

UK Technical Advisory Group on the Water Framework Directive

Prevent Deterioration Of Status

This Guidance Paper is a working draft defined by the UKTAG. It documents the principles to be adopted by agencies responsible for implementing the Water Framework Directive (WFD) in the UK. This method will evolve as it is tested, with this working draft being amended accordingly.

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WFD	WFD, objective setting	Review:	
Requirement:	This guidance complements the EU guidance: draft Article 4(7); & objective setting guidance.		

- Two of the objectives of the Water Framework Directive are to ‘prevent deterioration of the status of all bodies of surface water’ and ‘prevent the deterioration of the status of all bodies of groundwater’¹. This paper sets out the UKTAG’s understanding of these requirements. It also discusses the exceptions allowed by the Directive.

Limit of application of this paper

This paper sets out understanding of the WFD ‘prevent deterioration’ objectives only.

The existing ‘No deterioration’ policies applied by the individual agencies, to inform regulatory decisions on new discharges and increases in load for existing discharges, will continue to be applied. These policies consider sustainable development and fair allocation principles when considering consent/permit limits and any permissible changes to the existing water quality of the receiving watercourse. These policies can be obtained from the relevant agencies in Scotland, England & Wales and Northern Ireland.

Principles

Application

- The Directives requires that Member States implement measures to prevent deterioration of the status of each water body. The wording of Article 4(1)a and 4(1)b defines this as the prevention of deterioration between status class.²
- The requirement of no deterioration of status class applies to each water body. Deterioration of the status of one water body cannot be offset by an improvement of another.

From when must deterioration of status be prevented?

- The date from which Member States must ensure that deterioration of status is prevented is not stated explicitly in the Directive.
- Failing to take action to prevent deterioration of status can increase future costs. This is because restoring damaged water bodies can be more expensive than preventing damage in the first place. Accordingly, UKTAG advises that its member agencies:
 - Use their existing powers in a way that is consistent with the objective of preventing deterioration of status; and

¹ Article 4(1)(a)(i) and 4(1)(b)(i)

² and is compared to the wording of Article 4(7) for Drinking Water Protected Areas.

- In liaising with other decision-makers, promote decisions that are consistent with the objective of preventing deterioration of status.

Preventing Deterioration of Status

6. The status class reported for a surface water body is dictated by the quality element worst affected by human activity. Similarly, for a groundwater body to be in Good Status, each of the conditions defining good status must be met³.
7. Suppose the condition of one quality element in a surface water body puts the water into Poor Status, and all the other quality elements are compatible with Good Status or better. In this instance the condition of the other quality elements normally would not be permitted to deteriorate to Poor⁴.
8. The environment agencies make regulatory decisions (like issuing an environmental permit) by reference to environmental standards. When making regulatory decisions, the agencies will apply the established principles of no deterioration to each environmental standard. Suppose a single environmental standard (for example, the Specific Pollutant, copper) is failed. The water body would be classed as Moderate. When making regulatory decisions, the agencies would not authorise another environmental standard to be failed.

Where deterioration of status is unavoidable

9. Where the following criteria apply, it may not be possible to prevent deterioration of status:
 - The deterioration results from effects that occurred before the introduction of the controls required as part of the Directive's Programme of Measures;
 - It is unfeasible, technically or economically⁵, to prevent deterioration of status; and,
 - All practicable steps are taken to mitigate the adverse impacts on the status of the water body.
10. For example, pollutants released into the unsaturated layers overlying a groundwater body may enter the body some time later. This may eventually cause the deterioration in status of groundwater or surface water bodies. Controlling further releases of pollutants into the unsaturated zone of the groundwater might not prevent such deterioration. In this example it may be possible to reduce the risks from some sources of pollution. In other cases it may be "technically infeasible" or "disproportionately expensive" to do so⁶.
11. The Directive provides no exemptions from its objective of preventing deterioration of status in the circumstances described above. However, no Member State would be able to meet the objective of no deterioration in status in such circumstances.

