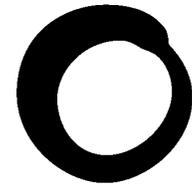




Marine Information Network  
[www.marinet.org.uk](http://www.marinet.org.uk)

Allington House  
Allington  
Chippenham  
Wiltshire SN14 6LN  
Tel. 01249 653972  
[stephen.marinet@btinternet.com](mailto:stephen.marinet@btinternet.com)



**Friends of  
the Earth**

28<sup>th</sup> May 2012.

For the attention of: Marine Strategy Framework Directive Implementation Team, Defra,  
Area 2D, Nobel House, 17 Smith Square, London SW1P 3JR.

Dear Sir, Consultation on MSFD : UK Initial Assessment and Proposals for GES.

Our representatives have attended the Defra briefings and workshops on this matter led by Andrew Clayton, and we wish to thank the officers and the department for these briefings. We have observed the working being done by Defra to define the 11 MSFD Good Environmental Status (GES) descriptors, and we are supportive of this endeavour.

Our experience and knowledge is largely confined however to Descriptor 3 (populations of commercial fish and shellfish) and it is to this specific Descriptor that our present comments are addressed. Whilst we appreciate the limited nature of this commentary, we do observe that fish and shellfish are the fauna that are central to the higher trophic orders of the marine ecosystem and thus their good environmental status is of fundamental importance. If this is not so, the marine ecosystem as a whole is severely impaired.

Descriptor 3: *“Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock.”* ref. Marine Strategy Framework Directive, 2008/56/EC, Annex 1, paragraph 3.

Defra commentary: Ref. <http://www.defra.gov.uk/consult/files/20120327-msfd-consult-document.pdf>

Defra observes: “This [MSFD Annex 1 para.3] generally means that commercial species will be exploited sustainably (consistent with the highest sustainable long-term yield), species will have adequate reproductive capacity for replacement (able on average to reproduce at least once before being caught) and that stocks will have an age and size distribution that avoids impaired recruitment.” **Ref. para. 424**

Defra observes: “The proposed UK characteristics of GES for this Descriptor are as follows:

- The level of stock mortality generated by fishing activity (F) is equal to or lower than  $F_{msy}$  – the level capable of producing Maximum Sustainable Yield (MSY)† for the long-term. Where  $F_{msy}$  is not known, the proxy will be the catch/biomass ratio that is consistent with MSY.

- The spawning stock (SSB) is at a level capable of delivering MSY.
- Each fish stock contains a high proportion of mature fish and an appropriate age structure.”

**Ref. Table 20 – Proposed GES characteristics for commercial fish (Descriptor 3)**

† **Maximum Sustainable Yield, or MSY, is the largest average catch that can be taken from a particular fish stock for an indefinite period i.e. without threatening its long-term viability (Note: this definition of MSY is a Defra definition in an earlier version of the Consultation Document, but not present in the final version).**

Defra observes: “For this descriptor experts have proposed that MSFD targets are based on the achievement of stocks within the safe biological limit precautionary thresholds, whilst aiming, in the medium-long term, for the more ambitious stock specific targets for fishing at levels consistent with the MSY. Achieving a fishing mortality rate of MSY for all stocks is considered to be equivalent to safe biological limits, while also reducing fishing pressure on the wider ecosystem.”  
**Ref. para 428.**

Defra observes: “There is currently little detailed information about the approach other Member States are likely to take to setting targets for this Descriptor. However ICES† is in the process of developing advice on methodologies for GES targets for commercial fish and the approach proposed in this impact assessment has been put forward by UK scientists in ICES.” **Ref. para 430.**

†**The ICES MSFD Descriptor 3 Report, published 22<sup>nd</sup> February 2012, can be seen at <http://www.ices.dk/reports/ACOM/2012/WKMSFD-D3/MSFD%20D3%20Report.pdf>**

MARINET’s Observations:

**1.** It is important to remember the overall objective of the Marine Strategy Framework Directive, namely “The marine environment is a precious heritage that must be protected, preserved and, where practicable, restored with the ultimate aim of maintaining biodiversity and providing diverse and dynamic oceans and seas which are clean, healthy and productive.” **Ref, MSFD, Recital 3.**

We cite this because an interpretation or definition of Descriptor 3 [*Populations of all commercially exploited fish and shellfish are within safe biological limits, exhibiting a population age and size distribution that is indicative of a healthy stock*] which does not fully meet the objective of protecting, preserving and restoring the marine environment in order to maintain biodiversity and deliver clean, healthy and productive seas has fallen short of its obligation, is deficient, and has therefore failed.

We therefore **recommend** to Defra to ensure that the overall definition of Descriptor 3 arrived at by Member States, as well as Defra’s own contribution to that ultimate definition, is possessed with such integrity.

