

Joint NGO Guidance Paper on the implementation of the MSFD

A resource document for environmental NGOs
on the implementation of the Marine Framework Strategy Directive

March 2012



*Coalition
Clean Baltic*



 **SEAS AT RISK**

The European Seas Environmental Cooperation (ESEC) is an informal network between the Black Sea NGO Network (BSNN), the Coalition Clean Baltic (CCB), the Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO-ECSDE), and Seas At Risk (SAR), which work for the protection of the marine environment in Europe's regional sea basins: the Baltic, Black and Mediterranean Seas and the North-East Atlantic Ocean.

Black Sea NGO Network (BSNN) is a regional association of NGOs from all Black Sea countries. The BSNN members, currently over 60, are brought together by the common concern for the decreasing environmental quality of the Black Sea and the need for the adoption of democratic values and practices in the Black Sea countries that follow the ideals of sustainability.

Website: <http://www.bsnn.org>

Coalition Clean Baltic (CCB) is a politically independent, non-profit association, which unites 27 member organizations, with over half a million members in all countries around the Baltic Sea. The main goal of CCB is to promote the protection and improvement of the Baltic Sea environment and its natural resources.

Website: <http://www.ccb.se>

The Mediterranean Information Office for Environment, Culture and Sustainable Development (MIO-ECSDE) is a non-profit Federation of 121 Mediterranean NGOs for Environment and Development. MIO-ECSDE acts as a technical and political platform for the presentation of views and intervention of NGOs in the Mediterranean scene and plays an active role for the protection of the environment and the promotion of the sustainable development of the Mediterranean region and its countries.

Website: www.mio-ecsde.org

Seas At Risk (SAR) is a democratic international network which uses its unique membership base and long-standing expertise to advocate environmentally sound policies at European and international level. SAR's vision is "Healthy marine ecosystems whose benefits can be enjoyed now and in the future".

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Introduction

The Marine Strategy Framework Directive (MSFD) is the first all-encompassing piece of European legislation specifically aimed at the protection of the marine environment. Its key aim is to achieve Good Environmental Status (GES) in European waters by 2020. With this aim in mind, the Directive establishes several implementation steps, which should guide progress towards the achievement of GES in 2020 and allow for the revision of the Directive's components thereafter.

The present Guidance Paper is intended to assist NGOs in their advocacy and policy formulation efforts at regional, national and local level. In particular, this paper has been drafted on the occasion of the national consultations on the MSFD and presents a set of recommendations to guide and assist NGOs in their contributions to these consultation processes.

1. Marine Strategy Framework Directive: State of play and next steps

1.1. Why is the MSFD so important?

- The MSFD is the first encompassing piece of EU legislation specifically aimed at the protection of the marine environment.
- The Directive foresees an ecosystem-based approach to the management of all human activities which have an impact on the marine environment.
- It imposes an obligation on all EU Member States to take the necessary measures to achieve or maintain Good Environmental Status in their marine waters by 2020.
- The MSFD foresees a regional approach to implementation, making use of Regional Seas Conventions.

Definition of GES – MSFD Art. 3 (5)

'Good environmental status' means the environmental status of marine waters where these provide ecologically diverse and dynamic oceans and seas which are clean, healthy and productive within their intrinsic conditions, and the use of the marine environment is at a level that is sustainable, thus safeguarding the potential for uses and activities by current and future generations, i.e.:

(a) the structure, functions and processes of the constituent marine ecosystems, together with the associated physiographic, geographic, geological and climatic factors, allow those ecosystems to function fully and to maintain their resilience to human-induced environmental change. Marine species and habitats are protected, human-induced decline of biodiversity is prevented and diverse biological components function in balance;

(b) hydro-morphological, physical and chemical properties of the ecosystems, including those properties which result from human activities in the area concerned, support the ecosystems as described above. Anthropogenic inputs of substances and energy, including noise, into the marine environment do not cause pollution effects;

Good environmental status shall be determined at the level of the marine region or subregion as referred to in Article 4, on the basis of the qualitative descriptors in Annex I. Adaptive management on the basis of the ecosystem approach shall be applied with the aim of attaining good environmental status.

1.2. Where are we now in the implementation process?

By the 15th July 2012, Member States must have produced some of the most important deliverables of this Directive:

- a. An initial assessment of the current environmental status of their marine waters (by reference to Table 1 of Annex III) and of the environmental pressures and impacts of human activities on the marine environment (based on Table 2 of Annex III). The initial assessment must include an economic and social analysis of the use of those waters and of the cost of degradation of the marine environment.
- b. The determination of Good Environmental Status at the level of the marine region or sub-region, on the basis of the qualitative descriptors in Annex I and in reference to the initial assessment. The definition of GES will be done on a case by case basis, rather than being a single one for all Member States.
- c. The setting of environmental targets and associated indicators, in order to guide progress towards achieving GES. The targets should be based on the initial assessment and take account of the indicative lists of pressures and impacts set out in Table 2 of Annex III, and of characteristics set out in Annex IV.

