

Good Environmental Status and Environmental Targets:

Descriptor 7

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 7 reproduced hereunder:

Permanent alteration of hydrographical conditions does not adversely affect marine ecosystems

1.2 Selection of relevant criteria and indicators

Descriptor 7 is addressing changes in hydrological conditions as a result of anthropogenic activities in the marine environment. Assessment of achievement of Good Environmental Status in terms of this descriptor should thus be linked to relevant activities in the marine environment on the basis of the criteria and indicators set by the Commission Decision on criteria and methodological standards on good environmental status of marine waters (2010/477/EU), reproduced hereunder:

- 7.1 Spatial Characterisation of permanent alterations
 - Extent of area affected by permanent alterations (7.1.1)
- 7.2 Impact of permanent hydrographical changes
 - Spatial extent of habitats affected by the permanent alteration (7.2.1)
 - Changes in habitats, in particular the functions provided (e.g. spawning, breeding and feeding areas and migration routes of fish, birds and mammals), due to altered hydrographical conditions (7.2.2)

The proposed GES and targets do not address the criteria/indicators individually, but rather collectively, with a view to enable application of the criteria and indicators on a case by case approach. It should be noted however that application of Indicator 7.2.2 in the short term may not be possible due to current data limitations with respect to ecosystem functions.

1.3 Good Environmental Status

The proposed Good Environmental Status for Descriptor 7 reflects the need to minimise adverse effects of interference with hydrological processes through anthropogenic activities. Assessment towards achievement of this GES should thus be linked to the relevant activities taking place within the marine environment:

Significant adverse effects of permanent alterations of hydrographical conditions on key marine habitats and species are, in so far as practicable prevented or minimised to the extent possible.

In line with the OSPAR Commission's guidance on Descriptor 7¹, this GES would apply to new development in the marine environment which can result in permanent changes in hydrographical conditions. Furthermore, achievement of this GES in coastal waters should be linked to any measures stipulated as part of the EU Water Framework Directive to address hydromorphological objectives.

1.4 Environmental Targets and Associated Indicators

The proposed environmental target in relation to Descriptor 7 reflects the need to use existing tools which may contribute to evaluate and assess the extent of impacts in relation to permanent alterations of hydrographical conditions resulting from activities in the marine environment. Such tools, as identified in the Commission Decision on criteria and methodological standards on good environmental status of marine waters (2010/477/EU), include environmental impact assessment, strategic environmental assessment and maritime spatial planning.

The proposed target thus aims at ensuring the integration of MSFD requirements with current environmental assessment processes, with a view to minimise adverse effects of anthropogenic activities in terms of changes in hydrographical conditions, to the extent possible, and achieving Good Environmental Status for Descriptor 7. Synergies with the requirements of the EU Water Framework Directive for coastal waters must also be ensured.

¹ OSPAR Commission 2012. MSFD Advice document on Good environmental status - Descriptor 7: Hydrographical conditions. A living document - Version 17 January 2012

Table 1: Proposed operational target for ‘Interference with hydrological processes’

Good Environmental Status	Environmental Target	Features	Indicators
Significant adverse effects of permanent alterations of hydrographical conditions on key marine habitats and species are, in so far as practicable prevented or minimised to the extent possible.	Changes in hydrographical conditions from large-scale development proposals are adequately assessed through existing permitting and licensing procedures in line with the parameters stipulated by the Marine Strategy Framework Directive	Activities in the marine environment which may lead to interference with hydrological processes.	Indicators in relation to proposals subject to assessment procedures (to be developed)