**2.** Our second point concerns the need for the ultimate definition of Descriptor 3 (i.e. the definition adopted by the Commission, Member States, and thus represented to the European Court of Justice) is a common, unified definition.

At the present time, there appears to be a strong suggestion that Member States will each arrive at their own definition of Descriptor 3, and how and in what manner it is to be applied. If this were to be so, this will be a recipe for chaos. It will mean the Descriptor being interpreted in different ways in order to suit different needs and purposes, and thus there will be no clear coherent definition that can be applied in a universal way. As a result, fish and shellfish populations will not be well served. Their protection and, where necessary, their restoration will as a result not be based on need defined in objective, scientific terms but rather will be defined in subjective, self-

interested and political terms which simply suits each Member State. If this were to come to pass, the value of Descriptor 3, and indeed of the Marine Strategy Framework Directive itself, will have been corrupted and devalued to the point where, in all practical terms, it has become worthless.

In MARINET's view it is of paramount importance that Members States come to a single, unified definition of Descriptor 3 which applies in a single, universal form throughout all EU seas. To do otherwise is to arrive at a definition of Descriptor 3, and ultimately the MSFD itself, which is "designed to fail". We **recommend** that Descriptor 3 is defined in a unified way by all States.

**3.** MARINET believes that the definition of "safe biological limit" is central to a robust understanding and delivery of Descriptor 3, and thus a key feature in determining the integrity of the definition of Descriptor 3.

The issue is simple. From a historical perspective many, if not most, commercial fish stocks in EU seas are seriously depleted at the present time, often due to over-fishing which has occurred and persisted over many years.

Therefore if we accept these current stock levels as our baseline, and define "safe biological limit" with reference to this baseline, there is very little prospect at all that these stocks will be restored to the levels of abundance (size) which ecological conditions might permit. In short, we will be condemning our fish stocks and our fishing industry to living in a perpetual state of decline which, in many instances, borders on a condition (ecologically and economically) of collapse.

Such a situation will be entirely inconsistent with the aim of biodiverse, and healthy and productive seas, and will fail totally to deliver food security – the ability to meet our needs for fish from our own stocks for all 12 months of the year, year after year – which must be a primary aim of the Common Fisheries Policy and its present reform process (Note: "food security" has declined in EU seas, and we can currently meet our needs for only 6 months of the year, and the situation is still worsening).

Therefore we need a definition of "safe biological limit" which looks beyond present stock sizes and present circumstances, and seeks to define the matter in terms of **the potential of the stock that can exist within current ecological conditions.**

Such a definition of safe biological limit recognises not just the potential of the stock, but what is truly required to re-establish and restore that stock to a safe condition, because a stock whose abundance and character (age and size profile) which has been maximised to that which current ecological conditions will support is the true safe level of that stock. This is the level that will endure with a strong degree of certainty in ecological and biological terms, and it is the level which will endure and sustain a re-vitalised fishing industry, thus delivering the important social imperatives of fishing policy.

We therefore **recommend** that Defra, and ultimately the Members States collectively, adopt and operate a definition of "safe biological limit" which is based on the **potential** of the stock, and **not** on its current depleted size and condition. We regard this approach to the definition of Descriptor 3 as essential. Without the adoption of this definition stocks will remain, almost perpetually, in their current condition of decline and will be continually confronted by the possibility of collapse, the fishing industry itself will never be revitalised, and food security for the European Union's population as whole will never be re-established and will become simply a historical notion.

In this were to be so, the MSFD would have fallen prey to a "design to fail" process. It is imperative that this is avoided, and we believe firmly that our recommendation will deliver this.

4. Given that the definition of safe biological limit must be referenced to the **potential** of the stock in order to deliver food security and a revitalised fishing industry, it follows logically that Defra and Member States must also reference and define their use of the principle of “maximum sustainable yield” (MSY) in a similar manner.

At present Defra and Members States are using a definition which states that MSY is directly linked to their understanding of safe biological limit i.e. stocks referenced to their current levels, and this means that their operational definition of MSY - “the largest average catch that can be taken from a particular fish stock for an indefinite period i.e. without threatening its long-term viability” – is similarly referenced. In short, stocks will be fished (F<sub>msy</sub>) with no, or very little, opportunity to be rebuilt to their maximum potential.

MARINET recommends to Defra, and Members States, that the definition of MSY needs to be as follows: ‘maximum sustainable yield’ means the maximum catch that may be taken from a fish stock indefinitely *and that provides for the restoration of stocks to maximum levels of abundance that current ecological conditions will permit.*

It is our clear **recommendation** to Defra, and Member States, that MSY both within the Marine Strategy Framework Directive and the Common Fisheries Policy should be operative on the basis of this definition. This definition provides for true sustainability. Sustainability where fish stocks are restored to their full potential within current ecological conditions thus providing for biodiverse and productive seas (the environmental pillar of sustainability), where fish stocks are maximised thus delivering a fishing industry whose economic value is restored and considerably greater than its value today (the economic pillar of sustainability), and where employment is guaranteed at increased levels for the fishing industry and, in addition, the EU population is also able to know that it has food security in terms of its requirements for fish (the social pillar of sustainability).