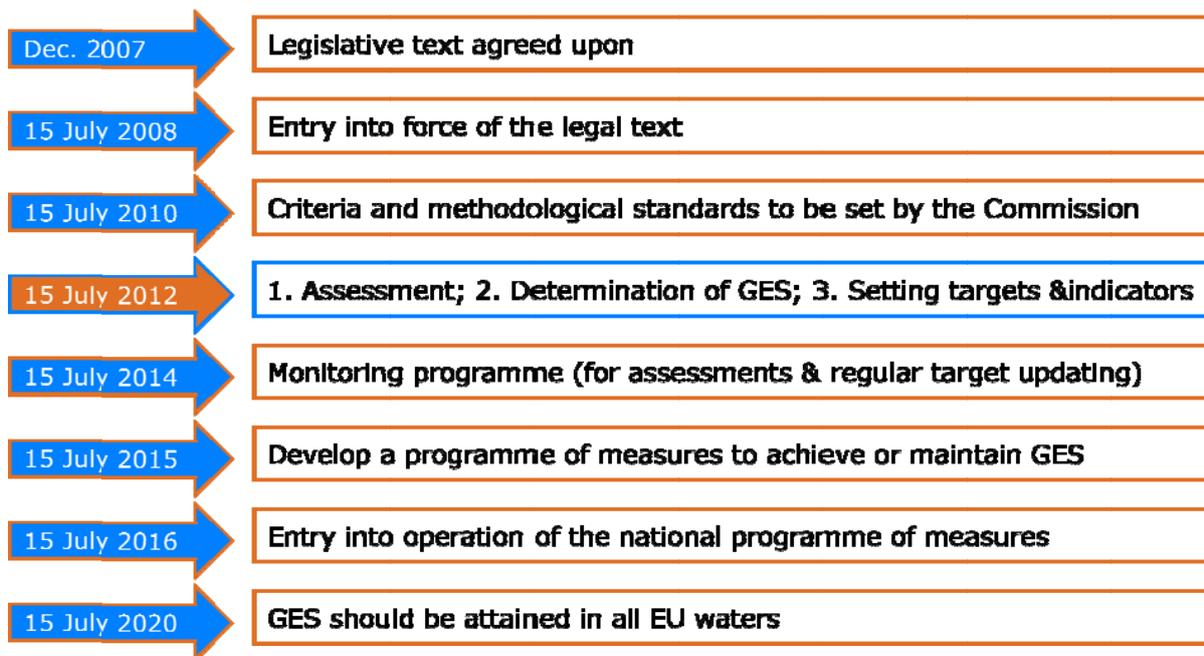


Figure 1. Main milestones in the implementation of the MSFD

1.3. Who are the actors?

The Directive imposes responsibilities and obligations on the Member States. Nevertheless, some decisions and activities are delegated to the European Commission.

It is up to the Member States to decide (in consultation with stakeholders) what they consider to be Good Environmental Status and to set their own environmental targets. Later in the process they will have to set up their own monitoring programmes and design and implement a programme of measures to achieve GES.

1.4. Role of the Regional Seas Conventions

The MSFD has a strong focus on the development of a coherent, co-ordinated and integrated approach to the marine environment. The Directive MSFD requires Member States sharing a marine region or sub-region to cooperate to ensure that the Directive's objectives are achieved and to coordinate their actions on each step of the marine strategies using the mechanisms and structures of the regional sea conventions. They are also obliged to make every effort to coordinate their actions with third countries in the same region or sub-region, taking account of their national obligations under the Directive.

The Regional Seas Conventions (RSCs) such as OSPAR, HELCOM, the Barcelona Convention and the Bucharest Convention can therefore provide a forum for Member States in the same marine region to coordinate their efforts (also in later stages of the implementation process – for example, when it comes to the implementation of monitoring programmes).

Regional cooperation – MSFD Art. 5 (2)

Member States sharing a marine region or subregion shall cooperate to ensure that, within each marine region or subregion, the measures required to achieve the objectives of this Directive, in particular the different elements of the marine strategies referred to in points (a) [initial assessment, determination of GES, setting environmental targets and implementing monitoring programmes] and (b) [programme of measures], are coherent and coordinated across the marine region or subregion concerned, in accordance with the following plan of action for which Member States concerned endeavour to follow a common approach.

Coordination and communication with Third Countries is essential. Coordination will help ensure that conflicting activities are not taking place and will allow for meaningful, practical and effective measures to be established. Without such coordination Member States run the risk that their attempts to achieve or maintain GES will be inadvertently countered by Third Country activities. In that respect, existing international structures, such as the Regional Sea Conventions, should be preferably used to coordinate the regional implementation of the Directive and be used as forums for communication between EU Member States and Third Countries.

1.5. Towards an MSFD Common Implementation Strategy

In addition to regional cooperation, the European Commission is working to ensure a consistent and harmonized approach in all marine regions/sub-regions by Members States, in an effort to facilitate the success of the MSFD implementation. In that respect a process to develop a Common Implementation Strategy (CIS) has been established, whereby a Committee structure oversees the details of implementation.

