






The term RISK in project management: Equivalence and terminographic modelling across selected languages

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Abstract

This study examines terminology in project management across English, Slovak, Spanish, Italian, and German, and proposes a model for entries in a multilingual project management lexicon that ensures conceptual accuracy even when equivalences are asymmetrical or no direct equivalent exists. The study uses the concept of RISK as a case study through which the proposed entry model is validated. The research is grounded in international terminological standards, including ISO 704 (2009), ISO 1087 (2019), and ISO 21506 (2024), as well as the theory of equivalence (Cabr , 1999) and contemporary approaches to terminology and terminography (Bergenholtz & Tarp, 2003; COTSOES, 2003). Within a case study framework, we have applied componential analysis to the concept of risk to validate a terminographic entry model that aligns with ISO standards. Based on the results of the analysis, the study proposes a model for lexicon entries that is compatible with ISO standards and provides recommendations for translators, terminographers, and project management professionals. The proposed model offers a systematic framework for developing specialized project management dictionaries and underscores the necessity for open-access, regularly updated, and internationally harmonized terminological databases to support effective collaboration in global project environments.

1 Introduction

In the past two decades, project management has been established as a global multidisciplinary area bringing together experts from different linguistic and cultural backgrounds. English as the dominant language of project management creates and forms

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terminology not only in traditional guides, such as PMBOK® (Project Management Body of Knowledge), PRINCE2®, or IPMA ICB® (Individual Competence Baseline) standard but also in agile frameworks, for instance, SCRUM (Schwaber and Sutherland, 2020). As a result, a significant terminological asymmetry between English as the source language and the target languages is being created, especially in cases of the absence of an equivalent or in cases when the term does not include all of the semantic features of the original concept in another language. In practice this asymmetry is revealed through inconsistent use of terms, terminological inaccuracy in documents and communication misunderstandings in international teams (Kerzner, 2017). The most problematic terms, such as *risk*, *issue*, *governance*, *deliverable*, *scope*, *baseline*, *work package*, *assumption*, and *prerequisites*, which are precisely defined in English, often lack an unambiguous equivalent in another language or are adopted as non-adapted loan words.

Although there are several glossaries and terminology databases, for example PMI Lexicon of Project Management Terms, PMBOK® Glossary, IPMA ICB, PRINCE2® Glossary, Slovenský výkladový slovník projektového riadenia (2015), editor Igor Trávník, PMI lexicon (2016), translated by Daniel Podolský or company glossaries Atlassian and Microsoft, these sources differ from each other and do not contain consistent solutions for a multilingual environment. There is a great need for a systematic terminographic analysis comparing the concept structure of terms in English, Slovak, Spanish, Italian, and German, which would allow the creation of a unified multilingual entry model. In the present study, this broader ambition is operationalized through a focused case study of the term RISK; the wider lexicon model is therefore proposed conceptually and discussed as a direction for future development rather than as a completed multilingual platform.

Experts in project management and related disciplines agree that terminological accuracy is indispensable for managing the complexity of projects in the international context.

Project success requires collaboration between stakeholders with different interests, organizational cultures, and social environments. This collaboration is fraught with differing understandings of project management concepts. As a result, “using jargon that is unfamiliar to one of the stakeholders” or similar phrases appear on the list of most common project management mistakes. The result is messages that the customer does not understand, disagreements about the scope and deliverables of the project, and conflicts. (Trávník, 2015, p. 2)

Terms such as *risk*, *issue*, *governance*, *deliverable*, *scope*, *baseline*, *work package*, *assumption*, *prerequisites*, *risk appetite*, or *stakeholder engagement* have precisely defined meanings in professional discourse; however, in multilingual teams, they are often subject to language interference, cultural interpretations, and different methodological traditions. Inconsistent terminology causes errors in planning, risk management, reporting, and performance evaluation. Terminology also functions as a tool for reducing transaction costs: inconsistent

use of terms results in duplication of work, unclear responsibilities, conflicts in the interpretation of contractual obligations, increased translation and revision costs, and reduced interoperability between organizations.

Another important aspect is also a terminological interoperability indispensable for digital transformation of project management. Modern project environments use automatized workflow systems, tools for managing portfolios, AI-assisted planning or data models for project KPIs (Key Performance Indicator). These systems presuppose unambiguous, machine-processable terms, as it is not possible to provide accurate mapping of data between tools, correct reporting, and reliable use of AI without a terminological consistency and unity.

