

## Standardisation of Compliance Management and Process Quality in the Organization Based on the Integrated Management System

DOI: 10.12776/qip.v28i3.2071

Peter Malega, Milan Majerník

Received: 2024-09-19 Accepted: 2024-11-04 Published: 2024-11-30

### ABSTRACT

**Purpose:** Examine the implementation possibilities, methods, and benefits of compliance management and anti-bribery management in organisational practice and propose an innovative model for building progressive systems for comprehensive quality and sustainability of production.

**Methodology/Approach:** It examines the structure, methods, and possibilities of system authorisation built according to ISO 37001:2016 and ISO 37301:2021 and the possibilities of their integration into a comprehensive IMS.

**Findings:** Organisations currently need to address issues of individual or joint use of standards, the optimal structure of the integrated system, authorisation, and continuous improvement in the context of increasing competitiveness and ensuring sustainable development in globalised markets.

**Research Limitation/implication:** The first limitation is the development of globalised policies that may influence the voluntary use of ISOs or change their structure. The second limitation is limited access to the state of preparation of standards revision and their annexes (ISO 37301:2021, ISO 14001:2015).

**Originality/Value of paper:** The paper is original in its connection to addressing the latest globalised challenges by building an integrated organisational system according to voluntary standards and jointly managing multiple aspects, including ensuring accredited system certification.

**Category:** Conceptual paper

**Keywords:** management system; integration; compliance management; bribery; corruption

**Research Areas:** Quality by Sustainability; Quality Management

## 1 INTRODUCTION

The globalised market environment today exerts constant pressure on organisations in both regulated and unregulated sectors, including through the implementation of integrated management systems developed according to international ISO standards. The research and development of standards result in new and newly revised ISO standards, not only as universal guidelines for implementing partial and integrated management systems but also for certifying established management systems (Krivokuca, 2024).

To address the practical technical issues of integrating and authorising partial management systems developed under original ISO standards for quality, environment, safety, energy, and social responsibility, among others, a unified, superior 10-element structure (HLS) was created. This structure has significantly contributed to the certification processes and the continuous improvement of organisation management systems.

The global application of additional standards for building, operating, and authorising management systems for previously non-traditional management aspects, such as compliance management and anti-bribery management, is on the rise (Majerník et al., 2012). With the increasing number of applied management systems, organisations are increasingly considering whether to use these standards individually or collectively as an integrated system, what the optimal structure of the integrated management system should be for their area of economic activity, and how to authorise and continuously improve their management system in terms of competitiveness and sustainable development.

Integrated Management Systems (IMS) play a crucial role in enhancing organisational efficiency and effectiveness, particularly concerning international ISO standards (Majerník et al., 2020). Integrating various management systems—such as quality, environmental, and occupational health and safety—into a cohesive framework allows organisations to streamline processes, reduce redundancy, and improve overall performance (Zgodavová, Bober, 2012; Francisco et al., 2024). One of the primary benefits of implementing an IMS is the reduction of duplication in policies and procedures (Khanna et al., 2010). Chovancová (2015) highlights that organisations experience operational benefits such as reduced costs and increased transparency when integrating their management systems. This reduction in redundancy saves time and fosters synergy among different management systems, which can lead to improved organisational image and efficiency. Furthermore, Talapatra et al. (2022) emphasise that an IMS enhances an organisation's capacity to achieve its objectives by aligning measurable goals with organisational policies, thereby facilitating better performance outcomes.

The integration of ISO standards (such as ISO 9001:2015 and ISO 14001:2015) and included newly prepared actions for climate change – organisations determine if climate change is the relevant question and relevant interested parties can have demands related to climate change), provides a framework that encourages

continuous improvement and innovation, enabling organisations to respond effectively to market demands and stakeholder expectations (Chovancová et al., 2022; Martí-Ballester and Simon, 2017; Pauliková et al., 2022; Zeng, 2011). The strategic benefits of IMS are also noteworthy. Simon et al. (2012) categorise the benefits of IMS into four clusters, including internal cohesion, better utilisation of systems, strategic advantages, and enhanced system performance. This categorisation underscores that IMS improves operational efficiency and contributes to long-term strategic goals. In the context of sustainability, the integration of management systems is increasingly recognised as essential. The literature suggests that organisations adopting IMS can realise significant cost savings and resource efficiencies, which are critical for sustainable development (Samy et al., 2015; Mežinska et al., 2013).

The ISO 37001:2016 (Anti-Bribery Management System) and ISO 37301:2021 (Compliance Management System) are both international standards developed by the International Organization for Standardization (ISO) to enhance organisational governance and ethical practices. Both standards emphasise the importance of leadership commitment and the establishment of a compliance culture. They require organisations to develop policies and procedures that align with their ethical commitments and legal obligations (Ridwan, 2021). Furthermore, both standards advocate for continuous improvement and regular monitoring of compliance mechanisms to ensure their effectiveness (Ridwan, 2021; Peltier-Rivest, 2020). Another commonality is the emphasis on training and awareness. Both ISO 37001:2016 and ISO 37301:2021 require organisations to train employees to ensure they understand the compliance requirements and the implications of non-compliance. This training is crucial for fostering an informed workforce that can identify and report potential ethical breaches (Ridwan, 2021).

Despite these similarities, the two standards differ significantly in their specific focus areas. ISO 37001:2016 is primarily concerned with preventing bribery and corruption within organisations. It outlines specific requirements for establishing, implementing, maintaining, and improving an anti-bribery management system. This includes conducting risk assessments, implementing due diligence processes, and establishing reporting mechanisms for bribery incidents (Peltier-Rivest, 2020; Veselovská et al., 2020). The standard is particularly relevant for organisations operating in high-risk environments where bribery is prevalent.