The Committee itself is made up of the Commission and Member States, but it is advised by several working groups, where stakeholders are allowed as participants. The current structure is as follows:

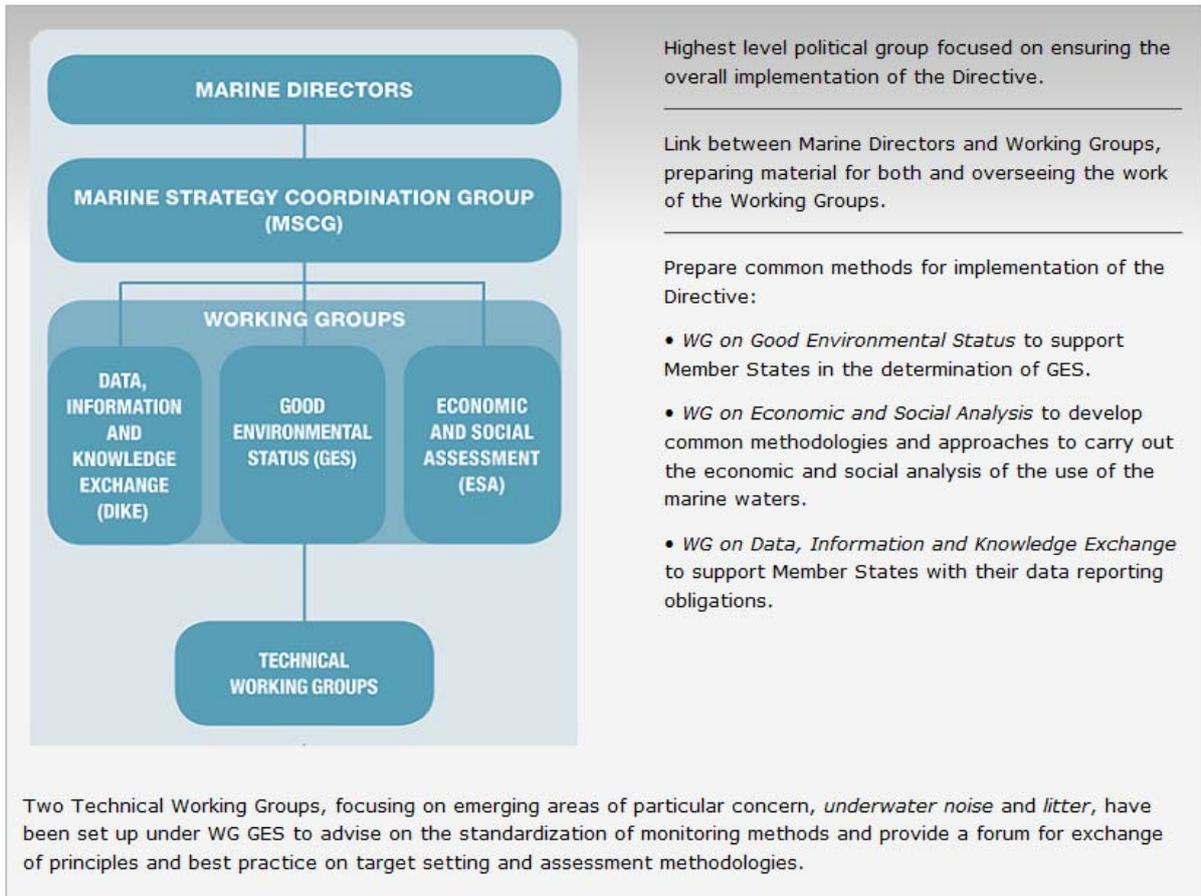


Figure 2. Committee structure to develop a Common Implementation Strategy (CIS) for the implementation of the MSFD.

These working groups have produced documents which can provide some useful guidance on several aspects of the implementation of the Directive. You can find them in the “Resources” section at the end of this document.

2. The MSFD and public participation

2.1. Why get involved?

The implementation of the MSFD poses new challenges and opportunities for the environmental movement, at regional but also at national level. NGOs through their involvement and active participation, in the different steps of the process, can ensure the improvement and protection of the marine environment in Europe and the conservation of its resources in the next few decades.

At this step of the process, Member States must submit their draft reports on the initial assessment, the determination of GES and the environmental targets to a public consultation procedure before finalising them, as provided for in the Directive:

Public consultation and information – MSFD Art. 19

1. In accordance with relevant existing Community legislation, Member States shall ensure that all interested parties are given early and effective opportunities to participate in the implementation of this Directive, involving, where possible, existing management bodies or structures, including Regional Sea Conventions, Scientific Advisory Bodies and Regional Advisory Councils.

2. Member States shall publish, and make available to the public for comment, summaries of the following elements of their marine strategies, or the related updates, as follows:

(a) the initial assessment and the determination of good environmental status, as provided for in Articles 8(1) and 9(1) respectively;

(b) the environmental targets established pursuant to Article 10(1);

(c) the monitoring programmes established pursuant to Article 11(1);

(d) the programmes of measures established pursuant to Article 13(2).

The national consultations provide NGOs with an opportunity to give input on these elements, and to voice their concerns and demands. Having a proper vision of what represents “good” environmental status and setting the right environmental targets is very important – ultimately, it will be these targets that will drive the programmes of measures. Weak targets will mean weak measures. This is one of the most fundamental tasks for NGOs to evaluate and point out.

