



## Background to the The SEG Standard

A Code of Conduct for a Responsible Eel Sector



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## 1. Introduction

The population of the European eel, *Anguilla anguilla*, had been declining for a century or more, before it was formally recognised by ICES (the International Council for the Exploration of the Seas), around 2000, that it was in a depleted and vulnerable state and in need of protection.

That led to the European Commission creating the Eel Regulation (EC 1100/2007) in 2007 for the protection, sustainable use and recovery of the eel population. It is the most important piece of legislation to effect the eel's recovery.

ICES reported in 2020 that, based on the glass eel recruitment index, the eel population stopped declining in 2011, two years after the Eel Regulation was implemented. Analysis of the data (see Appendix 1.) suggests that there are signs of a small recovery since; but still a long way from historical levels and what could be considered full recovery. With the eel's average life-cycle being 12 – 15 years, recovery will take several generations, and therefore many decades.

There therefore was, and still is, widespread agreement across Europe that more effective action is required to restore the eel population to biologically safe levels.

The Sustainable Eel Group (SEG) believes that, in support of the Eel Regulation, a minimum standard is needed that goes beyond mere legal requirements, to indicate where the eel is being caught and traded responsibly and thereby contributing to the recovery of the eel stock.

SEG's vision, from our updated [Theory of Change](#) is: to see:

***Biologically safe wild eel populations, distributed throughout their natural range fulfilling their role in the aquatic environment, recovering in line with the protection targeted by the EC Eel Regulation.***

SEG believes that this vision can be achieved most effectively by focusing on achieving two interdependent and mutually reinforcing outcomes: Healthy Water Habitats and a Responsible and ultimately Sustainable Eel Sector:

**Healthy Water Habitats:** defined as functionally intact water flow to support habitat for fish and vegetation, water quality, and ecosystem health, where there is natural residence of elvers, natural escapement of silver eels as well as free migration between the waters themselves.

**A Responsible Eel Sector:** defined as an eel sector that fishes and trades responsibly, to the best current practices, produces a fully traceable product, is financially viable, is compatible with the achievement and long term maintenance of healthy wild eel populations and makes a positive impact on communities, local economies and traditions.

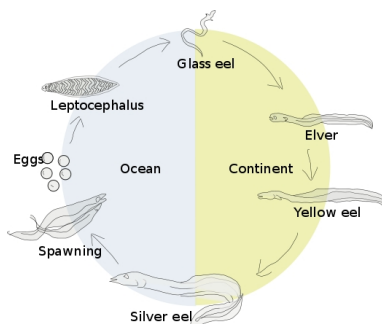
*(from The SEG Theory of Change, May 2016, updated January 2023)*

To understand why SEG believes that a responsible commercial eel sector has a positive part to play in saving the eel, rather than in contributing to its continuing demise, it is necessary to understand the eel's life cycle, and to understand the factors that are believed to be the most important reasons for the eel's decline, and how the commercial eel sector operates. It is then possible to understand how the SEG Standard can contribute to the restoration of eel populations.

## 2. The Eel's lifecycle

Mature 'silver' eels are believed to spawn in the Sargasso Sea south of Bermuda in the Atlantic Ocean. The maturing eel larvae, *Leptocephali*, then return to European continental waters by drifting on the Atlantic currents, developing into the immature 'glass eel' stage of their lifecycle in the estuaries of European and North African rivers.

On reaching an estuary, the glass eels swim towards fresh water and enter river systems, penetrating as far inland as migration barriers will allow. In the rivers the glass eels get pigmented to become elvers and then grow into the larger yellow eels. Maturation may take five to twenty years, depending on the eel's gender, and on the temperature and condition of its environment. Finally, the mature eels swim downriver to return to the sea and make the journey back across the Atlantic to Bermuda, where the cycle can begin again.