In contrast, ISO 37301:2021 has a broader scope, focusing on overall compliance management. It encompasses various compliance obligations, including legal, regulatory, and ethical requirements beyond just anti-bribery measures. ISO 37301:2021 provides a comprehensive framework for organisations to manage compliance risks across multiple areas, such as environmental regulations, data protection, and labour laws (Ridwan, 2021). This broader perspective allows organisations to integrate compliance management into their overall governance framework, ensuring a holistic approach to risk management.

## 2 METHODOLOGY

The compliance management system for the activities and processes of an organisation is generally based on the principles of good governance, proportionality, transparency, and sustainability. It provides guidance for the creation, development, implementation, evaluation, maintenance, and improvement of an effective and responsive compliance management system within an organisation from the year 2014 when ISO 19600:2014 compliance management systems guidelines were introduced.

The key objective of an organisation's compliance management system standard is to fulfil its obligations and effectively manage the risk of damage to its reputation. The ISO 19600:2014 offered guidelines for establishing and operating a compliance management system. However, it is not intended to provide the prestigious certification required in a globalised market environment, which represents a significant drawback.

To address this, a standard revision was prepared in 2021 in the form of ISO 37301:2021 for Compliance Management Systems (CMS). Compliance is generally understood as adherence not only to legal regulations but also to ethical rules. The standard also covers issues such as data protection, corruption, bullying, discrimination in the workplace, and, importantly, labour and contractual rights. It also intends to certify a compliance management system built according to this standard. ISO 37301:2021 adopts a holistic approach to compliance management, in contrast to ISO 37001:2016, which focuses solely on one aspect— anti-bribery management. Both standards are based on the same principles and can, therefore, be combined and integrated into an already implemented management system within an organisation.

The structure of international ISO standards in this area consists of a set of interrelated and integrated elements operating within the Deming cycle of continuous improvement. These elements define the policy, objectives, processes, and methods necessary for an organisation to establish a framework and apply a model to achieve its goals in alignment with its production management strategy and sustainability action plans.

Building a standard compliance management system, including an anti-bribery management system according to ISO 37301:2021 and ISO 37001:2016, followed by its certification, maintenance, auditing, and recertification, can significantly enhance an organisation's credibility and present it in the international market environment as a reliable business partner.

A potential area for further development of CMS, in connection with the processes of simplifying auditing and certification, may lie in its implementation within a functional Integrated Management System (IMS) according to ISO standards, also addressing quality, environmental, safety, and other management aspects.

The examined international standard ISO 37001:2016 Anti-Bribery Management System specifies the requirements and provides guidance for the establishment,

implementation, maintenance, review, and continuous improvement of an Anti-Bribery Management System within an organisation. A system developed according to this model can be implemented independently and integrated into the organisation's broader management system. The question is, if it can be a part of an Integrated Management System built according to ISO standards, thereby becoming a fully integrated component of the organisation's overall management system, what are the advantages of such a solution and possible barriers in the certification of the integrated system. The standard, as a model for implementing a management system, focuses specifically on the following areas within an organisation's operations:

- Corruption in the public, private, and non-profit sectors,
- Corruption carried out by the organisation,
- Corruption by the organisation's personnel acting on behalf of or for the benefit of the organisation,
- Corruption by the organisation's business partners acting on behalf of or for the benefit of the organisation,
- Bribery of the organisation,
- Bribery of the organisation's personnel in relation to the organisation's activities,
- Bribery of the organisation's business partners in relation to the organisation's activities,
- Direct and indirect corruption (e.g., a bribe offered or accepted through or by a third party).

Figure 1 illustrates the model for implementing the Anti-Bribery Management System according to ISO 37001:2016, Deming's cycle of continuous improvement.

The standard addresses only aspects related to corruption. It does not resolve issues concerning the activities and processes of production, nor is it intended for the purpose of certifying a developed management system.