Furthermore, the multilingual dimension carries the risk of terminological divergence, as many key terms lack direct equivalents in the target language, are translated inaccurately or inconsistently, and are interpreted differently across methodological traditions. Therefore, the need arises to create updated, open-access terminological dictionaries that reflect the dynamics of the professional field, promote transparency and access to information, facilitate international terminological cooperation between universities and professional organizations, and provide high-quality data for modern digital tools using NLP (Natural Language Processing), automatic translations, or generative models. The implications for practice include building standardized terminological databases, providing open access and regular updates, connecting them with international methodologies (PMI, IPMA, PRINCE2, Agile), and implementing them in project management tools and translation systems. Terminological accuracy thus becomes one of the key factors for success in the global project environment.

This study presents a methodological framework for creating a specialized lexicon, offers a systematic model for an entry in a multilingual project management lexicon, and provides recommendations for translators, terminologists, and project management professionals.

2 Theoretical Framework

This section outlines the theoretical framework employed for the analysis of selected terminological items related to project management in a multilingual context. The framework draws upon international terminological standards, the theory of equivalence, terminographic methodologies, and the specific characteristics of project management as a professional field.

A fundamental premise of terminological work is the distinction between the conceptual level and its linguistic representation. This duality reflects the Peircean triadic model of the sign, which consists of a representamen, an object, and an interpretant (Peirce, 1931-1935, as cited in Alston, 1956.) The interpretant functions as the mental link between a sign's form and its object and closely corresponds to the notion of concept in modern terminology science. According to ISO 1087 (2019), a concept is defined as a unit of knowledge formed by the combination of its characteristic features, while a term is regarded as the linguistic designation of the concept. The ISO 704 (2009) standard further emphasizes the primacy of the concept over the term, highlighting the necessity of conducting a conceptual analysis before

formulating a term's definition. The Slovak terminological tradition has long adhered to these principles. Masár (1991, 2000) stresses that a specialized term must accurately reflect a precise understanding of the concept, its position within the system, and its relationships to other concepts. Both Masár (1991, 2000) and Dolník (2003) underscore the importance of systematicity, consistency, and normalization in terminological practice, conceptualizing terminology as “the reflection of knowledge and its categorization” (Masár, 1991, p. 17). The works of Horecký (1956, 1961, 1989), Masár (1991, 2000), Dolník (1983, 1993, 2003), and Mlacek (1995) collectively provide a robust theoretical foundation for the analysis of concepts, the semantic components of terms, and the lexical and semantic relationships among terms in the domain of project management.

Equivalence between terms across different languages is one of the key questions in this study. The internationally recognized scholars (Cabré, 1999; Sekaninová, 1988; 1993) distinguish among four types of equivalence: symmetrical, symmetrical-asymmetrical, asymmetrical, and non-existing. Sekaninová (1993) claims that it is important to study the scope of meaning, semantic features, systemic relationships, terminological tradition, and the function of the term in the text. This approach is especially significant for terminology work in project management, since numerous English terms lack appropriate equivalents in Slovak or in other languages (e.g., *governance*, *backlog*, *timebox*) or the existing equivalents are asymmetrical (e.g., *deliverable*, *scope*, *baseline*).

Conceptual analysis is a fundamental tool in terminological work. According to ISO 704 (2009) and Cabré (1999), conceptual analysis involves identifying: (a) the superordinate concept (genus); (b) the distinguishing features (*differentia specifica*); (c) the features of the concept (essential versus descriptive); and (d) the specific relationships between concepts, such as hierarchical, partonomic, or associative relations.

Semantic componential analysis – first developed by the structuralist linguistic school (e.g., Weinreich, 1980; Wierzbicka, 2021) – is considered one of the most effective methods for uncovering the semantic structure of specialized terms and for comparing their equivalents across different languages. By decomposing the meanings of specific terms into smaller, discrete “semantic features” or “primitives,” this method reveals shared and contrasting properties (often using binary [+/-] or [1/0] notations) and helps identify the minimal components that define a lexical domain (Hornáčková Klapicová, 2015). Semantic componential analysis operates on the assumption that the meaning of a concept can be broken down into a set of binary or scalar features that may be: (a) present (+); (b) absent (-); or (c) optionally present (+/-).

This method enables the identification of terms and the formulation of their definitions by extracting semantic components from definitions, contexts of use, concept diagrams, and methodological documents. The equivalents in each language are then compared to the original English terms. Asymmetries arise when a semantic component is missing, shifted,

broadened, narrowed, or interpreted differently. This approach is particularly important in project management, a domain characterized by high terminological precision. Terms such as *risk*, *scope*, *baseline*, *deliverable*, *governance*, *assumption*, *prerequisites* issue and possess complex internal structures that are often not fully captured by standard translations.