Managing the risk of deterioration and reporting status changes

12. The status class assigned to a water body may appear to change either because of the play of errors in monitoring or as improvements in monitoring enable errors in previous classifications to be reduced. This does not necessarily mean that an actual change in status has occurred. For example, it may mean that improved data have indicated that the status was previously misclassified. Such misclassifications are inevitable because monitoring data are never error

³ Refer paragraphs 4.3 and 7.3 of EU CIS guidance: *Overall Approach to the Classification of Ecological Status and Ecological Potential (November 2003)*

⁴ EU Commission policy summary: Environmental Objectives Under The Water framework Directive – 20 June 2005 references: A 'less stringent objective' does not mean that (a) the other quality elements are permitted to deteriorate to the status dictated by the worst affected quality element or (b) the potential for improvement in the condition of other quality elements can be ignored. (Page 20).

⁵ by this we mean a higher degree of test for disproportionately expensive. This is the more likely test to be applied.

⁶ This issue has been addressed in the forthcoming Daughter Directive on Groundwater which addresses 'preventing or limiting inputs'.

free. In this case, the substantive requirement of the Directive to prevent deterioration of status has not been breached.

13. This means that the monitoring process will produce different types of result:

- apparent changes in class that are produced by the play of chance from the errors in monitoring. This is called the face-value change in class. There is up to 50 per cent confidence that this change has not happened in the real environment and would not have been observed if it had been possible to have error-free monitoring. Deterioration of status for an individual water body will not be reported on the basis of a face value change in class as to do so would be clearly misleading;
- changes in class for which there is a particular degree of confidence that the change is real taking into account the uncertainties of monitoring. Deterioration of status for an individual water body will be reported where there is at least 95 percent confidence that the water body has deteriorated from one status class to a lower one.

14. The intent is to report deterioration of status class, where we are sure there is actual failure in meeting the status class requirements. There are cases where data provides between 50 and 95 percent confidence that a water body may have deteriorated from one status class to a lower one. Deterioration of status of a particular water body will not be reported on the basis of such results. The agencies will target further monitoring and investigation to ascertain whether the apparent deterioration is real and will review the effectiveness of those measures in place to prevent deterioration of status (e.g. by agencies undertaking site inspections and audit monitoring of authorised water uses).

15. Aggregated face-value monitoring data for a River Basin District (RBD) will be used to identify trends. Such evidence may be insufficient to identify deterioration of status of any particular water body in the RBD but may well be sufficient to suggest a deteriorating trend, and a risk to the RBD and water bodies generally. We recommend that the environment agencies use such evidence to seek action at the RBD scale to prevent further deterioration.

16. If a water body's status class is reported to be worse than previously reported, the reasons for the change will be communicated, setting out, for example:

- why the previous monitoring results are thought to have misclassified;
- the improvements to data that have allowed a more reliable classification; and,
- the efforts made to check that there is no evidence that the apparent change in status class is due to an increase in pressures on the water environment

Where Deterioration of Status is Allowed

17. The Directive has two exceptions to the requirement to prevent deterioration of status. These are set out in Article 4.6 (temporary deterioration of the status as a result of circumstances of natural cause or *force majeure*) and Article 4.7 (new modifications).

Temporary Deterioration (Article 4.6)

18. Article 4.6 allows a temporary deterioration of status where this is the result of circumstances of natural cause or *force majeure* which are exceptional or could not reasonably have been foreseen. In particular:

- extreme floods, or
- prolonged droughts, or
- the result of circumstances due to accidents which could not reasonably have been foreseen.

19. The exception does not apply to those effects of extreme floods and prolonged droughts, which could reasonably have been planned for and prevented.

20. The exception does not apply in the case of accidents, which could reasonably have been foreseen.

21. This only applies if the deterioration of status is temporary and so the previous status will be restored as soon as reasonably practicable.

22. The natural effects of prolonged droughts or extreme floods cannot themselves cause a deterioration of status. Status classes describe the magnitude of the effects of human activity on the water environment. Prolonged droughts and extreme floods cause deterioration of status by, for example, washing increased amounts of pollutants into water bodies or by exacerbating the effects of abstractions for public water supply or other purposes.