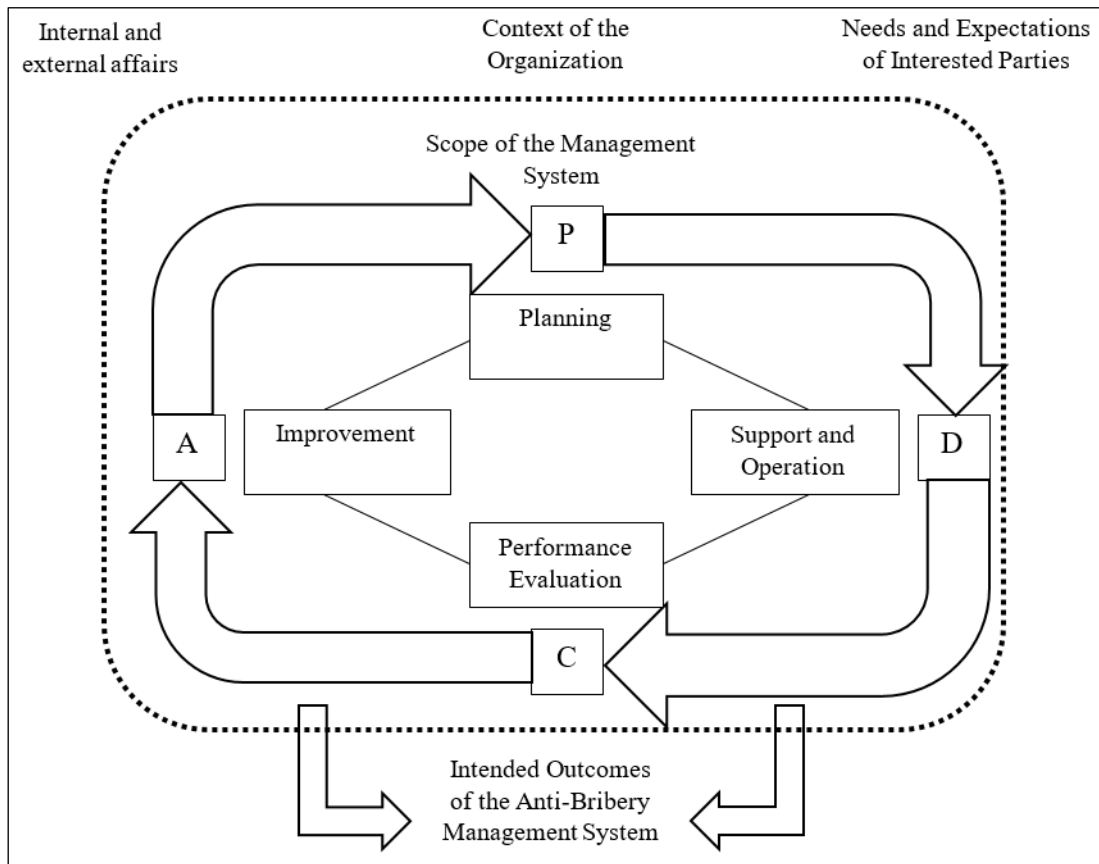
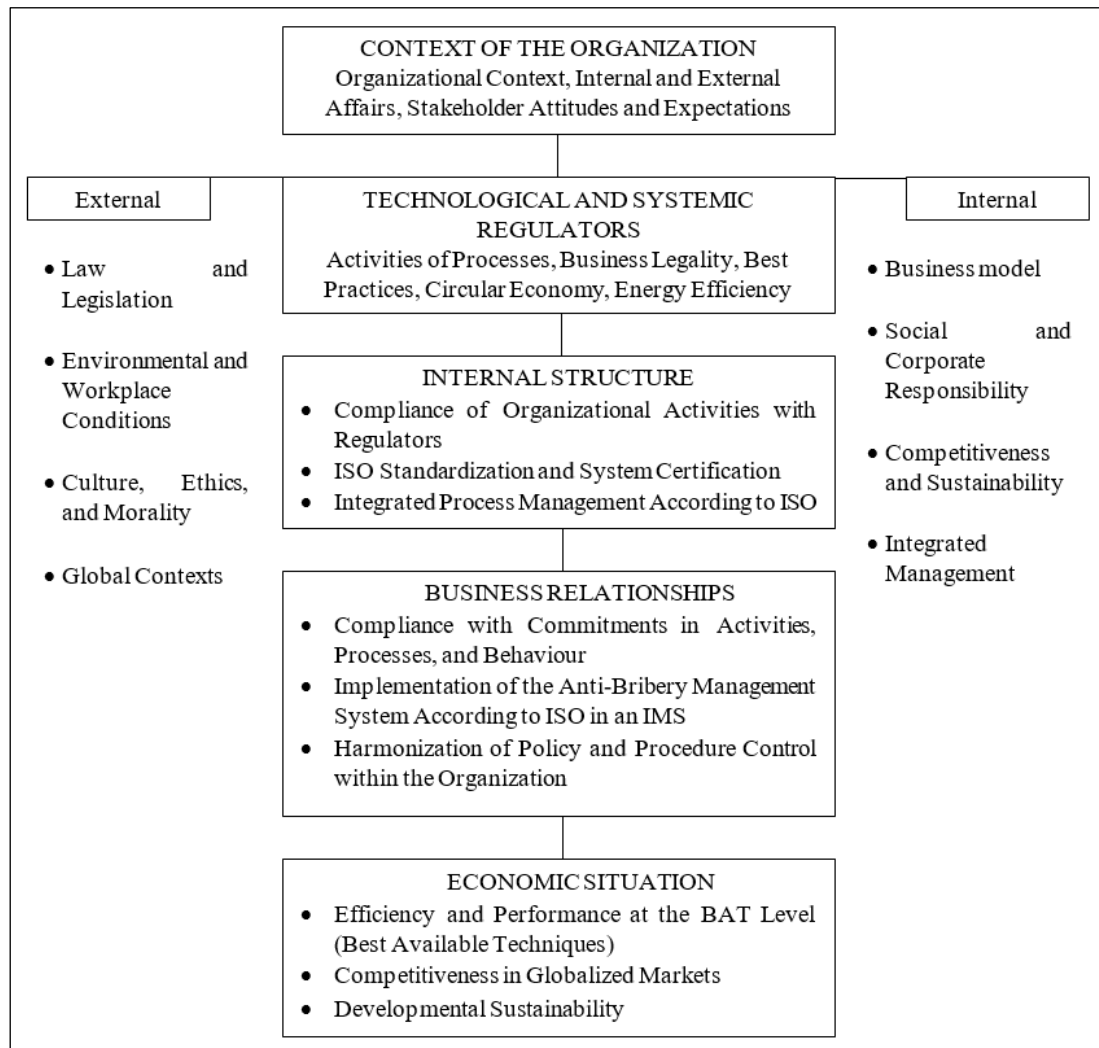


Figure 1 – Model for Implementing the Anti-Bribery Management System in the PDCA Cycle According to the ISO Standard (Chiarini et al., 2023)

### 3 RESULTS AND DISCUSSION

Figure 2 presents the proposed concept of a model for assessing the compliance of an organisation's activities and processes based on the latest ISO standards.