Semantic componential analysis makes it possible to accurately identify which aspects of meaning are lost or altered in translation, reveal terminological gaps, distinguish asymmetric equivalents, propose terminographically accurate solutions, and create multilingual entries that are compatible with ISO standards. It serves as a foundation for developing precise definitions, identifying conceptual relationships, recommending equivalents, constructing multilingual terminology databases, and harmonizing terminology in global projects. As Masár (2000) notes, “without knowledge of the internal semantic structure of a concept, it is not possible to create a terminologically adequate equivalent” (p. 41). Semantic componential analysis enables the precise identification of semantic differences between languages. In the field of project management, it is instrumental in uncovering asymmetries, identifying terminological gaps, and providing the basis for accurate, standardized, and multilingual terminographic solutions.

Terminology work involves several key steps: (a) the classification of concepts and the development of a conceptual system; (b) the creation of terms, including the analysis of their onomatological structure; (c) the formulation of term definitions; and (d) the development of the structure of terminology records and the management of terminology databases. Bergenholtz and Tarp (2003) define an entry in a terminological dictionary as a structured unit comprising a lemma, definition, equivalents, contexts, notes, and conceptual links.

Within the domain of project management – which integrates aspects of management, technical disciplines, organizational behavior, and software engineering (Turner, 2014) – terminology is primarily shaped by English-language methodologies such as the PMBOK® Guide, 7th Edition (PMI, 2021), PMBOK® Guide, 8th Edition (PMI, 2025), Managing Successful Projects with PRINCE2® (AXELOS, 2017, 2018), IPMA ICB Version 4.1 (IPMA, 2023), and the Scrum Guide (Schwaber and Sutherland, 2020). These sources employ terminology that is precisely defined in English, but often lacks clear equivalents in Slovak, Spanish, Italian, or other languages. This results in terminological conflicts that may impede effective communication.

In international projects, terminological divergence frequently arises when different language communities interact. As Sekaninová (1993) notes, equivalence is always influenced by the language system and cultural context. In project management, this issue is particularly evident with terms that lack clear equivalents, are translated inaccurately, or are interpreted differently according to specific methodological traditions. Consequently, terminological work in project management must be conceptually oriented, attentive to equivalence, systematic, multilingual, and practically applicable within the context of global projects.

3 Research aims and questions

The primary issues associated with project management terminology include: (a) the absence of an equivalent in the target language (e.g., *governance*, *backlog*, *timebox*); (b) semantic asymmetry despite lexical equivalence (e.g., *risk* as a bidirectional concept including both threats and opportunities, as opposed to terms with only negative meaning in some linguistic traditions); (c) asymmetry between the original term and its existing equivalent in another language (e.g., *deliverable*, *scope*, *baseline*); (d) the use of descriptive equivalents that omit certain semantic components of the original term (e.g., *business case*, *stakeholder*); and (e) the adoption of anglicisms in place of fully established and standardized terminological equivalents in the target language (e.g., *WBS*). These challenges directly affect the quality of project documentation, team communication, and the overall effectiveness of project management.

Accordingly, the main objectives of this study are to identify the various types of equivalence between the original English term RISK and its counterparts in the target languages, compare conceptual structures, and develop a model for entries in a multilingual lexicon of project management in Slovak, Spanish, Italian, and German. Within this broader objective, the present article focuses empirically on the term risk as a case study used to validate the proposed terminographic entry model.

Based on these objectives, two research questions were formulated:

RQ1: What is the degree of equivalence in the conceptual structure of the term risk across the traditional project methodologies (PMI, ISO 31000, PRINCE2, IPMA) and which semantic components show the highest degree of asymmetry?

RQ2: What micro-asymmetries occur across the equivalents of the term risk in English, Slovak, Spanish, Italian, and German?

4 Research methodology

The methodological framework of this study is designed to enable a systematic analysis of project management terms in different languages (English, Slovak, Spanish, Italian and German), and to provide reliable data for the compilation of terminographic entries in a multilingual dictionary. The method utilizes a qualitative approach, with an emphasis on semantic componential analysis, contrastive linguistics, and terminographic modelling.

The selection of the term risk was based on three criteria: a) frequency of use in the project regulations; b) terminological problematicity; and c) conceptual complexity. The term we selected is present in key methodologies and commonly used by project managers in practice. The main emphasis is placed on the usage of the term in the Slovak project management environment, because this context is directly relevant to the authors' research background and because it represents a linguistic environment in which systematic terminological standardization in project management remains comparatively limited.