23. The exception only applies when all of the conditions in the boxes are met.

a. *All practicable steps are taken to prevent further deterioration of status and in order not to compromise the achievement of the objectives of this Directive in other bodies of water not affected by those circumstances*

24. We interpret the word 'practicable' implies a test of reasonableness that includes a consideration of cost and benefits.

b. *The conditions under which circumstances that are exceptional or that could not reasonably have been foreseen may be declared, including the adoption of the appropriate indicators, are stated in the river basin management plan;*

25. Several existing Directives have waivers for 'unusual weather condition' waivers. Policies have been developed setting out the circumstances under which a waiver is used. These policies have been developed in the light of experience in applying the specific requirements of each Directive.

26. It is recommended that for the first round of River Basin Management Plans that UKTAG develops a standard set of words that can be applied to each River Basin District. This will need to be (by necessity) high level and generic in nature.

c. The measures to be taken under such exceptional circumstances are included in the programme of measures and will not compromise the recovery of the quality of the body of water once the circumstance is over

27. The measures to prevent further deterioration and mitigate damage caused by exceptional circumstances will be tailored to individual circumstance. Should exceptional circumstances occur, the actions in response to it will be added to the programme of measures.

d. The effects of the circumstances that are exceptional or that could not reasonably have been foreseen are reviewed annually and subject to the reasons set out in paragraph 4(a), all practicable measures are taken with the aim of restoring the body of water to its status prior to the effects of those circumstances as soon as reasonably practicable

28. Article 4.4(d) requires Member States to attempt to restore a water body to its status prior to the effects of the exceptional circumstances. There is no requirement however, to take any restorative action that would be disproportionately expensive.

e. A summary of the effects of the circumstances and of such measures taken or to be taken in accordance with paragraph (a) and (d) are included in the next update of the river basin management plan

29. Article 4.6(e) is in effect a reporting requirement for the public and the Commission. Competent Authorities will need to ensure that their reporting and RBMP review processes address this requirement.

New Modifications (Article 4.7)

30. Article 4(7) makes provision for deterioration of status provided that all the following conditions are met:

- all practicable steps are taken to mitigate the adverse impact on the status of the body of water;
- the reasons for those modifications or alterations are specifically set out and explained in the river basin management plan required under Article 13 and the objectives are reviewed every six years;
- the reasons for those modifications or alterations are of overriding public interest and/or the benefits to the environment and to society of achieving the objectives set out in paragraph 1⁷ are outweighed by the benefits of the new modifications or alterations to human health, to the maintenance of human safety or to sustainable development;
- the beneficial objectives served by those modifications or alterations of the water body cannot for reasons of technical feasibility or disproportionate cost be achieved by other means, which are a significantly better environmental option; and
- exemption for activities that prevent the future achievement of good status through restoration activities have been defined.

31. The European Commission (DG Environment) is currently developing a paper on the application of Article 4(7). Once approved, UKTAG will consider whether this paper needs to include further consideration of Article 4(7)⁸.

⁷ Article 4(1)(a)(i) and 4(1)(b)(i)

⁸ And other European guidance that develops our understanding of the Directive's requirements

Directives Requirements

REQUIREMENTS

Article 1 Purpose

The purpose of this Directive is to establish a framework for the protection of inland surface waters, transitional waters, coastal waters and groundwaters which:

Article 1(a) Prevent further deterioration and protects and enhances the status of aquatic ecosystems and, with regard to their water needs, terrestrial ecosystems and wetlands directly depending on the aquatic ecosystem

Article 4.1 Environmental objectives

In making operational the programmes of measures specified in the river basin management plan:

Article 4.1(a) For surface waters

Article 4.1(a)(i) Member states shall implement the necessary measures to prevent deterioration of the status of all water bodies of surface water, subject to the application of paragraphs 6 and 7 and without prejudice to paragraph 8