*Figure 2 – Proposed Concept of Model for Assessing Compliance of Organisational Activities and Processes Based on the latest ISO Standards*

The international standard ISO 37301:2021 is designed for the development and certification of management systems aimed at harmonising the control of policies and procedures within organisations. It sets out requirements and provides guidance for establishing, implementing, evaluating, maintaining, and continuously improving a Compliance Management System (CMS). It can be applied to all types of organisations, regardless of their size, nature, or complexity of activities. The CMS is based on integrity, good governance, proportionality, transparency, accountability, and sustainability.

This internationally recognised standard provides a comprehensive set of requirements and guidelines for creating a robust compliance program that enables organisations to maintain integrity and trust. The compliance management system provides a structured approach for an organisation to meet its compliance obligations, including those mandated by law, such as laws and regulations, and those it voluntarily chooses to comply with, such as internal policies and

procedures. The benefits of certifying a management system built according to ISO 37301:2021 can be summarised as follows:

- Improved reputation and credibility,
- Better business opportunities due to enhanced market reputation,
- Reduced costs associated with non-compliance with laws and regulations,
- Enables the organisation to establish and maintain a culture of compliance.

Table 1 illustrates a comparison of the key elements of the HLS structure of standards within ISO 37301:2021 and ISO 37001:2016 from the point of view of the possibility of building and subsequent certification of an integrated management system and its structure.

*Table 1 – Comparison of Key Elements of the HLS Structure of Standards*

<b>ISO 37301:2021</b>	<b>ISO 37001:2016</b>
1. SCOPE 2. NORMATIVE REFERENCES 3. TERMS AND DEFINITIONS	1. SCOPE 2. NORMATIVE REFERENCES 3. TERMS AND DEFINITIONS
4. CONTEXT OF THE ORGANISATION 4.1. Understanding the organisation and its context 4.2. Understanding the needs and expectations of interested parties 4.3. Determining the scope of the compliance management system 4.4. Compliance management system 4.5. Compliance obligations 4.6. Compliance risk assessment	4. CONTEXT OF THE ORGANISATION 4.1. Understanding the organisation and its context 4.2. Understanding the needs and expectations of stakeholders 4.3. Determining the scope of the anti-bribery management system 4.4. Anti-bribery management system 4.5. Bribery risk assessment
5. LEADERSHIP 5.1. Leadership and commitment 5.1.1. Governing body and top management 5.1.2. Compliance culture 5.1.3. Compliance governance 5.2. Compliance policy 5.3. Roles, responsibilities and authorities 5.3.1. Governing body and top management 5.3.2. Compliance function 5.3.3. Management 5.3.4. Personnel	5. LEADERSHIP 5.1. Leadership and commitment 5.1.1. Governing body 5.1.2. Top management 5.2. Anti-bribery policy 5.3. Organisational roles, responsibilities and authorities 5.3.1. Roles and responsibilities 5.3.2. Anti-bribery compliance function 5.3.3. Delegated decision-making
6. PLANNING 6.1. Actions to address risks and opportunities 6.2. Compliance objectives and planning to achieve them 6.3. Planning of changes	6. PLANNING 6.1. Actions to address risks and opportunities 6.2. Anti-bribery objectives and planning to achieve them



ISO 37301:2021	ISO 37001:2016
<p>7. SUPPORT</p> <ul style="list-style-type: none"> <li>7.1. Resources</li> <li>7.2. Competence <ul style="list-style-type: none"> <li>7.2.1. General</li> <li>7.2.2. Employment process</li> <li>7.2.3. Training</li> </ul> </li> <li>7.3. Awareness</li> <li>7.4. Communication</li> <li>7.5. Documented information <ul style="list-style-type: none"> <li>7.5.1. General</li> <li>7.5.2. Creating and updating documented information</li> <li>7.5.3. Control of documented information</li> </ul> </li> </ul>	<p>7. SUPPORT</p> <ul style="list-style-type: none"> <li>7.1. Resources</li> <li>7.2. Competence <ul style="list-style-type: none"> <li>7.2.1. General</li> <li>7.2.2. Employment process</li> </ul> </li> <li>7.3. Awareness and training</li> <li>7.4. Communication</li> <li>7.5. Documented information <ul style="list-style-type: none"> <li>7.5.1. General</li> <li>7.5.2. Creating and updating</li> <li>7.5.3. Control of documented information</li> </ul> </li> </ul>
<p>8. OPERATION</p> <ul style="list-style-type: none"> <li>8.1. Operational planning and control</li> <li>8.2. Establishing controls and procedures</li> <li>8.3. Raising concerns</li> <li>8.4. Investigation processes</li> </ul>	<p>8. OPERATION</p> <ul style="list-style-type: none"> <li>8.1. Operational planning and control</li> <li>8.2. Due diligence</li> <li>8.3. Financial controls</li> <li>8.4. Non-financial controls</li> <li>8.5. Implementation of anti-bribery controls by controlled organisations and by business associates</li> <li>8.6. Anti-bribery commitments</li> <li>8.7. Gifts, hospitality, donations and similar benefits</li> <li>8.8. Managing inadequacy of anti-bribery controls</li> <li>8.9. Raising concerns</li> <li>8.10. Investigating and dealing with bribery</li> </ul>
<p>9. PERFORMANCE EVALUATION</p> <ul style="list-style-type: none"> <li>9.1. Monitoring, measurement, analysis and evaluation <ul style="list-style-type: none"> <li>9.1.1. General</li> <li>9.1.2. Sources of feedback on compliance performance</li> <li>9.1.3. Development of indicators</li> <li>9.1.4. Compliance reporting</li> <li>9.1.5. Record-keeping</li> </ul> </li> <li>9.2. Internal audit <ul style="list-style-type: none"> <li>9.2.1. General</li> <li>9.2.2. Internal audit programme (is given in ISO 19011)</li> </ul> </li> <li>9.3. Management review <ul style="list-style-type: none"> <li>9.3.1. General</li> <li>9.3.2. Management review inputs</li> <li>9.3.3. Management review results</li> </ul> </li> </ul>	<p>9. PERFORMANCE EVALUATION</p> <ul style="list-style-type: none"> <li>9.1. Monitoring, measurement, analysis and evaluation</li> <li>9.2. Internal audit</li> <li>9.3. Management review <ul style="list-style-type: none"> <li>9.3.1. Top management review</li> <li>9.3.2. Governing body review</li> </ul> </li> <li>9.4. Review by anti-bribery compliance function</li> </ul>
<p>10. IMPROVEMENT</p> <ul style="list-style-type: none"> <li>10.1. Continual improvement</li> <li>10.2. Nonconformity and corrective action</li> </ul>	<p>10. IMPROVEMENT</p> <ul style="list-style-type: none"> <li>10.1. Nonconformity and corrective action</li> <li>10.2. Continual improvement</li> </ul>

