Kenya Bureau of Standards

Standards for quality life

Code of practice for Artificial Intelligence

KEBS TC 94

Software Engineering, IT Service Management, IT Governance and Artificial Intelligence

August 2024

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- **KEBS** is the National Standards body in Kenya;
- Established through "*The Standards Act*" *Cap. 496* of the Laws of Kenya;
- KEBS started its operations on 12th July 1974;
- Currently responsible to the Ministry of Industry, Trade & Cooperatives

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Information Technology Standards

KEBS TC 94 is the National Mirror Committee to JTC 1

SC 42, SC 7 and SC 40

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Draft Kenya Standard
Code of practice for Artificial Intelligence

DKS 3007:2024

Structure

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- Scope
- References
- Terms and Definitions
- Characteristics
- Measures, Activities & documentation

Current Status : Ballot Draft

Scope and Application

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Scope

This document provides a set of recommendations and activities intended to help the organization develop, provide, or use AI applications responsibly.

Application

This standards is applicable to any organization that provides or uses products or services that utilize AI applications.

References

- **ISO/IEC 5339**, Information technology — Artificial intelligence — Guidance for AI applications
- **ISO/IEC 42001:2023**, Information technology — Artificial intelligence — Management system
- **ISO/IEC 5338:2023**, Information technology — Artificial intelligence — AI system life cycle processes
- **NIST AI 100-1**, Artificial Intelligence Risk Management Framework (AI RMF 1.0)
- EU Artificial Intelligence ACT

Objective of the Standard

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— To propose approaches to establish trust in AI systems.

— Highlight Pitfalls typical associated with threats and risks to AI systems, along with possible mitigation techniques and methods.

— Approaches to assess and achieve trustworthy and privacy of AI systems etc.

Clause 4 : AI Characteristics

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Outlines :

- characteristics of an AI system
- Life Cycle Processes of the AI System
- Stakeholder roles and responsibilities at different stages of process of the life cycle

Clause 5: Requirements

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This Clause specifies characteristic requirements as follows:

- Functional characteristics of AI
- Description of requirement
- Measures and Activities
- Documentation

Clause 5.1 AI Trustworthiness

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Measures, activities and documentation requirements are outlined for the following sub-characteristics to ensure trust in AI applications:

Robustness

Reliability

Resilience

Controllability

Explainability

AI Trustworthiness Cont'd

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Predictability

Transparency **verification**

Validation **AI Bias**

Fairness

5.2 AI Risks Framework

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- The purpose of this process is to identify, analyse, treat and monitor the risks continually throughout the lifecycle of an AI system product or service.
- Based on NIST AI Risk Management Framework and EU Artificial Intelligence ACT

5.3 Ethics and society

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This Clause

- Recommends an ethical framework to build AI systems in responsible ways
- Outlines Societal concerns relating to the means of collecting, processing and disclosing of personal data, conceivably with biased opinions

AI Stakeholder roles

It outlines the roles and responsibilities of All stakeholders in the AI life cycle including,

- data providers
- AI Application Developers
- AI Regulators
- AI Customers

Guidance for quality assurance

Provides a quality model for AI systems that assists in developing quality requirements.

The quality characteristics of the quality model of AI systems are references to ISO/IEC 25059

Guidance to Risk framework

AI risk management is integrated and incorporated into broader enterprise risk management strategies and processes.

Annex C references both NIST AI Risk Assessment framework and the EU ACT and provides guidance for Privacy Risk Assessment.

Way foward

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Guidance to Risk framework

We are currently organizing a validation workshop to consider the public review comments and look forward to publishing the Kenya Standard in December 2024.

We intend to collaborate regionally and internationally for a common governance framework in the Artificial intelligence space.


THANK
YOU