At the same time, the comparison with English, Spanish, Italian, and German ensures a balanced multilingual perspective.

The linguistic material was excerpted from: a) primary sources (A Guide to the Project Management Body of Knowledge PMBOK® Guide – PMI, 2021 and 2025; Managing Successful Projects with PRINCE2® – AXELOS, 2017; IPMA Individual Competence Baseline, Version 4.1 – IPMA, 2023; The Scrum Guide – Schwaber and Sutherland, 2020); b) secondary sources (company glossaries – Atlassian, Microsoft, IBM; Software localizations – Jira, MS Project, Asana, Trello; National terminological databases – Real Academia Española RAE for Spanish, Duden for German, Treccani for Italian and JÚLŠ SAV for Slovak, Slovenský výkladový slovník projektového riadenia (2015), editor Igor Trávník, PMI lexicon (2016), translated by Daniel Podolský); and c) corpus sources (Project documents and online discussions of project managers – PMI community, StackExchange PM).

Our methodological approach combines: a) concept analysis, which was used to identify the superordinate concept, distinguishing features, semantic components, and conceptual relationships. This procedure is based on ISO 704 (2009, p. 5); b) componential analysis – a binary matrix (presence (+) vs absence (-) of semantic components) was created for the selected term in all the languages in question. The aim was to identify asymmetries, detect missing semantic components in translations, and determine the type of equivalence; c) contrastive analysis of definitions used in methodological guides, glossaries, and project documentation. This method helped to identify terminological shifts; d) equivalence analysis – each term was classified according to the type of equivalence across different languages: symmetrical, symmetrical-asymmetrical, asymmetrical, and non-existing; e) terminological synthesis – a model of an entry in a terminological lexicon of project management was created based on the results of the analysis; f) validation of results was executed through consultations with a panel of project management experts from Slovak, Spanish, Italian, and German environments, together with comparison against PMI, IPMA, and PRINCE2 glossaries. The consulted experts were practitioners and trainers familiar with international project management methodologies and multilingual terminology use in professional contexts.

5 Results

The term *risk* is defined as an “uncertain event or set of events with a potential positive or negative impact” (ISO21506, 2024). PMBOK® 7th Ed. (2021) defines *risk* as “An uncertain event or condition that, if it occurs, has a positive or negative effect on one or more project objectives” and further lists related terms and their definitions, e.g., *risk acceptance*, *risk-adjusted backlog*, *risk appetite*, *risk avoidance*, *risk breakdown structure*, *risk enhancement*, *risk escalation*, *risk exploiting*, *risk exposure*, *risk management plan*, *risk mitigation*, *risk register*, *risk report*, *risk review*, *risk sharing*, *risk threshold*, *risk transference*. PMBOK® 8th Edition (2025) defines *risk* as an “uncertain event or condition that, if it occurs, has a positive or negative

effect on one or more portfolio, program, or project objectives”. According to PMBOK® Guide 8th ed. (2025), a *risk* is an event or condition that may or may not occur, and when it does, it will have a positive or negative effect on one or more project objectives. This definition describes the following characteristics of *risk*: a) uncertainty that it will happen; b) event or condition; c) impact on objectives; and d) positive (opportunities) or negative (threats) effects. The PMBOK® Guide 8th ed. highlights that considering *risk* is part of full performance domain crucial for project decision-making. PRINCE2® (2017) defines *risk* as “An uncertain event or set of events that, should it occur, will have an effect on the achievement of objectives. A risk is measured by a combination of the probability of a perceived threat or opportunity occurring, and the magnitude of its impact on objectives” and also lists other related terms, such as *proximity of risk*, *reduce (risk response)*, *residual risk*, *risk actionee*, *risk appetite*, *risk estimation*, *risk evaluation*, *risk exposure*, *risk management*, *risk management approach*, risk owner, risk profile, risk register, *risk response*, *risk response category*, risk tolerance, *risk tolerance line*.