---

Based on the performed comparison of the structure of the standards, Figure 3 illustrates the possible compliance management system implemented within the organisation's Integrated Management System (IMS). Implementing a standardised compliance management system and anti-bribery management in an integrated system is necessary for today's globalised market environment, both from the perspective of competitiveness, organisation, and the sustainable development of products in various environmental activities. Even though such a system is economically, personnel-wise, and organizationally demanding, the benefits it brings are undeniable. Organisations that have long been using standard management systems for quality, environment, safety, and others will only expand their integrated system and use their experience and practices, especially in auditing, certification audits, and the use of joint and combined audits. The implementation will be more challenging for companies that do not have such experience and practices with an integrated management system or even with individual management systems (quality, environment, safety) separately. Awareness, communication, training, competence, and capabilities are critical to integrated management systems.

Figure 4 presents the essential integration of management systems based on ISO standards with the HLS structure. Figure 5 shows the proposed systemic multi-integration of management systems, where  $IMS \subset SMS$  (Specialized Management System) according to ISO 37301:2021.

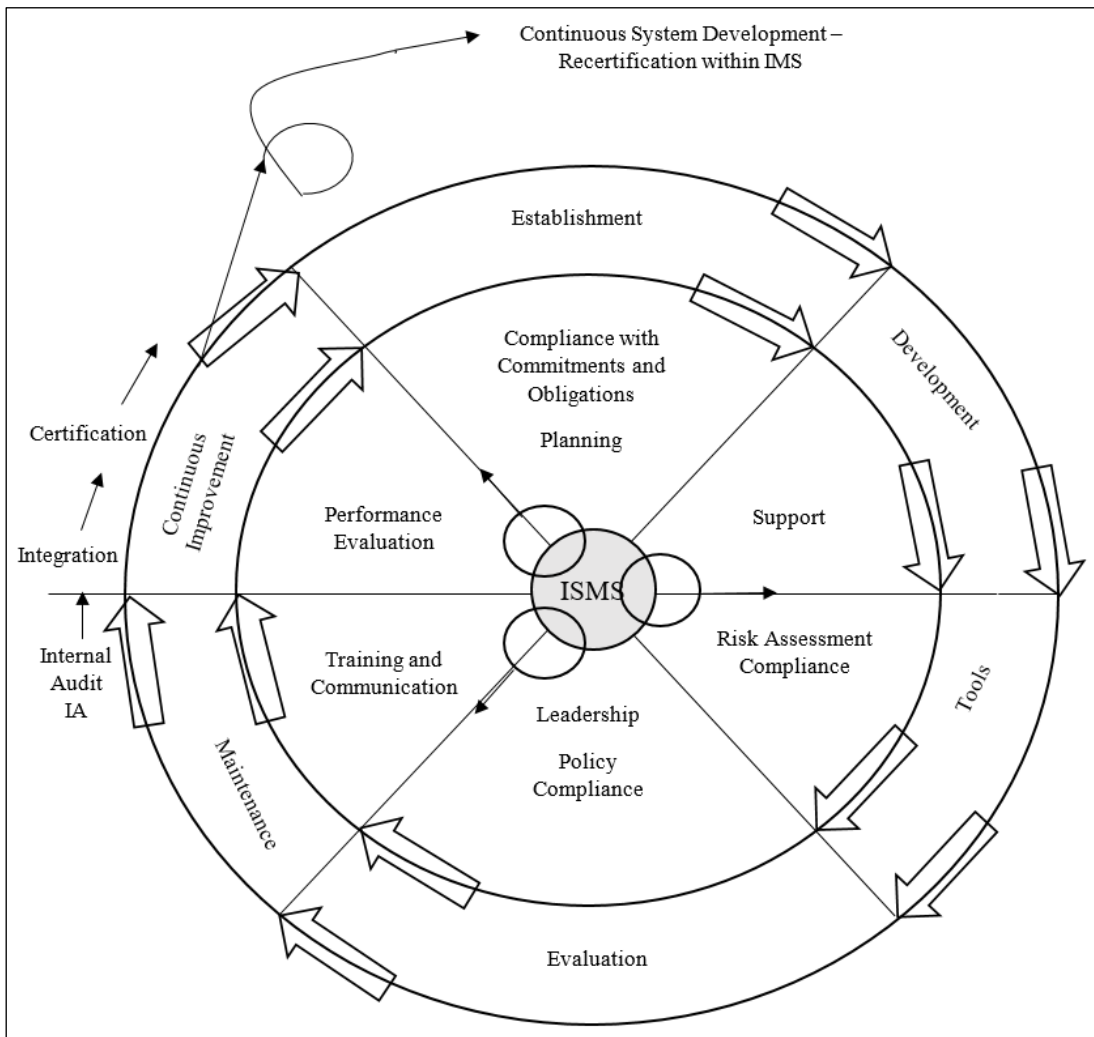


Figure 3 – Compliance Management System (CMS) Implemented within the Organization's Integrated Management System (IMS)