2.2. When to get involved?

Table 1. Timeline for public consultations in the different EU Member States

EU Member States	Consultation starts	Consultation ends	Website
Belgium	April 2012	May 2012	
Bulgaria	From April 2012		
Cyprus	Spring 2012		
Denmark	1 February 2012	30 April 2012	
Estonia	1 April 2012 ?	31 May 2012	http://www.envir.ee/merestrategie
Finland	1 April 2012	15 May 2012	
France	Before May 2012		
Germany	14 October 2011	14 April 2012	http://www.meeresschutz.info/index.php/berichte.html
Greece			
Ireland	End 2012?		
Italy	June 2012?		
Latvia	May?		http://www.lhei.lv/lv/jurasdirektiva.php
Lithuania	1 February 2012?	31 May 2012?	
Malta			
Netherlands	6 April 2012	18 May 2012	http://www.centrumpp.nl/
Poland	31 May 2012	6 August 2012	
Portugal	June 2012		
Romania	First semester 2012		
Slovenia			
Spain	May 2012		
Sweden	19 March 2012	16 April 2012	
United Kingdom	27 March 2012	27/30 June 2012	

2.3. How to contribute? Issues of concern and recommendations

Within the framework of the national consultations, NGOs should try to ensure that:

- Initial assessments are rigorous and accurate, reflecting all the relevant aspects covered by Annex III of the MSFD, as well as the Commission’s decision on criteria and methodological standards.

For example NGOs should make sure that all essential features, characteristics pressures and impacts are addressed by the initial assessments and point out any factual errors or omissions.

- The definition of GES at the national or regional level is ambitious and adequate, and does not just represent the status quo (the already impacted marine environment).

For example GES for marine litter could be defined in the following way: GES will be attained when marine litter is no longer introduced into the marine environment and where the marine environment is free of marine litter, or where levels are close to zero.

- Environmental targets are ambitious, as they will drive the elaboration of the programmes of measures to achieve GES.

For example a 50% an overarching and practical target for all marine litter in EU waters for 2020 could be to reduce the amount of marine litter by a minimum of 50% from an agreed baseline level.

2.3.1. Determining GES

The primary aim of the MSFD is not to achieve “sustainable development” or “sustainable use” of the marine environment. Rather, the primary objective is to achieve and maintain Good Environmental Status, to protect, preserve and restore the marine environment and to avoid its deterioration. In doing so, the Directive aims to ensure that the cumulative and combined pressures of human activities do not hinder the achievement of GES and the resilience of marine ecosystems to respond to anthropogenic effects, so enabling the sustainable use of marine resources now and in the future.

By phrasing the Directive in this way, there is an implicit recognition that sustainable use is dependent on a healthy functioning marine environment.

Objectives – MSFD Art. 1

1. This Directive establishes a framework within which Member States shall take the necessary measures to achieve or maintain good environmental status in the marine environment by the year 2020 at the latest.
2. For that purpose, marine strategies shall be developed and implemented in order to:
 - (a) protect and preserve the marine environment, prevent its deterioration or, where practicable, restore marine ecosystems in areas where they have been adversely affected;
 - (b) prevent and reduce inputs in the marine environment, with a view to phasing out pollution as defined in Article 3(8), so as to ensure that there are no significant impacts on or risks to marine biodiversity, marine ecosystems, human health or legitimate uses of the sea.
3. Marine strategies shall apply an ecosystem-based approach to the management of human activities, ensuring that the collective pressure of such activities is kept within levels compatible with the achievement of good environmental status and that the capacity of marine ecosystems to respond to human-induced changes is not compromised, while enabling the sustainable use of marine goods and services by present and future generations.

4. This Directive shall contribute to coherence between, and aim to ensure the integration of environmental concerns into, the different policies, agreements and legislative measures which have an impact on the marine environment.

While we recognise that the aim of the MSFD is not to achieve a completely pristine marine environment, the determination of GES should not preclude the option to retain in or restore to a pristine condition certain elements of the ecosystem or rare or fragile habitats.

GES should not be set at the status quo. The MSFD was developed in response to an agreed view that the marine environment has suffered damage and that human induced pressures are increasing. Consequently the GES descriptors, indicators and targets must be set at ambitious levels, and not just at levels that are easily achievable within the given timeframe.

For example when it comes to fisheries an ambitious target would be to rebuild the biomass of fish stocks to above B_{MSY} within a chosen timeframe, as a necessary precondition to reaching MSY.¹

A key issue is if GES under the MSFD is defined and approached in a coherent way with Good Ecological Status, as provided for in the Water Framework Directive (WFD).

2.3.2. Setting environmental targets and associated indicators

It is important to ensure that the targets are at least as 'ambitious' as existing commitments (for example, in the context of RSCs or other Directives, such as the Water Framework Directive, and the Birds and Habitats Directives). These already decided targets must form the minimum standards also for the MSFD implementation and NGOs must underline this.

However, it is also important to secure value-added for the MSFD: the marine strategies should not be a simple compilation of all the targets that exist under other legislation. The MSFD poses an opportunity to really extend environmental protection to the whole sea basin (and not just to protected areas or species) and to apply measures to all human activities having an impact on the marine environment. This is an opportunity not to be missed.

