DTZS/EMDC 1 (3399) / ISO 17289.



# **DRAFT TANZANIA STANDARDS**

Water quality — Determination of dissolved oxygen — Optical sensor method.

# TANZANIA BUREAU OF STANDARDS

## **0.** National foreword

The Tanzania Bureau of Standards is the statutory national standards body for Tanzania, established under the Act.No.3 of 1975, amended by Act.No.2 of 2009.

This draft Tanzania standard is being prepared by noise and vibrations Technical Committee, under the supervision of the Environmental Management Divisional Standards Committee (EMDC).

This draft Tanzania Standard is identical to, *ISO 17289, Water quality* — *Determination of dissolved oxygen* — *Optical sensor method*, published by the International Organization for Standardization (ISO).

### 1. Terminology and conventions

The text of the International Standard is hereby being recommended for approval without deviation for publication as draft Tanzania standard. Some terminology and certain conversion are not identical with those used in Tanzania Standards; attention is drawn to the following:

The comma (,) has been used as decimal marker for metric dimensions. In Tanzania, it is current practice to use a full point (.) on the baseline as a decimal marker.

Wherever the words "International Standard" appear, referring to this draft standard, they should read as "Tanzania Standard".

## 2. Scope

ISO 17289:2014 specifies an optical method for the determination of dissolved oxygen in water using a sensor working on the basis of fluorescence quenching.

Measurement can be made either as a concentration of oxygen in milligrams per litre, percentage saturation (% dissolved oxygen), or both. Depending on the instrument used, detection limits of 0,1 mg/l or 0,2 mg/l can be reached according to the manufacturer's manual. Most instruments permit measurement of values higher than 100 %, i.e. supersaturation.