IPMA ICB4 (2023) does not define risk; however, it traits risk and opportunity together within the competence element called: *Practice 11: Risk and opportunity*. IPMA does not define risk only negatively. Instead, it adopts a dual perspective: risk (with potential negative effect/threat) and opportunity (with potential positive effect). To provide an illustration, we present several examples of its use from this document: “However, intended strategies are often not realized as the environment changes and new opportunities and risks during pursuit of a certain path” (p. 42) or “Identifies new risk and opportunities which could alter the strategy” (p. 42). The term risk is also introduced in another place followingly: “Risk and opportunity management is a process of identification, assessment, response planning, implementation, and control of risks related to projects” (IPMA ICB4, 2023, p. 141). It appears that the IPMA standard differentiates between the two terms, *risk* and *opportunity*, whereas for PMI and PRINCE2 the term opportunity may be understood as a risk with a positive impact. Všetěčka (2025) introduces the term risk as follows: “Modern methods comprehend the term ‘risk’ in the two following meanings: a) Threat – an uncertain event with a negative effect on the course or deliverables of a project; b) Opportunity – an uncertain event with a positive effect on the course or deliverables of a project” (p. 236). PMI lexicon (2016) translated the term risk as “Neistá udalosť alebo stav, ktoré, ak sa vyskytnú, majú pozitívny alebo negatívny dopad na jeden alebo viacero projektových cieľov.” (from the original English definition ‘An uncertain event or condition that, if it occurs, has a positive or negative effect on one or more project objectives’.)

Trávník (2015, p. 130) defines *project risk* as a stochastic event that negatively affects the success of a project or its management. Furthermore, *project risk* may also arise from *project opportunities* that are either recognized too late or managed incorrectly. When such stochastic events occur, they present a challenge for the project manager or the project sponsor. Each risk or project opportunity may stem from the interaction of several partial uncertain events, which serve as secondary sources of both risks and opportunities. Risks can be classified as primary or secondary, and as acceptable or unacceptable. The risk associated with a particular activity or component of a project is defined comparably. It is important to note that, while many authors define *risk* as a stochastic event that may also have positive outcomes (i.e., opportunities), Trávník does not adhere to this perspective. In the Slovak context, the term risk is generally associated solely with negative impacts, such as the possibility or danger of loss, failure, or damage. This interpretation is also evident in the use of the term *risk mitigation*, since opportunities are not mitigated but rather enhanced and exploited.

Project risk can be described by outlining the relevant event and specifying its expected value or risk discount. The risk discount may differ depending on the chosen project implementation option, and greater variation in these values indicates a riskier project over all. Both risks and opportunities have distinct causes, effects, and manifestations. Failing to distinguish between them, or conflating the two, complicates the management of project risks and opportunities. A notable category of risks is the deviation of the actual development of the project environment from initially accepted project assumptions. Based on shared characteristics, it is possible to categorize *risks* and *opportunities* and to construct a hierarchical structure for their management.

In the Concise Dictionary of the Slovak Language (2003), the word *risk* (“riziko” in Slovak) is defined as follows: “Možnosť, nebezpečenstvo straty, neúspechu, škody” (‘possibility, danger of loss, failure, damage’). The Dictionary of foreign words (academic) (2005) defines *risk* (“riziko” in Slovak) as “nebezpečenstvo, možnosť škody, straty, neúspechu” (‘danger, possibility of damage, loss, or failure’). Synonymický slovník slovenčiny (2004) defines *risk* (“riziko” in Slovak) as “nebezpečenstvo, možnosť niečoho zlého” (‘danger’, ‘the possibility of something bad’).

According to the above-mentioned Slovak dictionaries, the term risk has a negative meaning. In a positive sense, the term *príležitosť* (‘opportunity’) could be used. The equivalents of *risk* – *riesgo* (ES), *rischio* (ITA), *Risiko* (GER) – introduced in the Spanish, Italian, and German methodological guides and in the existing lexicons of project management and their definitions match the conceptual core of the original English term.

Table 1. Component analysis of risk across different project management methodologies

Component	PMI	ISO 31000	PRINCE2	IPMA ICB4
<i>Uncertain</i>	+	+	+	+
<i>Event or condition</i>	+	-	+	-
<i>Effect on objectives</i>	+	+	+	+
<i>Positive and negative</i>	+	+	+	+
<i>Probability</i>	+	+	+	+
<i>Consequence</i>	+	+	+	+
<i>Cause</i>	+/-	+/-	+	+/-
<i>Subjectivity</i>	-	+	-	+
<i>Context</i>	+/-	+	+/-	+
<i>Response needed</i>	+	+	+	+

Sources: PMBOK® Guide (8th ed.), ISO 31000, PRINCE2®, and IPMA ICB4®

Table note: The authors selected the semantic components included in Table 1 through systematic extraction and comparison of recurring definitional features in PMI, ISO 31000, PRINCE2®, and IPMA ICB4®. In the matrix, “+” indicates that a component is explicitly present, “-” indicates that it is not explicitly present, and “+/-” indicates partial or implicit presence.