## 3. Causes of decline in the population of the European eel

All the causes for the collapse in eel populations are not fully understood, in part due to the lack of knowledge in relation to the oceanic phases of the eel's lifecycle. However, factors impacting on eel populations in relation to the continental phase of the lifecycle are known to include:

- Loss of freshwater habitat
- Water pollution
- Barriers to up- and downstream migration, such as dams, dykes, and weirs
- Mortality due to water intakes and pumps
- Mortality due to hydropower
- By-catch where eels are not the target species
- Glass eel fishing – for dead or live trade, commercial or recreational
- Silver eel fishing – for dead or live trade, commercial or recreational
- Yellow eel fishing - commercial or recreational
- Illegal fishing and illegal trade

Climate change is also believed to be having an impact. It is known to be affecting ocean currents such as the Gulf Stream. The delivery of leptocephali and glass eels to Europe and North Africa is dependent on the strength and direction of the Gulf Stream.

The paucity of information as well as the lack of known conservation measures that could be applied to the oceanic part of the eel's life cycle means that efforts to restore healthy eel populations must necessarily focus on these factors.

#### 4. Explanation of the SEG` approach certification programme

Here we explain SEG's approach to eel protection and the part that the SEG standard plays in that.

##### **The European Commission Eel Regulation 2007**

Much of our approach is to support the **2007 EC Eel Regulation** and the multiple elements within it that collectively aim for a level of 40% protection (survival) of the European eel. So, our strategies, including the SEG standard, are designed to support that level of protection.

##### **A standard for a single impact on the eel stock**

There are many factors that have caused the decline of the eel population: climate change, pollution, habitat loss, barriers to migration, overfishing etc.

It is in this overly complex setting, that the Sustainable Eel Group took the initiative (in 2011) to develop a standard for a responsible eel fishing sector. This Code of Conduct is available to (regional groups of) individual fishers, traders, processors and aquaculturists. This code sets minimal conditions for a responsible level of exploitation, contributing to the implementation of the national Eel Management Plans and the EU Eel Regulation. However, given that the SEG standard addresses only the commercial fishing sector, it does not address all factors and all actors involved in eel management: issues related to water management, pollution, wildlife management, and loss of (accessibility to) habitats are not included.

The SEG standard deliberately addresses a single type of actor in a multi-actor environment, a single factor in a multi-factor process.

The context for this can be read in more detail in our document [118 Certifying eel fisheries in a multi-actor environment](#).

Faced with the factors that are known to result in eel mortality, it may seem that a ban on the recreational and commercial take of eels – including glass eels, silver eels and yellow eels – would be an obvious and potentially effective conservation measure. SEG believes, counter-intuitively, that this would be wrong. In fact a range of factors suggest that a responsible and ultimately sustainable commercial eel sector would be a major force in restoring eel populations.

Most fundamentally, the continuing existence of a commercial sector is completely dependent on the maintenance of a healthy wild eel population. Despite more than 100 years of research it has to date proved impossible to breed eels in captivity. Eel aquaculture and ranching, as well as fishing for glass eels and adults is impossible without a wild population. Without a wild population there is no commercial eel sector. The sector – including commercial, recreational and traditional fishers - has a deep, cultural relationship with the eel and eel trade, going back centuries.

Its dependence on the eel gives the eel sector a clear interest in the survival and growth of eel populations, but does not give it the tools to contribute, or show that a ban on the taking of eels would not be an effective long-term conservation measure. The arguments for this fall into four categories: technical, institutional, political and financial.

On the technical side, the eel sector has plenty of opportunity to contribute to the restoration of populations. Technical measures include the safe capture and handling of glass eels for translocation from estuaries and rivers that are blocked to potential upstream migration to rivers and wetlands where they can grow to adulthood and return to the sea to reproduce, and the establishment of eel fishing free periods, quota and areas or zones.

On the institutional side, it is essential to combat the illegal fishing and trade in eels. The trade of eels beyond European borders is already banned under Cites, and yet, despite reductions since 2017, is estimated in 2022 to represent 15 to 25 tonnes of eel a year – 40% on top of the total legal European market of some 40 to 50 tonnes. The illegal market undermines the viability of the legal sector and suggests also that simply banning eel fishing and trade is unlikely to be an effective measure. A responsible, legal commercial eel sector, with eyes at the water, implementing full traceability from water to end product, has the potential to reduce the illegal trade far more effectively than already over-stretched policing on its own.

