

Good Environmental Status and Environmental Targets:

Descriptor 3

1.1 Introduction

This report outlines the Good Environmental Status (hereinafter referred to as 'GES') and environmental targets established to achieve GES in terms of MSFD Descriptor 3 reproduced hereunder:

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

1.2 Selection of relevant criteria and indicators

The Commission Decision on criteria and methodological standards on good environmental status of marine waters (2010/477/EU) stipulates the following criteria and indicators for the assessment of the extent to which good environmental status is being achieved in terms of Descriptor 3:

Criterion 3.1: Level of pressure of the fishing activity

- Fishing mortality (3.1.1), or
- Ratio between catch and biomass index (3.1.2)

Criterion 3.2: Reproductive Capacity of Stock

- Spawning Stock Biomass (3.2.1), or
- Biomass Indices (3.2.2)

Criterion 3.3: Population age and size distribution

- Proportion of fish larger than the mean size of first sexual maturation (3.3.1)
- Mean maximum length across all species found in research vessel surveys (3.3.2)
- 95% percentile of the fish length distribution observed in research vessel surveys (3.3.3) or
- Size at first sexual maturation which may reflect the extent of undesirable genetic effects of exploitation (3.3.4)

Commercial fish stocks exploited by Maltese fishery are shared across the Mediterranean region and assessment of such stocks would need to incorporate fisheries data from a number of Mediterranean countries¹. For this reason, assessment of stocks on the basis 'Fishing Mortality' and 'Spawning Stock Biomass' (or related secondary indicators) should only be resorted to at a regional or subregional scale in order to ensure meaningful results. Furthermore, as per comments made by STECF² '*any action taken by Maltese authorities to address overexploitation of fish stocks will have little, if any, effect on the status of the stock*'.,

As indicated in Malta's Fisheries Management Plans³, while committed to contribute to stock assessment and implementation of management plans at a regional level, Malta is also targeting effective monitoring and control of fishing activity within its Fisheries Management Zone established through EC regulation 1967 of 2006⁴ with a view to ensure sustainable fisheries within such zone.

Within this context, the proposed GES and targets for the purposes of the MSFD aim at establishing realistic goals which can be achieved through effective management at the level of the Fisheries Management Zone. For this reason the proposed GES and targets focus on MSFD Criterion 3.3 (Population Age and Size Distribution). Although fishing mortality (3.1.1) and spawning stock biomass (3.2.1) (or related secondary indicators) are still deemed relevant for assessment of GES in terms of Descriptor 3, their relevance will only be ensured through a collective assessment of fisheries data at a regional scale.

1.3 Good Environmental Status

The proposed Good Environmental Status constitutes a qualitative description of Malta's desired status for commercial stocks on the basis of the management measures put forward by Malta's Fisheries Management Plans for Lampuki fishery, Lampara and bottom otter trawling. The proposed GES is indicated hereunder:

Sustainable exploitation of fish stocks as indicated by the population age and size distribution of selected commercial species is achieved through effective management and monitoring of fishing effort.

¹ Scientific, Technical and Economic Committee for Fisheries (STECF). 43rd Plenary Meeting Report (PLEN-13-02). 2013 Publications Office of the European Union, Luxembourg.

² Scientific, Technical and Economic Committee for Fisheries (STECF). 43rd Plenary Meeting Report (PLEN-13-02). 2013 Publications Office of the European Union, Luxembourg.

³ http://vafd.gov.mt/fish_con?l=1

⁴ Council Regulation (EC) No 1967/2006 concerning management measures for the sustainable exploitation of fishery resources in the Mediterranean Sea, relates to the conservation, management and exploitation of living aquatic resources in the Mediterranean.

This GES would apply at the level of Malta's Fisheries Management Zone and is expected to be achieved through the implementation of Malta's Fisheries management plans.

1.4 Environmental Targets and Associated Indicators

The environmental targets pursuant to Article 10 of the MSFD are proposed in consideration of Malta's Fisheries Management Plans and the conclusions put forward by the Scientific, Technical and Economic Committee for Fisheries (STECF) as part of the review of such plans⁵.

Malta has submitted Management plans for the Lampuki (*Coryphaena hippurus*) fishery, Lampara fisheries⁶ and Bottom otter trawling⁷. These management plans are geared towards monitoring and surveillance of the fishing fleet as well as control of the fishing effort as follows:

- For the lampuki fishery, the management plans call for fishing effort to remain constant (a fixed number of 130 boats each year). Further to this, better monitoring and surveillance of the fishing fleet and its activity is to take place by ensured that all vessels record their landings in a catch logbook and land their catch in a designated port. together with enhancement of data collection and knowledge about the biology of the species and the behaviour of the local fleet targeting it.
- For the lampara fishery the management plan established Catch per Unit Effort thresholds and calls for a reduction in fishing effort of 20% (3 vessels) in line with the precautionary approach.
- For bottom otter trawling, the management plan calls for a 20% in capacity reduction, and a one month closed season as from 2014 for three years.

STECF⁸ deems the proposed reductions in effort for Lampara fishery and otter trawling excessive and would have little impact on the overall mortality on these shared stocks, given that Maltese landings of the target species are very low when compared to the total international landings. In general, STECF highlights the need for stock assessments at a regional scale and calls for the use of survey indices and indices of abundance from fishery independent data in the absence of stock assessments.

Within this context, the proposed MSFD targets are related to the management and monitoring of fishing effort in line with the measures put forward in Malta's management plans and the analysis of fishery independent data as recommended by STECF. The proposed targets are listed in Table 1.

⁵ Scientific, Technical and Economic Committee for Fisheries (STECF). 43rd Plenary Meeting Report (PLEN-13-02). 2013 Publications Office of the European Union, Luxembourg.

⁶ main target species *Scomber japonicus* and *Sardinella auritia*

⁷ main target species *Aristaeomorpha foliacea*, *Mullus* spp. *Parapenaeus longirostris*

⁸ Scientific, Technical and Economic Committee for Fisheries (STECF). 43rd Plenary Meeting Report (PLEN-13-02). 2013 Publications Office of the European Union, Luxembourg.

Table 1: Proposed Targets to achieve GES in relation to MSFD Descriptor 3.

Good Environmental Status	Environmental Target	Feature	Indicators
Sustainable exploitation of fish stocks as indicated by the population age and size distribution of selected commercial species is achieved through effective management and monitoring of fishing effort.	<p>Management and monitoring of fishing activities result in a sustainable fishing effort over time, in line with the measures put forward in Malta's Fisheries Management Plans, with a view to ensure sustainability of the stocks targeted by Maltese fisheries.</p>	<p>Lampuki fishery Lampara fishery Bottom otter trawling</p>	<p>Fishing effort</p>
	<p>To ensure better use of fishery independent data in analysis of fish populations.</p>	<p>Selected fish species</p>	<p>Level of knowledge on selected fish species</p>