: Transport	
<b>Weighting: 1</b>	
<b>Responsible indicators</b>	<ul style="list-style-type: none"> <li>• There is a Transport Plan in place to minimise travel time – this meets the Transport requirements for vertebrates</li> <li>• Packing is done in a way that minimises handling, time and stress</li> <li>• Eels are kept cool and wet with an adequate supply of oxygen</li> <li>• The operator holds the relevant transport authorisations</li> </ul>
<b>Discussion</b>	The Company has its own truck to collect the eels with the maximum distance with the current farms of 2.5 hours. The truck is designed for eel transport with aerated water in each compartment and is approved by the Authorities. There is a tiny amount of live sales to Germany (once annually) and these are transported by the company's own truck
<b>Score</b>	1 - responsible
Criterion 4.7: The required percentage of glass eels is being used for restocking	
<b>Weighting: 2</b>	
<b>Responsible indicators</b>	<ul style="list-style-type: none"> <li>• The buyer can provide documented evidence that <u>they have sold</u> at least 60% for restocking the required target percentage of its glass eels from the last season for the primary purpose of conservation / escapement.</li> <li>• The eels for restocking are representative of the stock – slow growers are not selected</li> </ul>
<b>Aspiring indicators</b>	<ul style="list-style-type: none"> <li>• The buyer can provide documented evidence that they <u>have reserved or made available at least 60%</u> of the required target percentage of its glass eels from the latest season available for the primary purpose of conservation / escapement, OR</li> <li>• 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</li> <li>• The buyer can provide credible evidence that re-stocking will occur in the forthcoming season.</li> <li>• The eels for restocking are representative of the stock – slow growers are not selected</li> </ul>
<b>Discussion</b>	N/A as not a farm
<b>Score</b>	N/A

Component 7 – Processing, wholesale and retail supplies	
<b>Issues</b>	<p>This component describes the sometimes short, sometimes long chain from the eel leaving the fishery or fish farm, processed for human consumption (e.g. filleted, smoked), distributed to retailers and then sold to the consumer (e.g. the public, restaurants).</p> <p>In some cases, a number of processes might be carried out by the same business, e.g. some family businesses in Holland have their own eel farm, their own smoker and sell direct to the public.</p>
<b>Notes</b>	<p>There are no separate criteria for processors, wholesalers and retailers, but the component is provided here to show how they are included in the supply chain.</p> <p>The most obvious and important component applying to these is Component 1.1, covering Commitment to legality, 1.3: Trading in certified eel and 1.4: Traceability.</p>
	Where the facility undertakes other processes in this standard, e.g. perhaps eel farming, the business and assessor should decide the relevant parts to audit.
<b>Benefits</b>	<ul style="list-style-type: none"> <li>• Consumers have the opportunity and choice to purchase responsibly sourced eel</li> </ul>
<b>Targets &amp; Measures</b>	<ul style="list-style-type: none"> <li>• An increasing number and proportion of processors, wholesalers and retailers provide certified eel, from 5% now to 90% in 10 years</li> <li>• An increasing proportion of total retail sales is of certified eel, from 5% now to 75% in 10 years</li> </ul>
<b>Discussion</b>	<p>The company was one of the first to gain the SEG Standard and believes passionately in the responsible sourcing and processing requirements. From intake, care of the eels in tanks, humane slaughtering (150-200kg at a time) and processing, efficient brining, up to date smoking and to finally the latest in packing techniques the operation is slick. The quality of the finished product speaks for itself and it is proud to show the ESF label on its products. Effectively all sales are from certified (or soon to be) sources.</p>
<b>Score</b>	1 - Responsible