Politically, the eel needs friends. In numbers the European eel sector 10 years ago was thought to be worth over €500m per annum and provided employment for over 10,000 people across Europe and beyond. However, the sector is dispersed and disorganised. As a sporting and leisure activity eel fishing is pursued by hundreds of thousands of dedicated anglers. The eel's lifecycle and need for open, healthy waterways makes it a flagship species for the restoration of wetlands, water quality and water flow. Together and aligned in their interests the commercial sector, recreational anglers, scientists and conservationists make a powerful political alliance. Divided, their chance of succeeding in their shared aim of restoring eel populations is greatly reduced.

However, motivation without resources is insufficient. The eel sector not only has a fundamental interest in seeing healthy wild eel populations restored, but it has the potential to make a financial contribution to achieve this, without having to depend on public financing or NGO fundraising. A responsible, commercial eel sector could provide a source of well-directed financing aimed at answering key research questions, supporting effective public communication, and supporting the implementation of genuinely effective conservation measures.

Finally, and perhaps most importantly, simply banning the commercial taking of eels would not work, as it would have no impact on the underlying factors that are causing the collapse in eel populations. The most important of these factors are the loss of freshwater habitats, water pollution, barriers to up and downstream migration, and eel mortality due to water intakes, pumps and hydropower. A united, engaged eel sector, committed to the restoration of healthy wild eel populations, implementing measures that are backed up by independent scientists and supported by conservation organisations, stands some chance of addressing these underlying factors.

SEG believes that such an approach has the best chance of success.

Based on this analysis, SEG believes that its sustainability standard and associated certification programme provides an effective system to help it achieve its objectives. SEG believes that this system will:

- Allow us to bring together scientists, conservationists and leading representatives of the commercial eel sector, and those with social, environmental and economic interests to identify and define the key technical measures that responsible players in the sector should be implementing to make the most effective contribution to the sustainability and viability of the sector;
- Provide a reliable basis for an assurance system to ensure that these measures are implemented, and for driving commercial advantage for the responsible leaders of the sector and away from irresponsible, unsustainable and illegal practices;
- Provide a platform to communicate with the wider public about the plight of the eel and action that the public can take to support the eel's restoration, not only in relation to the support for a sustainable eel sector but also, and perhaps even more importantly, in relation to support for actions to open water ways to safe eel migration, and restore wetlands, water quality, habitat and flow.

In this context, the SEG Board of Directors has defined the **objective of the SEG standard** as being to:

**Define the standards by which each step in the chain of custody in the commercial eel sector can be assessed for its sustainability and contribution to the protection and recovery of the eel population.**

The high level goal of the SEG standard is supported by two specific design requirements:

- the SEG standard shall be designed to ensure that each individual SEG certificate holder makes a positive contribution to SEG's sustainability objectives,
- implementation and operation shall support the collection and availability of the data necessary to monitor the efficacy of the standard in achieving these objectives.

SEG believes that it is of critical importance to the credibility and success of the SEG standard, that it defines the criteria by which each certificate holder can demonstrate how *their activity* contributes to the protection or recovery of healthy eel populations.

To meet these requirements, SEG believes that the best way to ensure that the SEG standard achieves its goal, is to invite a wide variety of stakeholders of the eel, from the commercial eel sector \*1, science, conservation and water operators \*2, covering social, economic and environmental interests, to develop the standard's specifications through an open, consultative, multi-stakeholder process.

#### Definitions

##### \*1 Commercial Eel Sector

This is any person, business or organisation who fishes or trades in eel for the purposes of restocking or consumption.

##### \*2 Water Operators

These are the owners of operations that have an impact on eel mortality and migration; for example: pumps for water supply, cooling water or flood management; hydropower; dams, weirs and sluices for navigation and flood management; culverts and weirs for water level management; pollution from discharges.