Article 4.1(b) For groundwaters

Article 4.1(b)(i) Member states shall implement the measures necessary to prevent or limit the input of pollutants into groundwater and to prevent deterioration of the status of all bodies of groundwater, subject to the application of paragraphs 6 and 7 and without prejudice to paragraph 8 of the Article and subject to the application of Article 11(3)(j)

Article 4.1(b)(iii) Member states shall implement the measures necessary to reverse any significant and sustained upward trend in the concentration of any pollutant resulting from the impact of human activity in order progressively to reduce pollution

Article 4.4 The deadline established under paragraph 1 may be extended for the purposes of phased achievement of the objectives for bodies of water, provided that no further deterioration occurs in the status of the affected body of water when all of the following conditions are met: [*non of which qualify the no further deterioration requirement*]

Article 4.5 Member states may aim to achieve less stringent environmental objectives than those required under paragraph 1 for specific bodies of water when they are so affected by human activity, as determined in accordance with Article 5(1), or their natural condition is such that the achievement of these objectives would be infeasible or disproportionately expensive, and all the following conditions are met:

Article 4.5(c) No further deterioration occurs in the status of the affected body of water

EXCEPTIONS

- Article 4.6 Temporary deterioration in the status of bodies of water shall not be in breach of the requirements of this Directive if this is the result of circumstances of natural cause or *force majeure* which are exceptional or could not reasonably have been foreseen, in particular extreme floods and prolonged droughts, or the result of circumstances due to accidents which could not reasonably have been foreseen, where all of the following conditions are met:
- Article 4.6(a) All practicable steps are taken to prevent further deterioration in status and in order not to compromise the achievement of the objectives of this Directive in other bodies of water not affected by those circumstances;
- Article 4.6(b) The conditions under which circumstances that are exceptional or that could not reasonably have been foreseen may be declared, including the adoption of the appropriate indicators, are stated in the river basin management plan;
- Article 4.6(c) The measures to be taken under such exceptional circumstances are included in the programme of measures and will not compromise the recovery of the quality of the body of water once the circumstance is over;
- Article 4.6(d) The effects of the circumstances that are exceptional or that could not reasonably have been foreseen are reviewed annually and subject to the reasons set out in paragraph 4(a), all practicable measures are taken with the aim of restoring the body of water to its status prior to the effects of those circumstances as soon as reasonably practicable, and
- Article 4.6(e) A summary of the effects of the circumstances and of such measures taken or to be taken in accordance with paragraph (a) and (d) are included in the next update of the river basin management plan.
- Article 4.7 Member states shall not be in breach of the Directive when:
- Failure to achieve good groundwater status, good ecological status, or where relevant, good ecological potential or to prevent deterioration in the status of a body of surface water or groundwater is the result of new modifications to the physical characteristics of a surface water body or alterations to the level of bodies of groundwater, or
- Failure to prevent deterioration from high status to good status of a body of surface water is the result of new sustainable human development activities
- And all the following conditions are met:
- Article 4(7)(a) All practicable steps are taken to mitigate the adverse impact on the status of the body of water;
- Article 4(7)(b) The reasons for those modifications or alterations are specifically set out and explained in the river basin management plan required under Article 13 and the objectives are reviewed every six years;
- Article 4(7)(c) The reasons for those modifications or alterations are of overriding public interest and/or the benefits to the environment and to society of achieving the objectives set out in paragraph 1 are outweighed by the benefits of the new

modification or alterations to human health, to the maintenance of human safety or to sustainable development, and

Article 4(7)(d) The beneficial objectives served by those modifications or alterations of the water body cannot for reason of technical feasibility or disproportionate cost be achieved by other means, which are a significantly better environmental option.

Article 4(8) When applying paragraphs 3, 4, 5, 6 and 7, a Member State shall ensure that the application does not permanently exclude or compromise the achievement of the objectives of the Directive in other bodies of water within the same river basin district and is consistent with the implementation of other Community environmental legislation

Article 4(9) Steps must be taken to ensure that the application of the new provisions, including the application of paragraphs 3, 4, 5, 6, and 7, guarantees at least the same level of protection as the existing Community legislation.