

STN	Informačné technológie Strategické vedenie IT Dôsledky využitia umelej inteligencie organizáciami na strategické vedenie	STN ISO/IEC 38507 97 4183
------------	---	--

Information technology

Governance of IT

Governance implications of the use of artificial intelligence by organizations

Technologies de l'information

Gouvernance des technologies de l'information

Implications de gouvernance de l'utilisation par des organisations de l'intelligence artificielle

Táto slovenská technická norma obsahuje anglickú verziu medzinárodnej normy ISO/IEC 38507: 2022 a má postavenie oficiálnej verzie.

This Slovak standard includes the English version of the International standard ISO/IEC 38507: 2022 and has the status of the official version.

138719

Úrad pre normalizáciu, metrológiu a skúšobníctvo Slovenskej republiky, 2024

Slovenská technická norma a technická normalizačná informácia je chránená zákonom č. 60/2018 Z. z. o technickej normalizácii v znení neskorších predpisov.

Anotácia

Cieľom tohto dokumentu je poskytnúť návod pre riadiaci orgán organizácie, ktorá používa alebo zavádzajú použitie umelej inteligencie (AI).

Tento dokument sa zaobrá povahou a mechanizmami AI v rozsahu potrebnom na pochopenie dôsledkov ich používania na strategické vedenie: aké sú ďalšie príležitosti, riziká a povinnosti, ktoré používanie AI prináša? Dôraz sa kladie na spravovanie (ktoré vykonávajú ľudia) používania AI v organizácii a nie na technológie tvoriace akýkolvek systém AI. Takéto strategické vedenie si však vyžaduje pochopenie dôsledkov technológií.

Rozsah tohto dokumentu sa týka dôsledkov používania AI pre organizáciu. Ako každý výkonný nástroj, aj používanie AI prináša nové riziká a povinnosti, ktoré by mali organizácie, ktoré ho používajú, riešiť. Umelá inteligencia nie je vo svojej podstate „dobrá“ alebo „zlá“, „spravodlivá“ alebo „zaujatá“, „etická“ alebo „neetická“, hoci jej použitie môže byť alebo sa tak môže zdať.

Účel, etika a ďalšie usmernenia organizácie sa odrážajú, či už formálne alebo neformálne, v jej politikách. Tento dokument skúma politiku riadenia a organizácie a ich aplikáciu a poskytuje návod na ich prispôsobenie na používanie AI. Prevádzkové aspekty politík sa implementujú prostredníctvom manažmentu. Tento dokument odkazuje na iné normy, kde nájdete podrobnosti o súvisiacich témeach vrátane sociálnej zodpovednosti, dôveryhodnosti (ako je riadenie rizík, riadenie zaujatosti a kvality) a riadenie súladu.

Tento dokument poskytuje návod pre členov riadiaceho orgánu organizácie, aby umožnili a spravovali používanie umelej inteligencie (AI) s cieľom zabezpečiť jej účinné, efektívne a priateľné používanie v rámci organizácie.

Tento dokument tiež poskytuje usmernenia pre širšiu komunitu, ako sú napr.:

- výkonné manažéri;
- externé spoločnosti alebo technickí špecialisti, ako sú právni alebo účtovní špecialisti, malobchodné alebo priemyselné združenia alebo profesijné orgány;
- verejné orgány a tvorcovia politiky;
- interní a externí poskytovatelia služieb (vrátane konzultantov);
- hodnotitelia a audítori.

Národný predhovor

Normatívne referenčné dokumenty

Na nasledujúce dokumenty sa odkazuje v texte takým spôsobom, že časť ich obsahu alebo celý obsah predstavuje požiadavky tohto dokumentu. Pri datovaných odkazoach sa používa len citované vydanie. Pri nedatovaných odkazoach sa používa najnovšie vydanie citovaného dokumentu (vrátane akýchkoľvek zmien).

POZNÁMKA 1. – Ak bola medzinárodná publikácia zmenená spoločnými modifikáciami, čo je indikované označením (mod), použije sa príslušná EN/HD.

POZNÁMKA 2. – Aktuálne informácie o platných a zrušených STN a TNI možno získať na webovom sídle www.unms.sk.

ISO/IEC 22989: 2022 prijatá ako STN EN ISO/IEC 22989: 2023 Informačné technológie. Umelá inteligencia. Pojmy a terminológia umelej inteligencie (ISO/IEC 22989: 2022) (97 4163)

ISO/IEC 38500: 2015 zrušená a nahradená ISO/IEC 38500: 2024 prijatá ako STN ISO/IEC 38500: 2024 Informačné technológie. Strategické vedenie IT pre organizáciu (97 4186)