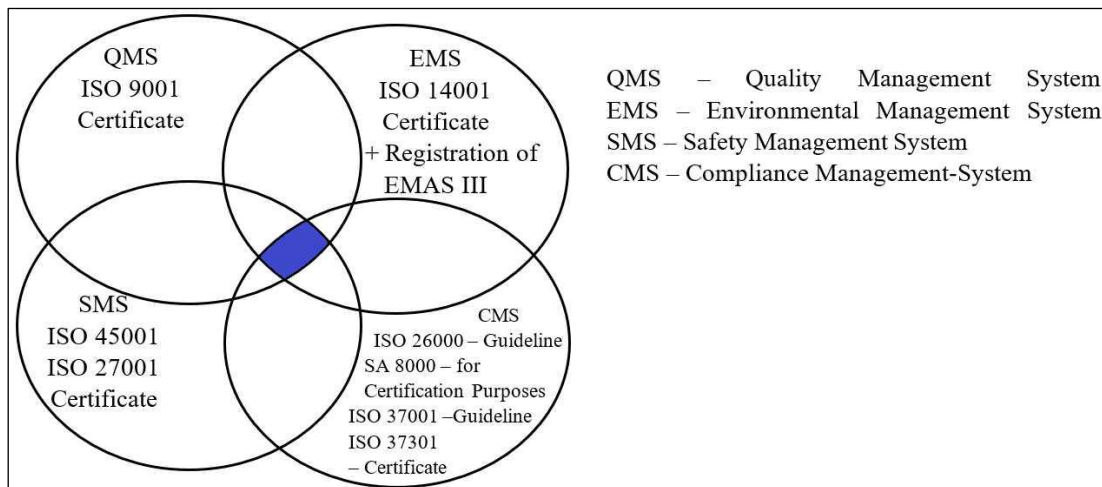
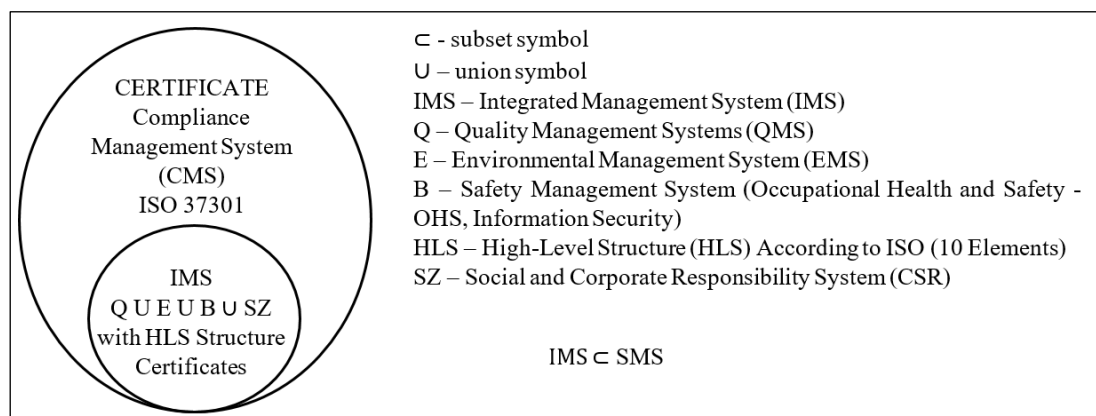


Figure 4 – Basic Integration of Management Systems Based on ISO Standards with the HLS Structure



*Figure 5 – Systemic Multi-Integration of Management Systems  $IMS \subset SMS$  According to ISO 37301:2021*

The implementation of a CMS individually or within an IMS according to the international standard ISO 37301:2021 brings multiple benefits to organisations, including:

- Intensification of a positive compliance culture within the organisation,
- Elimination of risks associated with neglecting obligations toward legal requirements,
- Protection of the organisation's and society's reputation,
- Ensuring integrity in the prevention and detection of unethical behaviour,
- Increased attention to the requirements and expectations of internal and external stakeholders,
- Rapid and effective resolution of compliance-related issues,
- Enhanced trust and loyalty from third parties and customers,
- Demonstrate a functional and effective CMS in the form of a certificate issued by an accredited certification body that is recognised and accepted in the international business environment.

The implementation of a standard anti-bribery management system in an integrated system has practically not been used in corporate practice so far. Only solo system applications in the sense of ISO 37001:2016 prevailed without the possibility of prestigious certification of the implemented system. Its implementation within the standard compliance management system through ISO 37301:2021 and subsequent integration into a more comprehensive integrated management system brings benefits, especially from the prestigious accredited certification recognised in globalised markets. From the perspective of organisations, the key benefits of such an integrated management system are economic, personnel, technical, and

synergistic in ensuring and operating individual management systems and production processes.

## 4 CONCLUSIONS

An organisation's Integrated Management System (IMS) generally stems from the vision of integrating the generic High-Level Structure (HLS) of international standards, particularly those related to quality (ISO 9001), environment (ISO 14001 – included new prepared actions for climate change – organisation determine, if the climate change is the relevant question and relevant interested parties can have demands related to climate change), safety (ISO 45001), information security (ISO 27001), and other standards designed for the prestigious certification of the management systems built according to them. These systems are tools aimed at and focused on the organisation's sustainable development.