When it comes to the specific targets and indicators, it is necessary to assess whether they are strong enough or detailed enough to ensure that the status of that component of the marine environment is either maintained at a high conservation status or is moving in the right direction. For example, would we consider GES achieved if 25% of a species was below the target set?

The issue of geographical scale and also of time-scales and metrics for indicators is important. Too large an area may mask local impacts and their causes (pressures). In contrast, too small an area may not be feasible for monitoring and assessment purposes or prove insufficient to cover the spatial distribution of biodiversity components or pressures and thus to evaluate wider effects of individual of cumulative local impacts. Specific focus should be given to time-scales required for management and metrics related to indicators, in order for them to provide suitable sensitivity and robustness to variation in natural processes. If an indicator is too aggregated, changes in an environmental component (positive or negative) may be masked.

¹ The maximum sustainable yield (MSY) for a given fish stock means the highest possible annual catch that can be sustained over time, by keeping the stock at the level producing maximum growth. The MSY refers to a hypothetical equilibrium state between the exploited population and the fishing activity. MSY is supported by a stable population size known as B_{MSY} (= "biomass MSY"). Consequently, "reaching MSY" means rebuilding fish populations to the B_{MSY} level, in order to be able to support the level of annual catches known as MSY.

Baselines and trends

In order to set environmental targets, Member States first need to identify baselines against which to measure their progress. Baselines provide an important standard against which to set the targets.

It is important that baselines are set correctly, so as to avoid the “shifting baselines syndrome”, whereby each generation at the beginning of their career redefines what it is they understand to be a “healthy” marine environment, which may represent significant changes from the original state of the system or even an already significantly impacted scenario.

There are several possible methods for setting baselines, and several associated methods for setting environmental targets. These are summarised below – for more information on baseline and target setting, please see Annex I.

Baseline and target setting methods (according to the Draft OSPAR Advice Manual on Biodiversity)

Approaches to setting **baselines** are:

Method A (reference state/negligible impacts) - Baselines can be set as a state in which the anthropogenic influences on species and habitats are considered to be negligible;

Method B (past state) - Baselines can be set as a state in the past, based on a time-series data set for a specific species or habitat, selecting the period in the dataset which is considered to reflect least impacted conditions;

Method C (current state) - The date of introduction of an environmental directive or policy can be used as the baseline state. As this may represent an already deteriorated state of biodiversity, the associated target should include an expression of no further deterioration from this state.

Approaches to **target-setting** are:

Method 1. Directional or trend-based targets:

- i. direction and rate of change
- ii. direction of change only

Method 2. Targets set at a baseline

Method 3. Target set as a deviation from a baseline

Several Member States are considering using trends when setting their environmental targets. Most Member States advocate this option in instances when scientific knowledge or understanding of a certain descriptor is considered to be limited. For example, when it comes to marine litter most Member States are likely to set a target of “reduction over time”, rather than setting a quantifiable, time-bound target, such as “40% less litter on beaches by 2020”.

Other Member States, however, are only planning to use trends for each and every descriptor.

Trends provide an easy solution to a perceived lack of information, but they are insufficient to guide significant improvements in environmental quality. The use of trends should be seen as an interim option until the evidence base supports the establishment for more quantitative environmental targets and NGOs should urge the Member States to avoid such an approach and fulfil the ambitions of this Directive.

2.3.3. Applying the ecosystem-based approach and the precautionary principle

The Marine Strategy Framework Directive defines the ecosystem-based approach, in its Art. 1.3, in the following way:

Ecosystem-based Approach – MSFD Art. 1 (3)

Marine strategies shall apply an ecosystem-based approach to the management of human activities, ensuring that the collective pressure of such activities is kept within levels compatible with the achievement of good environmental status and that the capacity of marine ecosystems to respond to human-induced changes is not compromised, while enabling the sustainable use of marine goods and services by present and future generations.

It is important that conduct and management of human activities (including fisheries, dredging etc.) will be carried out in a way that supports the objectives of the MSFD, as well as the Birds and Habitats Directives. The application of the precautionary principle is a central part of this ecosystem approach.

The precautionary principle – Earth Summit (1992)

Principle #15 of the Rio Declaration notes:

In order to protect the environment, the precautionary approach shall be widely applied by States according to their capabilities. Where there are threats of serious or irreversible damage, lack of full scientific certainty shall not be used as a reason for postponing cost-effective measures to prevent environmental degradation.

The challenge for EU Members States is to investigate and quantitatively evaluate, specify and propose options and undertake actions for a gradual transition from the current fragmented management of these activities (e.g. fish stock based regime for fisheries management) to a mature integrated management, including strategies for the implementation of the ecosystem approach at regional level, reconciling short-term economic objectives with long-term ecosystem sustainability objectives.

In that respect, Member States should try to develop a set of fully costed ecosystem management options that will deliver the objectives of the Marine Strategy Framework Directive, the Habitats Directive, the European Commission Blue Book and the Guidelines for the Integrated Approach to Maritime Policy. The key objective is to produce scientifically-based operational procedures that allow for a step by step transition from the current fragmented system to fully integrated management.