Vypracovanie slovenskej technickej normy

Spracovateľ: Úrad pre normalizáciu, metrológiu a skúšobníctvo SR, Bratislava

Technická komisia: TK 37 Informačné technológie

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
3.1 Terms related to AI	2
3.2 Terms related to governance	2
4 Governance implications of the organizational use of AI	2
4.1 General	2
4.2 Maintaining governance when introducing AI	3
4.3 Maintaining accountability when introducing AI	4
5 Overview of AI and AI systems	6
5.1 General	6
5.2 How AI systems differ from other information technologies	6
5.2.1 Decision automation	6
5.2.2 Data-driven problem-solving	7
5.2.3 Adaptive systems	7
5.3 AI ecosystem	8
5.4 Benefits of the use of AI	9
5.5 Constraints on the use of AI	10
6 Policies to address use of AI	11
6.1 General	11
6.2 Governance oversight of AI	12
6.3 Governance of decision-making	13
6.4 Governance of data use	14
6.5 Culture and values	15
6.6 Compliance	16
6.6.1 Compliance obligations	16
6.6.2 Compliance management	17
6.7 Risk	17
6.7.1 Risk appetite and management	17
6.7.2 Risk management	18
6.7.3 Objectives	19
6.7.4 Sources of risk	20
6.7.5 Controls	21
Annex A (normative) Governance and organizational decision-making	23
Bibliography	27

Foreword

ISO (the International Organization for Standardization) and IEC (the International Electrotechnical Commission) form the specialized system for worldwide standardization. National bodies that are members of ISO or IEC participate in the development of International Standards through technical committees established by the respective organization to deal with particular fields of technical activity. ISO and IEC technical committees collaborate in fields of mutual interest. Other international organizations, governmental and non-governmental, in liaison with ISO and IEC, also take part in the work.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives or www.iec.ch/members_experts/refdocs).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO and IEC shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents) or the IEC list of patent declarations received (see patents.iec.ch).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html. In the IEC, see www.iec.ch/understanding-standards.

This document was prepared jointly by Joint Technical Committee ISO/IEC JTC 1, *Information technology*, Subcommittees SC40, *IT service management and IT governance* and SC 42, *Artificial intelligence*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html and www.iec.ch/national-committees.

Introduction

The objective of this document is to provide guidance for the governing body of an organization that is using, or is considering the use of, artificial intelligence (AI).

This document provides guidance on the role of a governing body with regard to the use of AI within their organization and encourages organizations to use appropriate standards to underpin their governance of the use of AI.

This document addresses the nature and mechanisms of AI to the extent necessary to understand the governance implications of their use: what are the additional opportunities, risks and responsibilities that the use of AI brings? The emphasis is on governance (which is done by humans) of the organization's use of AI and not on the technologies making up any AI system. However, such governance requires an understanding of the implications of the technologies.

Artificial intelligence (AI)

AI embraces a family of technologies that bring together computing power, scalability, networking, connected devices and interfaces, together with vast amounts of data. Reference to 'AI' in this document is intended to be understood to refer to a whole family of technologies and methods, and not to any specific technology, method or application. For AI concepts and terminology, see ISO/IEC 22989:^{—1)}.

Use of AI

"Use of AI" is defined in this document in the broadest sense as developing or applying an AI system through any part of its life cycle to fulfil objectives and create value for the organization. This includes relationships with any party providing or using such systems.

Governance implications of the use of AI

The scope of this document is concerned with the implications for an organization of the use of AI. As with any powerful tool, the use of AI brings new risks and responsibilities that should be addressed by organizations that use it. AI is not inherently 'good' or 'evil', 'fair' or 'biased', 'ethical' or 'unethical' although its use can be or can seem to be so.

The organization's purpose, ethics and other guidelines are reflected, either formally or informally, in its policies. This document examines both governance and organizational policies and their application and provides guidance to adapt these for the use of AI. The operational aspects of the policies are implemented through management. This document refers to other standards for details on related topics including social responsibility, trustworthiness (such as risk management, management of bias, and quality) and compliance management.

1) Under preparation. Stage at the time of publication: ISO/IEC FDIS 22989:2022.

Information technology — Governance of IT — Governance implications of the use of artificial intelligence by organizations

1 Scope

This document provides guidance for members of the governing body of an organization to enable and govern the use of Artificial Intelligence (AI), in order to ensure its effective, efficient and acceptable use within the organization.

This document also provides guidance to a wider community, including:

- executive managers;
- external businesses or technical specialists, such as legal or accounting specialists, retail or industrial associations, or professional bodies;
- public authorities and policymakers;
- internal and external service providers (including consultants);
- assessors and auditors.

This document is applicable to the governance of current and future uses of AI as well as the implications of such use for the organization itself.

This document is applicable to any organization, including public and private companies, government entities and not-for-profit organizations. This document is applicable to an organization of any size irrespective of their dependence on data or information technologies.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitute requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO/IEC 22989:^{—2)}, *Information technology — Artificial intelligence — Artificial intelligence concepts and terminology*

ISO/IEC 38500:2015, *Information technology — Governance of IT for the organization*

koniec náhľadu – text d'alej pokračuje v platenej verzii STN

2) Under preparation. Stage at the time of publication: ISO/IEC FDIS 22989:2022.