Defining Good Environmental Status in the context of the European Marine Strategy Directive

What constitutes a healthy marine environment?

At the heart of the development of the European Marine Strategy (EMS) is recognition of the need for integrated management of human activities impacting on marine ecosystems – effectively an ecosystem-based approach. The EMS stakeholder process identified four strategic goals relevant throughout the EU's marine waters:

A. To protect, allow recovery and, where practicable, restore the function and structure of marine biodiversity and ecosystems in order to achieve and maintain good ecological status of these ecosystems.

B. To phase out pollution in the marine environment so as to ensure that there are no significant impacts or risk to human and/or on ecosystem health and/or on uses of the sea.

C. To contain the use of marine resources and goods and other activities in marine areas to levels that are sustainable and that do not compromise uses and activities of future generations nor the capacity of marine ecosystems to respond to changes.

D. To apply the principles of good governance, both within Europe and globally.

These have been superseded in the proposed Marine Strategy Directive by the single overarching objective of achieving "**Good Environmental Status**" in European marine waters.

How Good Environmental Status (GES) is defined is fundamental to the effectiveness of the Marine Strategy Directive. Arriving at a definition that is acceptable to all will be a significant challenge, but we do not believe such a central question should be deferred until after the Directive has come into force. NGOs hope that stakeholders will be given the opportunity to participate in and contribute to a wider debate on what constitutes Good Environmental Status.

The list of GES criteria presented in this document is a joint contribution from BirdLife International, the European Environment Bureau, Greenpeace, the International Fund for Animal Welfare, Oceana, the Fisheries Secretariat, Seas At Risk and WWF to this debate. The list contains two overarching criteria (namely criteria a and b) that describe the desired outcomes for ecosystem components, and a series of criteria (c to p) that refer to the control and detection of pressures and responses that result from human activities in the marine environment. The latter reflects the fact that we can only aim to manage human activities and not the marine environment itself and builds on the ecosystem approach to the management of human activities. All criteria have been drafted to be consistent with international and regional commitments.

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A Marine Region may be considered to have Good Environmental Status when all of the following conditions are met:

Biodiversity and ecosystem functions

a) All constituent marine ecosystems function within the limits of their natural carrying-capacity and are resilient to broader environmental change.

b) The natural flora and fauna of the region, and the structure, function and processes of its constituent marine ecosystems, are not at risk from human activities and their quality status is maintained (where no decline in quality has been detected) or restored (where downward trends in quality have been detected), paying particular attention to those species that are commercially or recreationally exploited, or are especially vulnerable to the impacts of human activities due to certain ecological characteristics (e.g. fragile, sensitive, slow growth, low fecundity, long-lived, edge of range, poor gene flow and genetically distinct sub-populations).

Extractive and exploitative uses of the sea

c) Marine capture fisheries and any other use of marine species, of habitats and of non-living marine resources (including seabed mineral resources) are conducted in a manner and at a scale which does not compromise the primary criteria a) and b) above. The exploited ecosystems must show no evidence of systematic degradation relative to those in unexploited areas. In the case of exploited marine species, this implies that population dynamics and population levels are close to those for unexploited ecosystems, with the long-term abundance of the species and age and size distributions indicative of a stable population. In addition, none of these activities must pose a threat to human health, compromise other legitimate uses of the sea, or in the case of renewable resources, reduce the potential for activities of and uses by future generations.

d) Fishing is conducted in a way that has been demonstrated to have no or minimal impacts on the seabed as well as no or minimal by-catch of non-target and juvenile organisms, and accordingly does not compromise the primary criteria a) and b) above.

Introduction of substances, materials and energy

e) Actions have been taken to protect and preserve the marine environment from all sources of pollution, including all possible steps to prevent and eliminate pollution from land-based sources, offshore sources and by dumping at sea. In particular:

f) Discharges, emissions and losses of hazardous substances (incl. endocrine disrupters) have ceased.

g) Influxes of nutrients (inorganic and organic), degradable organic matter and pathogens from all sources (e.g. rivers, sewers, run-off, aquaculture, atmospheric inputs) do not result in the primary criteria a) and b) above being compromised, and do not result in a systematic increase in the predominance of nuisance species or systematic decrease in oxygen concentrations in the water column, nor other threats to human health or other legitimate uses of the sea.

h) Harmful operational discharges and emissions from ships have been eliminated, and the chance of accidents leading to harmful discharges reduced to a minimum.

i) There are no intentional releases of oil and other harmful substances from platforms or other man-made structures, and measures are in place to prevent accidental releases.

j) The quantity of litter in marine and coastal environments has been minimised and does not pose a threat to marine species and habitats, human health or legitimate uses of the sea and coast.

k) There is no disposal of any waste or other matter into the water column, seabed or subsoil, unless specifically exempted or authorized under relevant national and international conventions, agreements and law, a prior environmental impact assessment is performed in accordance with Directive 85/337/EEC and relevant international conventions, and regular monitoring and controls are put in place.

l) Inputs of noise and other energy, including from vessels, acoustic devices, construction activities and other human uses of the sea, are minimised and have been demonstrated to have no significant adverse impacts on marine species (with particular regard to marine mammals), human health or other legitimate uses of the sea.

Releases into the environment

m) There are no intentional releases of non-native species, and measures are in place to prevent accidental releases, including through ballast water discharges, surface scraping of vessels to remove fouling organisms and escapes from aquaculture operations.

n) Any culture of genetically modified marine organisms is confined to secure, self-contained, land-based facilities in order to prevent their release to the marine environment.

Other human activities

o) All other human activities, including the construction, commissioning, operation and decommissioning of all man-made structures at sea, dredging and desalination are conducted in a manner and at a scale which does not compromise the primary criteria a) and b) above, does not systematically reduce the reproductive capacity of any species, does not pose a threat to human health or other legitimate uses of the sea and does not reduce the potential for uses and activities of future generations in the marine environment.

p) In any region, in addition to the wider marine environment satisfying the criteria a) and b) above, a complementary set of areas should be legally and permanently set aside to safeguard unique features and the best examples of typical features, allow the restoration of degraded systems, and contribute to an ecologically coherent regional and global network of well managed marine protected areas. Their purpose is also to act as undisturbed reference areas.