



EDC 5 (1872) DTZS

IEC 61400-3-1: 2019

DRAFT TANZANIA STANDARD

(Draft for comments only)

Wind energy generation systems - Part 3-1: Design requirements for fixed offshore wind turbines

Draft for Stakeholders Comments Only

TANZANIA BUREAU OF STANDARDS

1 National Foreword

This draft Tanzania Standard is being prepared by the Renewable Energy Technical Committee, under the supervision of the Electrotechnical Divisional Standards Committee (EDC)

This draft Tanzania Standard is an adoption of the International Standard IEC **61400-3-1:2019**, *Wind energy generation systems - Part 3-1: Design requirements for fixed offshore wind turbines*, which has been prepared by the International Electrotechnical Commission (IEC).

2 Terminology and conventions

Some terminologies and certain conventions are not identical with those used in Tanzania Standards; Attention is drawn especially to the following:

- 1) The comma has been used as a decimal marker for metric dimensions. In Tanzania Standards, it is current practice to use “full point” on the baseline as the decimal marker.
- 2) Where the words “International Standard(s)” appear, referring to this standard they should read “Tanzania Standard(s)”.

3 Scope

This document specifies additional requirements for assessment of the external conditions at an offshore wind turbine site and specifies essential design requirements to ensure the engineering integrity of fixed offshore wind turbines. Its purpose is to provide an appropriate level of protection against damage from all hazards during the planned lifetime. This document focuses on the engineering integrity of the structural components of an offshore wind turbine but is also concerned with subsystems such as control and protection mechanisms, internal electrical systems and mechanical systems.

A wind turbine shall be considered as a fixed offshore wind turbine if the support structure is subject to hydrodynamic loading and it is founded on the seabed. The design requirements specified in this document are not sufficient to ensure the engineering integrity of floating offshore wind turbines. In the remainder of this document, the term “offshore wind turbine” is assumed to refer to those that are fixed to the seabed. This document should be used together with the appropriate IEC and ISO standards mentioned in Clause 2. The safety level of the offshore wind turbine designed according to this document shall be at or exceed the level inherent in first part of this standard series