Aspects of corporate social responsibility have so far been addressed primarily through ISO standards as guidelines for implementing management systems, without offering the possibility of prestigious certification, which is now demanded in the globalised market environment. The growing number of ISO standards raises questions about whether and how an organisation can manage this trend. The clear answer lies in integrating management systems ( in the sense of Figure 4).

A process-integrated management system within an organisation is influenced by customers and suppliers (who set requirements for product quality), society and the public (who determine environmental requirements), employees (who define safety, protection, and social requirements), and shareholders (who dictate resources, including information, its allocation, and protection). These factors work integrally and encompass all dimensions of sustainable development (SD), i.e., economic, social, environmental, and cultural (including anti-bribery policies).

The results of our research to date, supported by practical experience, show that an integrated management system contributes to the sustainable development of both the organisation and society as a whole, particularly in terms of quality of life. The integration of management systems leads to a common system documentation structure based on the principles of quality management, considering all aspects of environmental management, safety management, and business risk management (Majerník et al., 2008; Majerník et al., 2009). It can even be argued that the sustainable development of an organisation is unachievable without the integration of systems, as the absence of continuous improvement processes or the high costs caused by disintegration prevents organisations from following the Global Reporting Initiative (GRI) in its intended form, leading instead to a much more degenerated version.

The most common approaches to integration in practice are as follows:

- 
- Developing an IMS from the outset, especially in cases where no standardised management systems exist (this can be complicated and discouraging for many organisations),
  - Developing management systems for various aspects separately and, after successful implementation, integrating them (a relatively complex and inefficient approach),
  - Gradually adding additional aspects to the elements of an already existing system, i.e., leveraging the experience from the first system during integration (a recommended approach, particularly supported by the HLS structure of standards and the potential emergence of new management system standards).

Prestigious certification of the established management system is the result of a successful assessment of its functionality conducted by an independent third party – an accredited certification body (CB).

Based on the latest knowledge and practical experience, the basic steps an organisation should follow on the path to successful certification of an integrated management system can be specified as:

- Thorough familiarisation with newly revised international ISO standards intended for building the management system,
- Defining a strategy and selecting a team for implementing the organisation's own system, whether partial or integrated,
- Process analysis, creating a process map, appointing a system manager, ensuring communication (internal, external, and training),
- Developing documented procedures for the functionality of the system or individual systems and improving processes (aspects, impacts, and risks of operation),
- Preparing documented information (manuals for the individual systems within the management system),
- Implementing documented procedures (operation) and maintaining records,
- Conducting internal audits of the management system (combined and joint) and improving processes in alignment with the system's policy,
- Selecting a certification body (CB) and ensuring the certification audit of the IMS based on anti-bribery management (see Figure 5 above).

A joint (or combined) certification (surveillance – once a year) and recertification (after three years) audit can significantly reduce the extreme burden on an

organisation that arises from operating and authorising (certifying) individual management systems.

An integrated management system audit involves reviewing individual management systems established within the organisation according to the newly revised ISO standards. The interrelationships of the requirements of the individual standards can be identified through a correlation table, which should be part of the documented information required by the standards. A review of the processes must be carried out within the scope of the audit's aspects, respecting any permitted exceptions to conduct an IMS audit.

The audit is conducted according to the general principles of management system auditing as outlined in ISO 19011:2018 – Guidelines for Auditing Management Systems. Users can apply these guidelines to develop their own audit-related requirements.

The audit program includes all activities necessary for planning and organising various types of audits and ensuring the resources required for their efficient and effective execution within a defined time frame. The results of audit program reviews may lead to corrective and preventive actions and improvements to the audit program.

The progressive understanding of "compliance" within an organisation's certified integrated management system shifts the focus, compared to the previously used ISO 19600:2014 and current ISO 37301:2021 standards, to a broader and qualitatively more effective context. As a result, ISO 37301:2021 emphasises not only legal compliance but also supports the promotion of strategic goals related to the sustainable development of organisational processes, which are defined and managed through systems built and certified according to international ISO standards.

A modern Compliance Management System (CMS) implemented in accordance with ISO standards for integrated management systems respects a risk-based approach (ISO 3100X) within the Deming cycle of continuous improvement (P-D-C-A). ISO 37301:2021 applies a holistic approach to compliance management, considering not only legal regulations but also adherence to official decisions, contracts, internal guidelines, corporate and/or business processes (certificates of respective management systems), collective agreements, and many other aspects of the organisation's operations, ensuring the prosperity and sustainability of its development.

## **ACKNOWLEDGEMENTS**

This work has been supported by the Scientific Grant Agency of the Ministry of Education of the Slovak Republic, KEGA 019TUKE-4/2022 Preparation of managers of new production structures of the future on the principles of Overall Equipment Effectiveness (OEE) through the education of students in the subject

of Production Management in the study program of Industrial Engineering and KEGA 003TUKE-4/2024 Innovation of the profile of industrial engineering graduates in the context of required knowledge and specific capabilities for research and implementation of intelligent systems of the future.

