

PD CEN/TR 16151:2011



BSI Standards Publication

Water quality — Guidance on the design of Multimetric Indices

bsi.

...making excellence a habit.
AVA Documents™
Document Sharing Hub

National foreword

This Published Document is the UK implementation of CEN/TR 16151:2011.

The UK participation in its preparation was entrusted to Technical Committee EH/3/5, Biological Methods.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© BSI 2011

ISBN 978 0 580 71891 5

ICS 13.060.45

Compliance with a British Standard cannot confer immunity from legal obligations.

This Published Document was published under the authority of the Standards Policy and Strategy Committee on 30 April 2011.

Amendments issued since publication

Date	Text affected
------	---------------

TECHNICAL REPORT
RAPPORT TECHNIQUE
TECHNISCHER BERICHT

CEN/TR 16151

April 2011

ICS 13.060.45

English Version

Water quality - Guidance on the design of Multimetric Indices

Qualité de l'eau - Lignes directrices pour la conception des
indices multimétriques

Wasserbeschaffenheit - Anleitung zur Planung und
Erstellung Multimetrischer Indices

This Technical Report was approved by CEN on 27 December 2010. It has been drawn up by the Technical Committee CEN/TC 230.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents

Page

Foreword.....	3
Introduction	4
1 Scope	5
2 Terms and definitions	5
3 Principle.....	6
4 Procedure	7
4.1 General.....	7
4.2 Selection of Candidate Metrics	8
4.3 Exclusion of redundant metrics	8
4.4 Definition of Upper and Lower Anchors.....	8
4.5 Transformation into a 0 to 1 score.....	9
4.6 Selection of core metrics	9
4.7 Combination of Core Metrics to a Multimetric Index indicating a single stressor or indicating general degradation (general multimetric approach)	9
4.8 Combination of Core Metrics to a Multimetric Index separating the impact of different stressors	10
Annex A (informative) Examples for metrics used to assess individual Biological Quality Elements, assigned to metric types.....	11
Bibliography	12

Foreword

This document (CEN/TR 16151:2011) has been prepared by Technical Committee CEN/TC 230 "Water analysis", the secretariat of which is held by DIN.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.