2.3.4. Applying an integrated and coherent approach

The national Marine Strategies to be developed and implemented should also contribute to the overall coherence and integration of existing EU policies and legislation, such as the Water Framework Directive, the Habitats Directive, the Convention for Biological Diversity, Maritime Spatial Planning, the Community Guidelines on Integrated Coastal Zone Management (ICZM), the Common Agricultural Policy (CAP), The common Fisheries Policy (CFP), the ICZM Protocol of the Barcelona Convention, and other ongoing work of the Regional Seas Conventions.

In addition, the implementation of the MSFD should provide the guiding lines for future policy developments. MSFD provisions must be kept in mind and complied with when devising policies in the fields of fisheries, maritime transport, coastal development, etc.

2.3.5. Ensuring a consideration of socio-economic aspects

No “development” can result from the destruction of the marine environment. Protecting the marine environment must form the basis for economic growth, and it must be recognised that some economic activities (among which fisheries is the paradigmatic, but not sole, example) cannot even exist without a healthy environment and balanced ecosystems. Therefore, social and economic uses should be taken into account in determining GES.

2.3.6. Establishing coordinated monitoring programmes in 2014

Many monitoring programmes are fragmentary and do not meet the MSFD requirements. By 2014, Member States shall have established fit-for-purpose monitoring programmes and developed (by 2015) and implemented (by 2016) programmes of measures designed to achieve or maintain GES by 2020.

In case, Member States bring up arguments like arguments like “we do not have data” or “we can’t do this because of other directives”, they should be urged to make it clear where gaps exist in order that the limitations are defined and also to indicate what is needed to eliminate such gaps. NGOs should point out that existing monitoring tools could be appropriately adapted to meet the MSFD purposes and that new ones should be adopted in order to reach the objectives of the Directive.

3. Useful resources

Herewith, a set of useful resources are listed. However, it should be noted that these documents don’t necessarily or always reflect the views of the undersigned NGOs.

[Commission Decision on Criteria and Methodological Standards](#): a legally binding document detailing which criteria the Member States need to consider when setting their targets for each of the descriptors. If a Member States does not use some of the criteria, they have to provide a reasonable justification to the Commission.

[Commission Staff Working Paper](#): this document provides information on the Commission’s interpretation of the relationship between the initial assessment of marine waters and the criteria for Good Environmental Status

[Draft Common Understanding of \(Initial\) Assessment, Determination of Good Environmental Status \(GES\) & Establishment of Environmental Targets \(Articles 8, 9 & 10 MSFD\)](#): this document was prepared by WG GES and aims at providing a common interpretation of the provisions of the Directive regarding the July 2012 deliverables. It is a rather good guidance document, and although it is not legally binding it would be good if Member States would follow it, at least a minimum standard.

[Guidance document on economic and social analysis for the initial assessment](#): this guidance document was prepared by WG ESA and contains information on the different approaches that can be used to calculate the economic value of marine waters and the cost of their degradation.

[Guidance document on marine litter](#): this document was prepared by the Technical Sub-group on Marine Litter and contains a lot of useful information on the available knowledge of the issue, monitoring possibilities and how to develop targets and indicators for this descriptor.

[Final report of the Technical Sub-group on noise and other forms of energy](#): this document details all the knowledge gaps and future monitoring and research needs on the issue.

Annex I- Baseline setting methods and target-setting approaches²

a) Baselines

Method A - Baseline as a state at which the anthropogenic influences are considered to be negligible

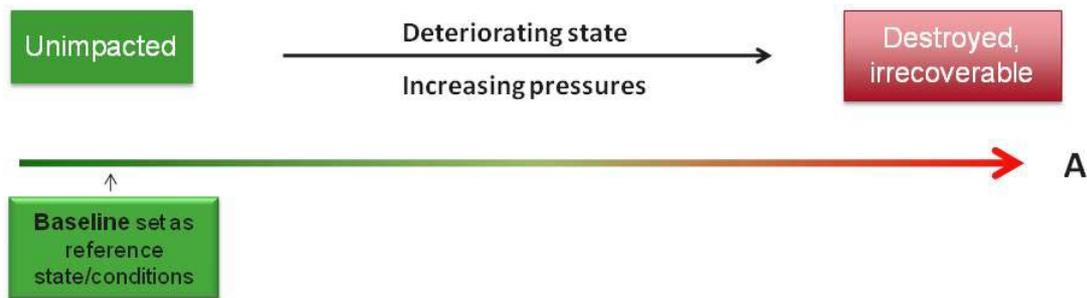


Figure 1. Baseline method A – as a state at which anthropogenic influences are negligible (reference state).

A state when anthropogenic influences are considered to be negligible can be identified in 3 different ways:

- Existing reference state: using current information on species and habitats from areas where human pressure is considered negligible or non-existent (for example, in some marine protected areas).
- Historical reference state: using historical information to ascertain what a habitat/community or species population may have been like at a time when impacts from human activities were negligible.
- Modelling of reference state: using models to determine a reference state (models depend on historic as well as current information to develop a theoretical state of unimpacted ecosystems under present climatic conditions).