SEG has been operating a standard since 2011, which has been revised and improved such that Version 6.0 was published in June 2018. This revised background prepares us for the review of the SEG standard, starting in 2023 for publication of Version 7.0. The current standard includes provisions relating to:

- Commitment to SEG's goals,
- Disassociation from illegal activities,
- Alignment with nationally approved Eel Management Plans, developed in support of the regulatory framework for the Eel Regulation 1100/2007,
- Minimisation of by-catch of non-target species,
- Reduction of damage to habitats,
- Minimisation of mortality in the fishing of live glass eels,
- Qualitative as well as quantitative requirements to support the effective re-stocking of viable wild eel habitats,
- Minimisation of mortality during the translocation of live eels at all stages of their life-cycle,

- Biosecurity,
- Quality requirements for eel aquaculture and ranching,
- Traceability of eels and eel products throughout the supply chain.

A strategic review of the effectiveness of the delivery of objectives in Version 6.0 has been undertaken, with recommendations for improvements for Version 7.0. Those recommendations are included in document: [114 SEG Standard Revision 2023 ToR V1.0](#).

The SEG Standard V6.0 and this revision to V7.0, have been designed to follow the requirements of the [JSEAL Code of Good Practice for Setting Social and Environmental Standards](#), last revised in December 2014.

**The following sets out the key reasons why SEG believes that adopting and supporting its programme is contributing to the Eel Regulation's targets of 40% survival of the eel:**

#### Minimising Illegal fishing

The last estimate of the total size of glass eel recruitment to continental shores was in 2017, and was 440 tonnes, or 1.3 billion fish, by the ICES WGEEL team, [Bornarel et al](#). In the same year, Europol estimated that 100 tonnes, 300 million fish, or 23% of the stock, were exported illegally to Asia. That compares to a legal catch of 65 tonnes in 2017 and a legal market of 40 tonnes. Quite obviously, any reduction in the illegal catch is going to have a contribution to the recovery of the stock. The legal market of 40 tonnes is a much more protective 9% of the stock.

The SEG programme involves:

- Influencing European and international governments to be aware and to take action against this damaging trade
- Influencing the commercial eel sector transform to a more sustainable approach
- Discouraging illegal trade by excluding illegal operators from the standard and certification.

Europol estimated the illegal trade in 2021 to be 20 tonnes, a 80% reduction over 2017, saving 240 million fish; 18% of the stock. Whilst the Covid pandemic undoubtedly had an impact on travel and trafficking, the efforts of the enforcement authorities in Europe have also had a major impact.

#### Glass eel fishing

The SEG standard only supports glass eel fishing where:

- The local fisheries authority has provided scientific evidence that there is a 'surplus' of glass eel recruitment, and that there is a quota that can be taken which still allows the catchment to be fully utilised by those left, below the 'surplus',
- There is good progress with the Eel Management Plan, as specified by the Eel Regulation,
- There is good compliance with local fishery rules,
- 60% of glass eels caught are made available for restocking (as specified by the Eel Regulation), and there is no abuse of the restocking and consumption quotas,
- Fishers use the methods (net mesh size and fishing speed) that will minimise fishing handling mortality,
- There is minimal damage to the local environment or by-catch due to fishing.

Collectively, these describe the best current practices for glass eel fishing, and in support of the eel Regulation, and to provide the 40% protection target.



A [study in 2021](#) demonstrated how the SEG standard had helped to reduce fish handling mortality from 42% in 2007 in the to 7.4% across a range of fishers in French estuaries. It was even less in SEG certified fishers. That is a saving of 62 million glass eels a year on the France glass eel fishing quota of 60 tonnes.

#### Yellow and silver eel fishing

The SEG standard only supports yellow and silver eel fishing where:

- The local fisheries authority has provided scientific evidence that there can be a catch of eels and the 40% escapement target can still be met,
- There is good progress with the Eel Management Plan, as specified by the Eel Regulation,
- There is good compliance with local fishery rules.

#### Glass eel trading

The SEG standard sets criteria to ensure:

- Mortality during storage is low,
- Mortality during transport is low,
- 60% of glass eels are used or made available for restocking.

#### Aquaculture

The SEG standard sets criteria to ensure:

- Mortality on the eel farm is low,
- Feed is from a responsible source,
- Eels are provided for restocking

#### Processing, wholesale and retail sales

For these the SEG standard sets criteria for:

- Commitment to legality,
- Trading in certified eel,
- Traceability.

Additionally, all participants in the SEG programme must demonstrate that they have achieved our standards for:

- Commitment to legality,
- Contributing to eel conservation programmes,
- Trading in certified eel,
- Traceability,
- Biosecurity and welfare.