The results of componential analysis of risk (Table 1) across the different project management methodologies (PMI, ISO 31000, PRINCE2, and IPMA ICB4) agree on the core characteristics of the term as a manifestation of uncertainty with potential positive (opportunities) or negative (threats) effects on the project objectives. However, these methodologies also expose minor asymmetries regarding some of the semantic components of the term, pointing to the differences in how the concept is framed. PMI views risk as an uncertain event or condition, highlighting its effect on project objectives. ISO 31000 perceives the concept as more abstract, emphasizing the relevance of the context and defining it as the effect of uncertainty on objectives. PRINCE2 proposes the cause-event-effect model, thus adding the semantic component of causality to the structure of the term. IPMA ICB4 underlines the behavioural, contextual, and perceptual aspects of risk and sets it within a competence framework. It may be concluded that while there exists conceptual consistency of risk across the traditional methodologies of project management, IPMA takes a more competence-based perspective, PMI and PRINCE2 adopt a more process-oriented one, and ISO 31000 embeds the term within a more systemic and contextual frame.

Table 2. Component analysis of risk across English, Slovak, Spanish, Italian, and German

Component	English (EN)	Slovak (SK)	Spanish (ES)	Italian (IT)	German (DE)
Uncertain	+	+	+	+	+
Event or condition	+	+	+	+	+
Effect on objectives	+	+	+	+	+
Positive or negative	+	+	+	+	+
Conditionality	+	+	+	+	+
Expressive value of uncertainty	+	+	+	+	+
Explicitness of modality	+	+/-	+	+	+
Event vs. condition	+	+	+	+	+/-
Semantic structure of effect	+	+	+	+	+
Project objectives	+	+	+	+	+

Sources: PMBOK® Guide (8th ed.) (EN, SK, ES, IT, DE)

Table note: The components in Table 2 were selected on the basis of the PMI definition and refined through cross-linguistic comparison of the English, Slovak, Spanish, Italian, and German formulations. These components are treated as core analytical features retained across languages for the purposes of comparison.

The results of componential analysis of the term risk across English (the source language), Slovak, Spanish, Italian, and German (target languages) (Table 2) reveal that asymmetries in semantic components occur only on a micro-lexical level. The Slovak expression “ak nastane” (‘if it occurs’) shows a slightly weaker expression of modality in comparison to the English expression “if it occurs”. The Slovak expression “ak nastane” (‘if it occurs’) could be substituted by “ked’ nastane” (‘when it occurs’) with a stronger conditionality. Uncertainty and effect are more strongly expressed by the German expressions “unsicheres Ereignis” (‘uncertain event/incident’) and “Auswirkung” (‘effect’). The German “Bedingung” has a broader meaning in comparison to the English “condition”, since it also includes presuppositions, conditions, and circumstances. To sum up, all of the languages in question retain full conceptual structure of the term risk. However, the German (*Risk*) equivalents are lexically strongest, the Slovak equivalent (*riziko*) has a slightly weaker modality, and Spanish (*riesgo*) and Italian (*rischio*) equivalents are stylistically closest to English.

6 Discussion

The results of componential analysis conducted on the term risk across English, Slovak, Spanish, Italian, and German reveal significant differences in conceptual structure. This confirms the presence of terminological asymmetry between English – the source language of the professional field – and the target languages. These asymmetries are consistent with Sekaninová’s (1993) assertion that equivalence is always relative, dynamic, and conditioned

by the language system. Despite some minor definitional and lexical variations across the five languages and different methodological traditions of project management, the term *risk* is a conceptually vigorous and internationally harmonized term in the project management lexicon.

The analysis also reveals methodological asymmetries in how the concept is framed. PMI understands risk as an uncertain event or condition, emphasizing its event-based nature and its impact on project objectives. ISO 31000 further abstracts this concept, defining risk as the impact of uncertainty on objectives, shifting attention from events to deviations and placing a strong emphasis on context and perception. PRINCE2 adds structural construction through the cause-event model, making causality an explicit semantic component. The IPMA ICB4 embeds risk within the competency framework, emphasizing behavioural, contextual, and perceptual dimensions rather than a strict definition boundary. These differences do not weaken the conceptual unity of the concept, but point to the methodological perspectives through which risk is interpreted. PMI and PRINCE2 adopt a more operational and process-oriented view, ISO 31000 more systemic and contextual, and IPMA more competent and human-oriented.

