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Irish Standard
I.S. EN 16101:2012

Water quality - Guidance standard on interlaboratory comparison studies for ecological assessment

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I.S. EN 16101:2012

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English Version

Water quality - Guidance standard on interlaboratory comparison studies for ecological assessment

Qualité de l'eau - Guide pour les études comparatives interlaboratoires ayant pour objet l'évaluation écologique

Wasserbeschaffenheit - Anleitung für Vergleichsprüfungen zwischen Laboratorien für ökologische Untersuchungen

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Foreword

This document (EN 16101:2012) has been prepared by Technical Committee CEN/TC 230 "Water analysis", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2013, and conflicting national standards shall be withdrawn at the latest by April 2013.

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Introduction

SAFETY PRECAUTIONS — Safety issues are paramount when surveying surface waters. Surveyors should conform to EU and national Health and Safety legislation and any additional guidelines appropriate for working in or near water.

The importance of data quality in ecological results is explicit in highlighted in several EU Directives. For example the EC Water Framework Directive (WFD 2000/60/EC), Annex V, Clause 1.3.4. "Estimates of the confidence and precision attained by the monitoring system used shall be stated in the river basin monitoring plan." This means that ecological data from aquatic environments should be of a known and verifiable quality. This European dimension drives regulatory agencies, research bodies, universities and contractors working across Europe to become increasingly involved in ensuring that the data produced from laboratory and field analyses is comparable and fit for purpose.

Ecological assessment techniques involve both a field and a laboratory component; each of these needs to be scientifically robust.

Implementation of interlaboratory comparison studies falls into two broad categories; interlaboratory tests designed to demonstrate comparability of data produced by laboratories which are working independently or in separate geographical regions [1] and routine procedures implemented by the laboratories as part of their operational methods.

Existing systems of interlaboratory comparison are generally not well developed for ecological assessments. By their nature the techniques used should be specific to the organism group and may not be readily transferable to other applications. This standard provides general guidance on the design of such systems.

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