² Adapted from the draft OSPAR Advice Manual on Biodiversity.

Method B - Baseline set in the past

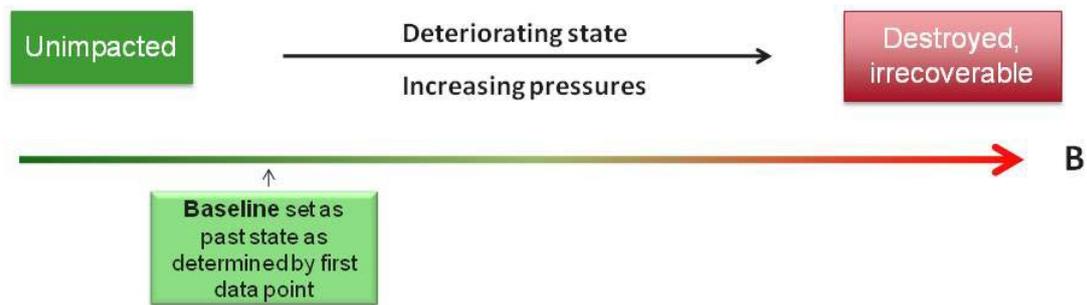


Figure 2. Baseline method B – as a state set in the past (often when monitoring first started).

The second method is to set a baseline as a past state (Figure 2), based on a time-series data set for a specific species or habitat. Expert judgement is needed to select the period in the dataset which is considered to reflect least impacted conditions; this may be the date of the first data point in a time series, provided this is considered the least impacted state of the time series. It is important to note that this first data point is not intended to represent an unimpacted/reference state, but simply when research or data recording on a particular species population or habitat began.

It is a robust approach in the sense that it is based on a time series of scientific data which should indicate how the state of a feature has changed over time; however, it can be limited by the quality and quantity of the data (for example, if the time series is rather short). It is straightforward and comprehensible, but resultant targets run the risk of being based on an already significantly impacted scenario. This is sometimes referred to as the ‘shifting baselines syndrome’³, where each generation at the beginning of their career redefines what it is they understand to be a ‘healthy’ marine environment, which may represent significant changes from the original state of the system.

Method C - Current baseline

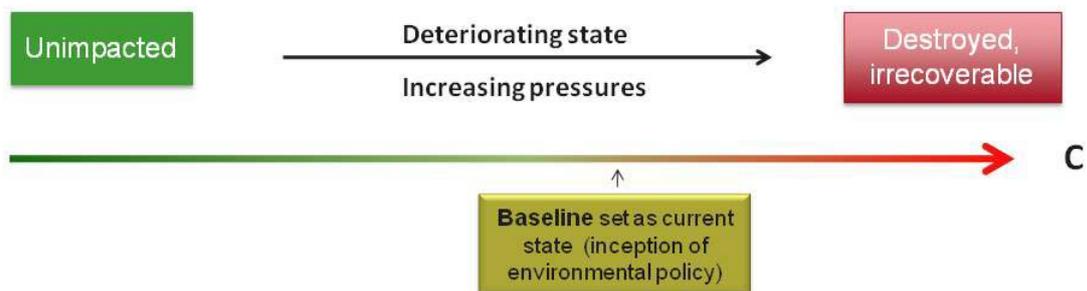


Figure 3. Baseline method C – as current state e.g. at inception of a policy or first assessment.

³ As described by Pauly, D (1995) "Anecdotes and the shifting baseline syndrome of fisheries." Trends in Ecology and Evolution, 10(10):430.

Finally, baselines can be set as the date of inception of a particular environmental policy or the first assessment of state (Figure 3). This approach was used in the context of the Habitats Directive, where the date when the Directive came into force was used by many European countries as the baseline for favourable reference values. This type of baseline is typically used with the objective of preventing any further deterioration from the current state; there can additionally be a target to improve the state from such a baseline (towards a reference state).

This approach could be appropriate where it is determined that GES has already been achieved and hence only requires “maintenance” under the MSFD. However, it is not considered appropriate where deterioration or degradation has already occurred. In addition, there is a significant risk of succumbing to ‘shifting baseline syndrome’ as described above. This method is generally more appropriate for use in setting baselines for pressures.

b) Targets

Once an appropriate baseline has been established, environmental targets (for state, impacts and pressures) can then be generated in line with the methodologies outlined below.