**The following are specific elements in the standard (V6.1) to support these:-**

**Criterion 1.1: Commitment to Legality.** This aims to reduce the level of illegal fishing and export of eels so that (a) more are kept and used in Europe and (b) less are caught overall.

**Criterion 1.2: Contribution to Eel Conservation Projects.** When a consumer buys a SEG or [Eel Stewardship Fund](#) labelled product, part of the purchase price goes towards eel conservation projects. Examples are: building eel passes to help eels migrate; in Holland, every autumn eel

fishermen move 5 – 12 tonnes of silver eels (up to 10,000 fish) ‘[over the dyke](#)’ into the sea; financial support for SEG’s anti-trafficking work and advocacy to influence for the most effective eel protection measures.

**Criterion 2.1: Eel fishing is from a fishery that is meeting its escapement targets.** The standard only accepts eel fishing from places where the populations are well-protected and, for glass eels, where there are surplus fish that can be moved to underpopulated waters.

**Criterion 2.4: Mortality during fishing is minimised.** Death due to poor handling must be less than 8%. This has driven better practice where, in some places, handling mortality used to be 50%.

**Criterion 4.7: The required percentage of glass eels is used for restocking.** The Eel Regulation specifies 60% of glass eels be used for restocking. SEG standard certification is issued only where this has been met.

## 5. Scope

The SEG standard applies to the fishing ranching, aquaculture, trade and transportation of the European eel *Anguilla anguilla* (L.) and eel products within coastal, estuarine and freshwater systems throughout its natural range.

The standard includes provisions for the monitoring of the trade in live eels and for the trade of eel products from source to end consumer.

Geographically, it covers the natural biological range of the eel in its continental phase, from North West Africa, to the Mediterranean, to the whole of Europe, to the North Cape of Scandinavia. Illegal trade transcends those boundaries – routes are via European and North African outlets mostly to the Far East; predominantly China.

It also includes provisions to encourage the improvement of aquatic habitats to aid eel populations, and to encourage water operators to reduce or mitigate the damaging effects of their operations on the eel.

## 6. Consideration of other standards and initiatives

SEG will continue to seek to align with existing and similar sustainability systems, for example the [Marine Stewardship Council](#) (MSC) and [Aquaculture Stewardship Council](#) (ASC) certification schemes.

ASC and MSC were consultees in the 2017 review of the SEG Standard and will also be actively consulted in the 2022 review. As a Community Member of ISEAL since 2019, SEG has approached ASC and MSC for examples of good practice to enable learning and improvements for our standard and its supporting system.

SEG also believes that there is potential for collaboration with the [Alliance for Water Stewardship](#) (AWS) in relation to its model for co-operation at the watershed level for the restoration of water quality, habitat and flow, and looks forward to discussions in the future during the process of SEG standard development. Similarly, we intend to engage with the [Hydropower Sustainability Council](#) to integrate eel (and other fish) protection.

In addition to its consideration of voluntary schemes and initiatives, SEG has carried out a review of European Union and United Nations policies, including the Eel Regulation 1100/2007 and the EU Water Framework Directive, to determine where and how the SEG standard can contribute to their implementation, as summarised in the table below. Alignment with European Union and United Nations policies, and in particular with the Eel Regulation, will remain a key consideration in the revision of the SEG standard.

## 7. Intended impacts on the eel population by policies, regulations and the SEG standard.

EEL MORTALITY FACTOR	EU Policy	SEG Standard Direct Impacts	SEG Standard Indirect Impact
Oceanic factors	EU and UN Environment Policy	No	No
Loss of freshwater habitat	Water Frame Work Directive Habitats Directive Eel Reg	No	Yes
Migration barriers, dykes and weirs	WFD, HD, Eel Reg	No	Yes
Water intakes and pumps	WFD, HD, Eel Regs	No	Yes
Hydropower	WFD, HD, Eel Regs	No	Yes
Fisheries: Glass Eel	Eel Regs Common Fisheries Policy	Yes	No
Fisheries: Yellow Eel	Eel Regs CFP	Yes	No
Fisheries: Silver Eel	Eel Regs CFP	Yes	No
Eel buying and trading		Yes	No
Eel culture		Yes	No
Pollution	WFD, HD, Eel Regs	some	some
Biosecurity		Yes	
Eel handling & welfare		Yes	

SEG also aims to ensure that its programme aligns with and is supportive of other initiatives aimed at protecting threatened and endangered species, in particular Cites. The eel is listed on Appendix 2 of the Cites Convention, meaning that trade is only allowed beyond the European Union borders under highly specific circumstances, which are not currently met.