A linguistic comparison between English, Slovak, Spanish, Italian and German shows that all four target languages give a definition of PMI with the same semantic structure. In each language, the six basic components of the English definition are retained: uncertainty, event/condition, conditionality, effect, valence, and project objectives. It can therefore be said that this is a complete conceptual symmetry across languages.

However, the analysis also shows certain manifestations of micro-asymmetry, which arises on the basis of lexical and grammatical differences between languages. *Unsicheres Ereignis* and *Auswirkung* express a stronger lexical intensity in German compared to their English counterparts. Slovak shows a slight weakening of the modality: *ak nastane* ('if it occurs'), it can be interpreted in a wider dimension than *keď nastane* ('when it occurs'), which potentially reduces the conditionality of the phenomenon. Spanish and Italian use the most neutral and natural equivalents, closely copying the English structure without semantic diversion. The German *Bedingung* is a broader term than the English *condition*, potentially expanding the conceptual scope of the term risk.

These asymmetries are minor and do not fundamentally affect conceptual equivalence across the five languages. However, they show how linguistic structure influences the intensity or nuances of a concept, even if the basic definition remains stable.

The comparative analysis of the term *risk* reveals a high degree of stability of the term and its equivalents both across languages and across methodologies, showing only small lexical and definition variations.

The findings point to the fact that the term *risk* is a conceptually stable concept, which, in contrast to cases of considerable asymmetry in terms such as *governance*, *backlog*, or *baseline*

maintains the accuracy of equivalents and uniformity of understanding according to definitions across the listed languages and project management methodologies.

This means that the term risk can be reliably used in multilingual project environments without conceptual distortion. The differences between PMI, ISO 31000, PRINCE2 and IPMA ICB4 are more significant than the differences between languages, which means that the asymmetry across methodologies outweighs the asymmetry caused by language differences. ISO 31000 represents the broadest conceptual framework: it emphasizes effect, context and perception. It thus expands the semantic field beyond the definitions given in PMI and PRINCE2. IPMA ICB4 formulates risk as a competence: this shifts attention from definition to behavior, which can affect how the term risk is understood and used in practice. Therefore, when creating a terminographic record of the term risk, it would be appropriate to provide a basic definition aligned with PMI/PRINCE2 (event-based), supplemented by methodological notes that would capture the emphasis on context according to ISO 31000 and the orientation on competencies according to IPMA ICB4.

The analysis shows that *risk* is one of the few project management terms that is terminologically anchored and can be used transparently in multilingual environments.

Answers to Research Questions

RQ1: *What is the degree of equivalence in the conceptual structure of the term risk across the traditional project methodologies (PMI, ISO 31000, PRINCE2, IPMA) and which semantic components show the highest degree of asymmetry?*

The analysis shows that the term *risk* belongs to some of the conceptually more stable terms in project management. All of the studies methodologies (PMI, ISO 31000, PRINCE2, IPMA) share its core structure based on these three universal components: a) uncertainty; b) potential influence; c) relationship to the aim of the project or organization. This agreement indicates that the term *risk* is anchored in a common management understanding of uncertainty as a factor influencing the success of projects.

Despite this high level of agreement there are also methodological asymmetries related mainly to peripheral semantic components. ISO 31000 broadens the concept toward a systemic understanding of risk as the influence of uncertainty on the objectives, which shifts the emphasis from event to deviation and explicitly shifts the components of perception and context. On the other hand, PRINCE2 enforces the causal structure of risk through the cause – event – effect model, which results in indicating cause an individual semantic component. IPMA ICB4 frames *risk* as a competence area, in which behaviour, cultural context and subjective perception play an important role. PMI remains operationalized and process-oriented, while *risk* is understood as an event or condition having influence on the project objectives.

Therefore, the highest degree of asymmetry is manifested through the components of perception, context, causality, and competence frame. The core components remain stable

across the different traditional methodologies. That means that the differences between the methodologies do not represent a conceptual disagreement, but rather different perspectives, which reflect the different aims of each methodological approach.

RQ2: *What micro-asymmetries occur across the equivalents of the term risk in English, Slovak, Spanish, Italian, and German?*

The comparison of the equivalents of the term *risk* in Slovak, Spanish, Italian, and German shows that all four languages retain a full conceptual symmetry in regard to the English original. All of the equivalents reproduce the six main semantic components of the PMI definition (uncertainty, event/condition, conditioning, effect, positive/negative valency, target orientation). Therefore, the term *risk* is conceptually equivalent in these languages and does not manifest any macro-asymmetry.