## REFERENCES

- Francisco, F.E; Kimura, I., de Nadea, J., Carvalho, C.P., Carvalho, M.M., Santos, G., Oliveira, O.J., 2024. Towards an Agile-Based Integrated Management Systems Framework. *Quality Innovation Prosperity* 28(2), pp. 35–59. <https://doi.org/10.12776/qip.v28i2.2011>.
- Chiarini, A., Cherrafi, A., 2023. Integrating ISO 9001 and Industry 4.0: An implementation guideline and PDCA model for manufacturing sector. *Total Quality Management & Business Excellence*, 34(13–14), pp. 1629–1654. <https://doi.org/10.1080/14783363.2023.2192916>.
- Chovancová, J., 2015. Environmental management systems: Incentives and barriers of implementation in Slovak enterprises. In *15th International Multidisciplinary Scientific GeoConference SGEM 2015*, pp. 205-212.
- Chovancová, J., Rovňák, M., Shpintal, M., Shevchenko, T., Chovanec, F., 2022. Perception of Benefits and Barriers Associated with the Management Systems Integration: A Comparative Study of Slovak and Ukrainian Organisations. *TEM Journal*, 11(2). <https://doi.org/10.18421/TEM112-34>
- Khanna, H. K., Laroia, S., Sharma, D., 2010. Integrated management systems in Indian manufacturing organisations. *The TQM Journal*, 22(6), pp. 670-686. <https://doi.org/10.1108/17542731011085339>.
- Krivokuca, M., 2024. Developing a Quality 4.0 Quality Management System. *Quality Magazine*, April 17, 2024.
- Majerník, M. et al., 2012. Accreditation, certifications, auditing. Bratislava: EU, 204 p.
- Majerník, M., Chovancová, J., 2009. Application of Environment Management Systems in Environmental Security and Risk Prevention. *Acta Mechanica Slovaca*, 13(3), pp. 74-83.
- Majerník, M., Daneshjo, N., 2020. Designing integrated management systems. 1st ed. Košice: Petit, 172 p.
- Majerník, M., Rošková, D., Chovancová, J., 2008. Environmental management system as a tool for environmental risk prevention. *Ekonomika a management*, pp. 28-33.
- Martí-Ballester, C. P., Simon, A., 2017. Union is strength. *Management Decision*, 55(1), pp. 81-102. <https://doi.org/10.1108/md-09-2015-0414>.



Mežinska, I., Lapiņa, I., Mazais, J., 2013. Integrated management systems towards sustainable and socially responsible organisation. *Total Quality Management & Business Excellence*, 26(5-6), pp. 469-481. <https://doi.org/10.1080/14783363.2013.835899>.

Pauliková, A., Chovancová, J., 2022. Improving energy efficiency through energy management systems implementation: A cluster analysis of ISO 50001. In *Crisis Management and Safety Foresight in Forest-Based Sector and SMEs Operating in the Global Environment*, p. 319.

Pauliková, A., Chovancová, J., Blahová, J., 2022. Cluster modeling of environmental and occupational health and safety management systems for integration support. *International Journal of Environmental Research and Public Health*, 19(11), p. 6588.

Peltier-Rivest, D., 2020. Corruption at Rolls-Royce: Can it happen again? *Journal of Financial Crime*, 28(2), pp. 433-447. <https://doi.org/10.1108/jfc-01-2020-0002>.

Ridwan, H., 2021. Comparative review of the latest concept in compliance management & the compliance management maturity models. *RSF Conference Series: Business, Management and Social Sciences*, 1(5), pp. 116-124. <https://doi.org/10.31098/bmss.v1i5.457>.

Samy, G. M., Samy, C. P., Ammasaiappan, M., 2015. Integrated management systems for better environmental performance and sustainable development: A review. *Environmental Engineering and Management Journal*, 14(5), pp. 985-1000. <https://doi.org/10.30638/eemj.2015.109>.

Simon, A., Karapetrović, S., Fa, M. C., 2012. Difficulties and benefits of integrated management systems. *Industrial Management & Data Systems*, 112(5), pp. 828-846. <https://doi.org/10.1108/02635571211232406>.

Talapatra, S., Uddin, K., Doiro, M., Santos, G., 2022. The linkage between corporate social responsibility and the main benefits obtained from the integration of multiple management systems in Bangladesh. *Social Responsibility Journal*, 19(1), pp. 79-100. <https://doi.org/10.1108/srj-09-2020-0390>.

Veselovská, L., Zavadský, J., Zavadská, Z., 2020. Mitigating bribery risks to strengthen the corporate social responsibility in accordance with ISO 37001. *Corporate Social Responsibility and Environmental Management*, 27(4), pp. 1972-1988. <https://doi.org/10.1002/csr.1909>.

Zeng, S., 2011. An empirical examination of benefits from implementing integrated management systems (IMS). *Development and Learning in Organisations: An International Journal*, 25(4). <https://doi.org/10.1108/dlo.2011.08125daa.013>.

Zgodavová, K., Bober, P. 2012. An Innovative Approach to the Integrated Management System Development: SIMPRO-IMS Web-Based Environment. *Quality Innovation Prosperity*, 16(2). <https://doi.org/10.12776/qip.v16i2.69>.

---

## ABOUT AUTHORS

**Milan Majerník** ORCID: 0000-0001-7092-5891\* (M.M.)\*\* – prof. h. c., prof., Ing., PhD., e-mail: milan.majernik@yahoo.com

**Peter Malega** ORCID: %000-0001-6354-5364 (P.M.) – Ing., PhD., Technical University of Kosice, Faculty of Mechanical Engineering, Košice, Slovakia, e-mail: peter.malega@tuke.sk.

## AUTHOR CONTRIBUTIONS

Conceptualisation, M.M.; Methodology, M.M.; Validation, P.M.; Formal analysis, P.M.; Investigation, P.M.; Resources, P.M.; Data curation, P.M.; Original draft preparation, M.M.; Review and editing, P.M.; Visualization, P.M.; Supervision, M.M.; Project administration, P.M.; Funding acquisition, P.M.

## CONFLICTS OF INTEREST

The authors declare no conflict of interest. The funders had no role in the design of the study; in the collection, analyses, or interpretation of data; in the writing of the manuscript, or in the decision to publish the results.



© 2024 by the authors. Submitted for possible open-access publication under the terms and conditions of the Creative Commons Attribution (CC-BY) license (<http://creativecommons.org/licenses/by/4.0/>).