Finally, SEG remains in close contact with the IUCN Committee responsible for monitoring the status of the eel in relation to the IUCN Red List process, and with the International Council for the Exploration of the Sea (ICES), which has been appointed by the European Commission to advise it on the status of the eel, and measures to be taken to restore the population to a healthy condition.

## 8. Stakeholder Analysis

SEG has carried out an analysis of stakeholders that may be affected by the implementation of a SEG Standard, the results of which are summarised below. For the full analysis see document [008 SEG Stakeholder Analysis](#).

## Key Stakeholder Groups

Based on its stakeholder analysis SEG has proactively identified a number of key stakeholder groups who are likely to be interested in or affected by the development and implementation of the SEG Standard, summarised in the table below.

Key Stakeholder Groups: Parties with a special interest in or potentially affected by measures related to SEG Activities	Interested/ directly affected by SEG Standard?	SEG Stakeholder Category	Sustainability Category
Eel fishers (glass eels, yellow eels, silver eels), ranchers and aquaculturalists	Directly affected	Commercial	Social
Traders/ transporters of live eels	Directly affected	Commercial	Social
Processors and traders of eel products.	Directly affected	Commercial	Social
Government advisers	Interested	Observer/ adviser	Social
Law enforcement agencies	Interested	Observer/ adviser	Social
Political representatives	Interested	Observer/ adviser	Social
Other relevant standards/ schemes, eg. MSC, ASC, GFG, SeaFood Watch, AWS, HSS	Interested	Observer/ adviser	Social
Relevant policy experts	Interested	Case by case	Social
Recreational fishers	Potentially affected	Case by case	Social
Consumers	Directly affected	Case by case	Social
Local communities, e.g. fishers, employment and culture near processors and restaurants	Interested, directly affected,	Case by case	Social
Fisheries scientists Marine scientists Research ecologists	Interested	Science	Environmental
River/ wetlands governance bodies (Local, national, regional. Private/public)	Potentially affected	Observer/ adviser (or assigned case by case)	Environmental
Environmental Non-Government Organisations	Interested	Observer / Adviser	Environmental
Hydropower companies	Potentially affected	Commercial	Economic
Water supply companies	Potentially affected	Commercial	Economic
Water extractors	Potentially affected	Commercial	Economic
Flood management authorities	Potentially affected	Commercial	Economic
Navigation authorities	Potentially affected	Commercial	Economic
Other industries and activities affecting or affected by water quality	Potentially affected	Commercial	Economic
Equipment Manufacturers, suppliers	Interested	Commercial	Economic
Illegal sector: illegal fishing of eels; illegal impacts e.g. bycatch; illegal trade in eels and eel products	Directly affected	Commercial	Economic, Social

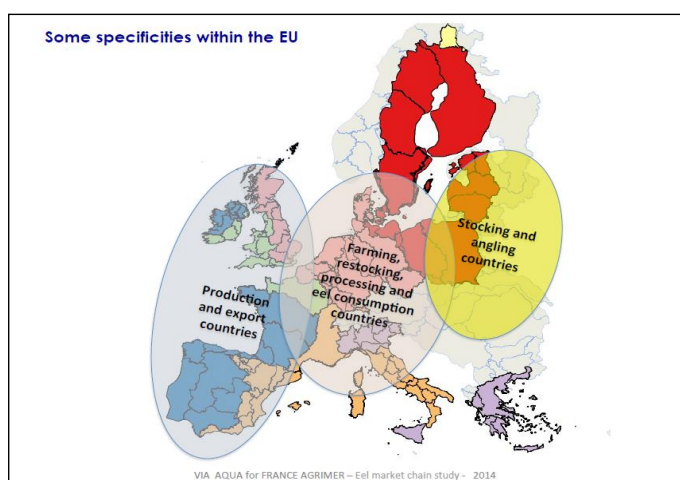
Commented [MR1]: Economic?