However, certain micro-asymmetries result from lexical and grammatical particularities of the individual languages. German shows the highest degree of lexical intensity: the expression *unsicheres Ereignis* and *Auswirkung* are semantically stronger than the English expressions *uncertain event* and *effect*, which may result in understanding *risk* as a more serious phenomenon. Slovak shows a slightly weakened modality in the expression *ak nastane* (if it happens), which could be interpreted as *keď nastane* (when it happens), which results in lowering the strictly conditioned character of *risk*. Spanish and Italian are closer to English, while using neutral and natural equivalents without a semantic shift.

These micro-asymmetries do not have an effect on the core of the concept; however, they may have an effect on the pragmatic interpretation of *risk* in project teams, especially in multilingual environments. Linguistic differences may form the intuitive perception of the intensity, probability, or seriousness of *risk*, which is relevant for terminography, translation, and project communication.

7 Conclusion

Project management terminology shows significant asymmetry across English, Slovak, Spanish, Italian, and German. English has the most extensive conceptual structure, whereas the target languages often show reduced semantic features or a complete lack of an equivalent. Traditional project management terms tend to be more conceptually stable. Among the languages analyzed, Slovak and Italian show the highest degree of asymmetry in equivalence. Consequently, a multilingual terminographic model should be concept-oriented. An effective entry in a multilingual project management lexicon should include the concept as the central unit (as per ISO 704), the equivalent term, a definition informed by semantic componential analysis, conceptual relationships, contextual usage, notes on recommended or inappropriate variants, and instances of meaning reduction relative to the original English term. The findings underscore the need for open-access, regularly updated, and multilingual terminological

databases to promote terminological consistency, tool interoperability, precise communication within international teams, and reliable use of AI in project management.

The comparative semantic analysis of the term *risk* across the traditional project management methodological guides and across English, Slovak, Spanish, Italian, and German shows that *risk* is one of the most conceptually stable and internationally harmonized terms in the lexicon of project management. The different methodological traditions – PMI, ISO 31000, PRINCE2, and IPMA present the same core conceptual structure of *risk*. According to these methodologies, *risk* is a manifestation of uncertainty with a possible effect on objectives, and both negative (threats) and positive (opportunities) outcomes belong to the semantic structure of the concept. Simultaneously, the study identifies important asymmetries across the different methodological traditions in project management. A high degree of semantic symmetry is also confirmed across the five languages – English as the source language compared to the equivalents in Slovak, Spanish, Italian, and German. While all of the target languages preserve the essential semantic components of the original term in English, there are certain micro-asymmetries observed across the individual languages.

It is recommended that terminologists and translators prioritize a concept-oriented approach over formal equivalence and consistently verify terminological consistency within a specific methodology. Identifying the semantic components of a concept, selecting appropriate superordinate, subordinate, and associative relationships, constructing concept diagrams, and finally choosing an accurate terminological equivalent are essential steps in this process. For terms that do not exist in the target language, it is advisable to adopt the English lemma, provide a precise definition in the target language, include usage notes, and add contextualized examples.

Project managers should ensure that all team members use standardized terminology and provide access to open-access glossaries and definitions. For terms exhibiting semantic asymmetry, updated definitions should clarify any missing components. Each project should establish its own glossary, including definitions of key terms, their equivalents in the target language, and user notes. This practice can significantly reduce the risk of miscommunication.

A multilingual lexicon of project management should differentiate between various methodologies (such as PMBOK®, ISO 31000, PRINCE2®, and IPMA ICB4®) and recognize that the same term may be defined differently across methodology guides. Terminology from distinct frameworks should not be intermingled, and the lexicon should consistently provide methodological context – for example, distinguishing between the definition of “work package” in PMBOK and in PRINCE2. Additionally, all lexicons should be regularly updated to incorporate new terms and harmonized with the latest standards.

We recognize several limitations inherent to this study. Some frameworks (e.g., IPMA) do not provide a uniform dictionary definition, which requires interpretive extraction of conceptual components. It is also certain that some micro-asymmetries may arise as a result

of translation conventions rather than conceptual differences. Furthermore, our analysis focuses on the explicit content of the definitions, not on implicit cultural or organizational interpretations of the term risk. Despite these limitations, the study provides a solid basis for determining methodological and linguistic asymmetries in the concept of risk.

Overall, this study contributes to a better understanding of how project-management terminology functions across different traditional methodologies and languages. It also shows the usefulness of component semantic analysis as a tool for identifying the possible asymmetries in multilingual environments. Further research may be carried out to uncover higher degrees of asymmetry in project-management terminology in order to bring more consistency and clarity to professional communication.

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