5. Descriptor 3 also requires that populations of all commercial fish and shellfish stocks exhibit a population **age and size distribution** that is indicative of a healthy stock.

This is a key factor in the definition of a healthy stock - and thus biodiverse, healthy and productive seas – because as the adult doubles in length so does its ability to produce eggs/sperm also increase proportionally. Accordingly, older fish in a stock are the most fecund, and older fish are thus the key to the rebuilding of a stock to the maximum levels of abundance that current ecological conditions will permit, and older fish are the basis of increased catch levels (tonnage) in a revitalised fishing industry.

The definition that Defra, and Member States, are currently considering for this aspect of Descriptor 3 – the age and size profile indicative of a healthy stock – is one where sexually mature adults are only present for a single year before being fished out. And, it is argued, this limited adult presence in the stock will be wholly sufficient to maintain the stock at a safe biological limit (i.e. have sufficient reproductive potential).

MARINET observes, firstly, that this characterisation of a healthy stock is simply untrue. If we take cod for example, which becomes sexually mature around the age of six years and can live twenty-five years, it is clearly obvious that the stock needs adults in its midst who are beyond the age of six if it is to have an age profile that is indicative of a healthy stock. To assert otherwise is akin to imagining that the human population can survive, and have a healthy profile, if it is solely relying on teenagers for its reproductive capacity (and hence survival) because all adults are eliminated once they reach the age of twenty. This is clearly an absurd proposition, both morally and logically.

MARINET observes, secondly, that the definition being advanced by Defra and Member States has not been quantified in any way and thus, by this yardstick, is wholly deficient. No attempt has

been made to establish the age and size profile that is indicative of a healthy stock – despite the **obligation** to do this in the wording of Descriptor 3 for **all** commercial populations of fish and shellfish. Moreover, there is a clear assertion by Defra and Member States that it is believed that the obligation to provide an age and size profile is unnecessary (because a stock existing within its “safe biological limit” i.e. with adults surviving for one year of sexual maturity, is adequate).

MARINET expresses to Defra, and Member States, the belief that their current approach to this part of Descriptor 3 is unscientific, derelict in terms of meeting its legal obligation, and wholly short-sighted. This is because it fails to address the practical needs (in terms of fish biology) necessary to rebuild fish stocks and, consequently, will fail to deliver a revitalised fishing industry, biodiverse and productive seas, and food security for the EU population. In short, it is an approach without any merit whatsoever.

MARINET advises Defra, and Member States, that an age and size profile can be established for all commercial stocks and that in practical, scientific terms, there is no impediment to the assembly of these profiles. We therefore **recommend** full and complete implementation of this part of the Descriptor (age and size profile), and MARINET further advises Defra, and Member States, that if these age and size profiles are not established this will create a situation that will be open to legal challenge because no impediment exists, in scientific terms, for not fulfilling this duty.

**6.** It has also been noted that there is the suggestion that the full application of Descriptor 3 will not be applied to **all** commercial fish and shellfish stocks, and that some stocks (not identified in the Consultation Document) will serve as “indicators” as to the healthy condition of those other stocks that have not been fully assessed or profiled under Descriptor 3.

MARINET **advises** Defra that if this suggestion is correct - that not all commercial stocks will be assessed for their safe biological limit and age and size profile that is indicative of a healthy stock - that this will be a renunciation of duty under the legal requirements of the Directive.

The Descriptor states “populations of **all** commercial exploited fish and shellfish”. It does not state that the assessment of health and safe biological limits for some stocks can be inferred from other stocks. There is no legal basis for the use of “indicator stocks”.

### Summary.

MARINET believes that a full definition and implementation of Descriptor 3 is essential if the primary aim of the Directive is to be attained – namely, biodiverse seas which are clean, healthy and productive. We both advise and request that Defra communicate this advice to the Member States that if the Marine Strategy Framework Directive, and particularly Descriptor 3, is not defined in the robust, scientific manner which we have outlined - which means restoring stocks to their **full potential** – then there is a clear perception that what is occurring is the crafting and adoption of a definition that is “designed to fail”.

“Designed to fail” means a devaluation of the Directive. It arises because, in political terms, it is perceived that its legal and environmental obligations are too great to be honoured. We have shown in this submission that various shortcomings exist in the process of definition which is being advanced by Defra and Member States. We have addressed these shortcomings, and we have detailed their remedy in the belief that **integrity** in the definition process will be sustained.

Yours sincerely

S. D. Eades,  
On behalf of MARINET