Commented [DB2R1]: Could be Social or Economic. Some can be considered in more than one category.

SEG maintains a database of stakeholders within each of these groups who are kept informed of and consulted on the development of the SEG Standard. It is not published in order to comply with data protection and privacy regulations.

### Geographical Considerations

SEG recognises that consideration also needs to be given to potential differences in perspectives and interests of stakeholders within stakeholder groups in different countries, affected by different cultural, economic and geographical contexts. Different countries have differing ecological as well as infrastructural and institutional contexts and have different roles in relation to the eel sector as a whole, as illustrated in the map below.



### Further considerations

SEG recognises that consideration also needs to be given both to larger and more commercially oriented operations, and to small-scale 'amateur' or 'recreational' user interests.

SEG monitors stakeholder participation in its standards development processes based on these considerations, and endeavours to ensure that all interests and perspectives have been given a fair opportunity to participate and to represent their views, prior to the finalisation of any SEG standard.

### SEG Stakeholder Categories

Based on its stakeholder analysis and its understanding of the coalition of interests that will be required to achieve its objectives, SEG has determined that the full range of stakeholders should be divided into three broad stakeholder categories for the purpose of decision-making on SEG Standards, representing Environmental, Social & Economic interests.

SEG's governance structure has therefore been designed to ensure the fair and balanced representation for stakeholders from each of these categories within its decision-making processes, and in particular in relation to the development and approval of the SEG Standard in terms of their representation on the SEG Board.

**Commented [MR3]:** Could you share with me how this is happening?

**Commented [DB4R3]:** We consider and respond to feedback as it is received during the operation of the standard. We have made a number of minor revisions to the standard and supporting procedures and guidance since the last major review in 2018. At 'review time' we ensure we record and publish all contributions and our responses.

**Commented [MR5R3]:** Ok, I think ISEAL Code compliance might need a little more monitoring of stakeholder participation, i.e. including checking the representativeness of participation across stakeholder groups.

**Commented [DB6R3]:** OK, thanks.

SEG recognises that many stakeholders could legitimately be assigned to more than one of these categories. In these cases the SEG Membership Secretary provisionally assigns a stakeholder to a given category.

## 9. Risks and mitigation

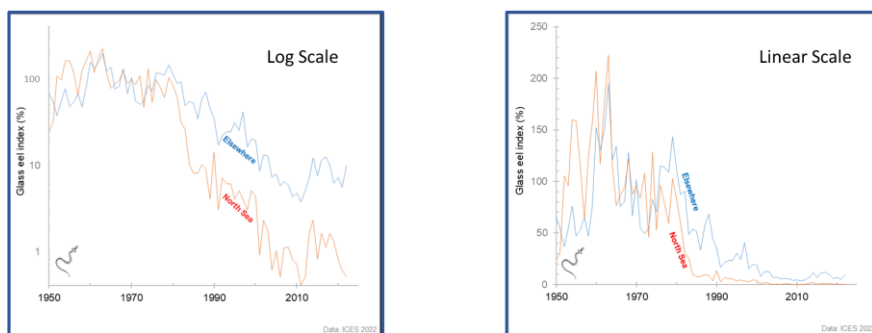
Finally, we have carried out an assessment of the risks (e.g. possible unintended negative social, environmental or economic impacts) in implementing its standard and considered ways to mitigate such risks.

An initial analysis of risks is in document [114 SEG Standard Revision 2023 ToR V1.0](#).

We are developing a more comprehensive risk management plan for our wider business and will be published in 2023 as '[208 Risk Management Plan](#)'.

## Appendix. European eel glass eel index (ICES data), 1950 - 2022

### ICES 2022 Glass Eel Time Series Recruitment Index



Note that '**Elsewhere**' accounts for over 90% of the recruitment.  
Around 1.3 billion glass eel arrivals is an indicated arrival volume from a 2017 ICES study