Several different ‘target-setting options’ exist:

- Method 1. Directional or trend-based targets
 - direction and rate of change
 - direction of change only
- Method 2. Targets set as the baseline
- Method 3. Target set as a deviation from the baseline

Method 1: Directional or trend-based targets

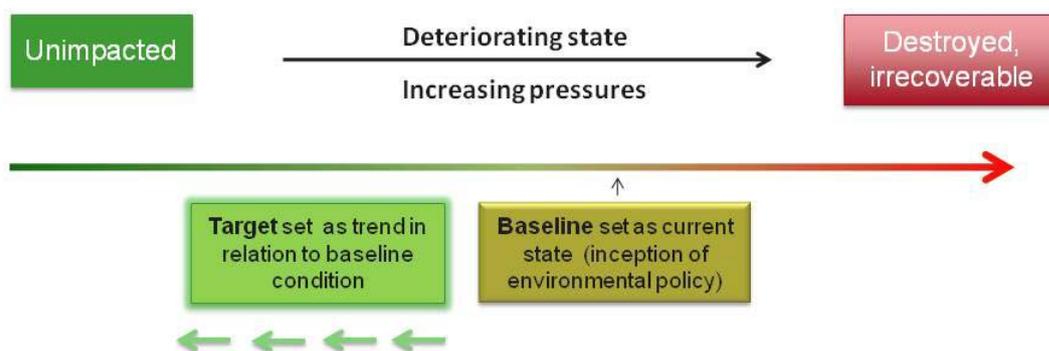


Figure 4. Target setting method 1 – directional or trend-based (here illustrated as an improvement compared with current state).

Directional or trend-based targets represent an improvement towards a more desirable state (e.g. a larger population of a particular species, or good condition of a habitat type over an increasing area) (Figure 4). They can be articulated simply as a direction of change, or as both direction and rate of change of an environmental parameter. This approach is relatively practical and straightforward, but it does not allow for a clear assessment of whether GES has been achieved, as a slight trend might be seen as “meeting the target”, but it might still be very far off from GES. This can be overcome by

expressing an improving trend up to a defined limit (e.g. the carrying capacity of a species) and then an acceptable deviation from this higher limit.

Method 2: Target set as the baseline

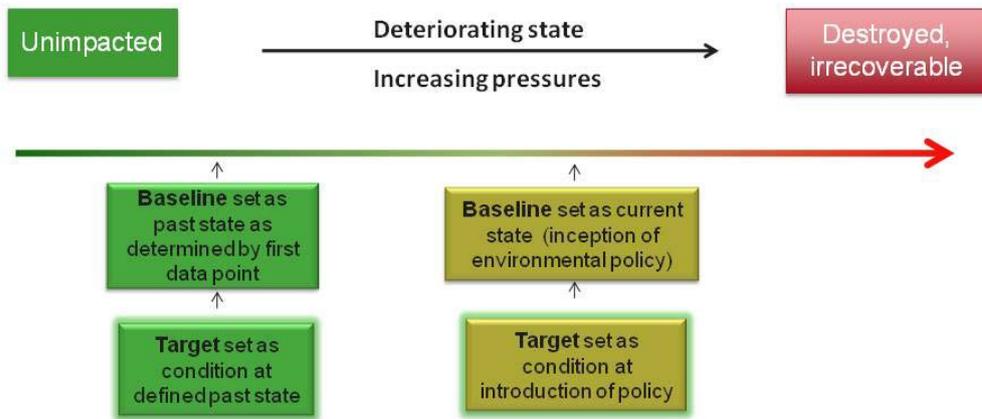


Figure 5. Target setting method 2 –target is set as the baseline (here two examples for baselines are illustrated: past and current baselines).

The target can be set as equivalent to the baseline (whether that be current state or a past known state) (Figure 5).

Method 3: Target set as a deviation from a baseline

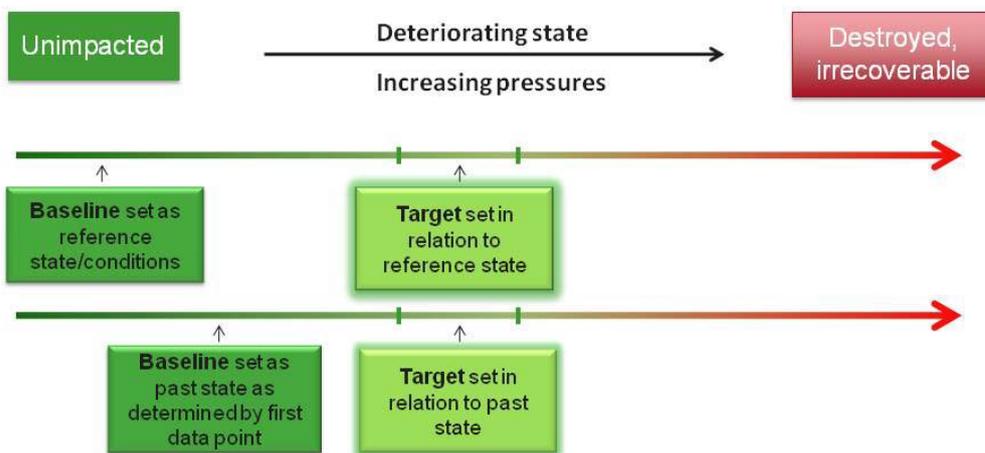


Figure 6. Target setting method 3 –target as a deviation from a baseline (here illustrated as a defined deviation from a reference or past state).

Targets can be set that represent a specified deviation from a chosen baseline, which is typically the reference state or past state (Figure 6), but can also be in relation to a current state when the target should be for an improved state rather than a deteriorated state. For example, a target can be set as the percentage of baseline habitat extent or species population size (or aspect of habitat or species condition, e.g. seagrass shoot density). These types of targets can be set as a percentage range or single percentage figure.