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Obor: Anglický jazyk

Tvoření termínů v dokumentech EU: Z angličtiny do ruštiny, češtiny a němčiny

Term creation in EU documents: From English to Russian, Czech and German

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Prohlašuji, že jsem diplomovou práci vypracovala samostatně, že jsem řádně citovala všechny použité prameny a literaturu a že práce nebyla využita v rámci jiného vysokoškolského studia či k získání jiného nebo stejného titulu.

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Abstrakt

Diplomová práce se zabývá zkoumáním víceslovných termínů se substantivem jako řídicím členem v angličtině a ruštině (okrajově v češtině a němčině), konkrétně analýzou nejfrekventovanějších terminologických sousloví a překladatelských postupů. Opírá o relevantní práce terminologů a lingvistů, předkládá komplexní výklad pojmů „termín“ a „neologismus“ a uvádí postupy pro překlad lexikálních jednotek, které nemají k dispozici příslušný ekvivalent v cílovém jazyce. V empirické části analyzuje excerptované termíny, jejich spojení a překlad, zjišťuje nejfrekventovanější postupy využívané pro překlad termínů, a to včetně nových termínů. Materiál je čerpán z rozhodnutí Rady 2009/371/SVV ze dne 6. dubna 2009 o zřízení Evropského policejního úřadu (Europol).

Klíčová slova: terminologie, tvoření termínů, překlad EU dokumentů, překlad neologismů, překlad z angličtiny do ruštiny, Europol

Abstract

The present master's thesis investigates noun-based 'multi-word' terms in English and Russian (and to a smaller degree in Czech and German), analyses the most frequent term structures and translation procedures. It draws on relevant sources on terminology and linguistics, presents a comprehensive approach to the notion 'term' and 'neologism', describes procedures for translating lexical units with no standard target language equivalents available, develops a research framework for extracting terms, analyzes the term structure and the translation of terms, with a focus on newly emerging ones, and identifies the most frequent ways of term translation. The sample text is the Council Decision 2009/371/JHA of 6 April 2009 establishing the European Police Office (Europol).

Key words: terminology, term creation, translation of EU documents, translation of neologisms, translation from English to Russian, Europol

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Abbreviations

A – adjective

AAN – adjective-adjective-noun

AN – adjective-noun

ANN – adjective-noun-noun

acc – accusative case

Adv – adverb

c – conjunction

dat – dative case

det – determiner

gen – genitive case

inst – instrumental case

N – noun

NN – noun-noun

NNN – noun-noun-noun

N's – noun in possessive case

p – preposition

Part – participle

loc – locative case

Pro – pronoun

Tran – transgressive

V – verb

Ved – verbal form ending in -ed

Ving – verbal form ending in -ing

* – in the Appendix 2, asterisk marks the addition of a plural form, a capital letter, and a part of the term (which is ignored by the C-value analysis and which is crucial to the understanding of the translation procedures to be applied) to the excerpted terms

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1. Introduction

Extensive use of terms is the most characteristic feature of an official document. Terms help to maximize the accuracy of information contained within the document – precision then excludes the possibility of an arbitrary or subjective interpretation. Contemporary terminology is constantly changing due to the continuous addition of new terms, which results from the appearance and development of new products and concepts, particularly in science and technology. Working with new terms requires a thoughtful approach, analysis of term creation and neologisms, and a solid understanding of both foreign and native language when selecting an appropriate translation procedure. The study aims to provide evidence that a translation of a newly emerging noun-based term is easily accessible in the target language – even when there is no a recognized equivalent. The research closely examines the structure of terms to explain what stands behind it and why the term structure is of practical importance and application when considering the translation procedure to be used.

The thesis consists of Introduction and three core parts – Theoretical Part, Material and Method Part, Research Part – followed by Conclusion, References and Sources.

The Introduction presents the research problem that will be addressed by the thesis and reviews its parts. The Theoretical Part investigates terminology (as a scientific discipline), the origin and distinctive features of the three ‘classical schools of terminology’ in Prague, Vienna and Moscow, the definition of the term, its linguistic characteristics, criteria for the selection of new terms and ways of their forming, the definition of the neologism and the types of neologisms, and procedures for translating lexical units with no regular target language equivalents.

The Material and Method Part outlines the specific tasks that will be carried out in the Research Part, introduces and comments on the tool and method applied – describes the term extraction tool TermMine advanced by the National Centre for Text Mining at the University of Manchester and the C-value term recognition method. It presents criteria for the inclusion of terms in the analysis. The sample text from which two hundred terms are extracted is the Council Decision 2009/371/JHA of 6 April 2009 establishing the European Police Office (Europol). The terms will be automatically extracted by means of the free online term extraction service TerMine. The automatic term extraction will be applied only when working with the English version of the Council Decision. The relevant terms in Russian, Czech and German texts will be collected manually: the selected tool for term extraction does not support Cyrillic and diacritics.

The Research Part analyzes the terms extracted from the sample text. When analyzing the terms, the theoretical concepts and methods discussed in the first part are applied, in particular linguistic characteristics of the term and the procedures for translating lexical units with no

established target language equivalents. The Conclusion presents the findings and considers further possible areas for research on the subject.

The practical significance of the research and its results is in that it offers guidelines for translating terms or proofreading texts.

2. Theoretical Part

2.1. Definition of Terminology

Terminology is a discipline concerned with the study and compilation of specialized terms (Cabré, 1999: 1). Terminology considers various aspects of specialized terms, including their typology, origin, form, content (meaning), function, use, regulation and creation (Griniewicz, 2008: 9). It is seen, for example, by Picht (2011: 24) as having “meta-status among all other sciences since terminology is a precondition for all kinds of creation of knowledge and its communication, knowledge ordering, knowledge exchange and knowledge proliferation”.

The Russian translation of the discipline is ‘терминоведение’ (transliteration: ‘terminovedenie’; a compound ‘terminovedenie’ is composed of two roots, ‘termin’/‘term’ and ‘ved’/‘science’, literally means ‘terminology science’), and not ‘терминология’ (transliteration: ‘terminologija’). Alexander Reformatzkij (1900-1978), a Russian linguist, defines terminology/‘terminologija’ as a set of terms within a specific field which make up a part of lexicon most accessible in terms of ‘conscious regulation’ (Reformatzkij, 1996: 62). Unlike in Russian, where different terms are used to distinguish between a set of specialized terms and discipline, in Czech, English and German one word is used to refer to both: ‘terminologie’ in Czech (‘odborné názvosloví’ is also frequently used to denote a set of specialized terms), ‘terminologie’ in German (Poštolková, Roudný, Tejnor, 1983: 7-8) and ‘terminology’ English.

Terminology is an interdisciplinary field, and “[l]ike all interdisciplinary fields in science, terminology is a discipline that is defined in relation to the other fields from which it takes a specific set of concepts” (Cabré, 1999: 25). Terminology is located at the intersection of linguistics, logic, gnoseology, ontology, information science and computer science (Cabré, 1999: 25; Poštolková, Roudný, Tejnor, 1983: 7-8).

2.1.1. Origin of Terminology and ‘Classical Schools of Terminology’

Most sources agree that terminology began to shape and mature as an independent discipline in the 1930s (Kocourek, 2012: 41; Cabré, 1999: 1; Griniewicz, 2008: 258). Similarly, Rey (1995: 49) claims that it is only in the 20th century that “terminology acquired a scientific orientation while at the same time being recognised as a socially important activity”. There are several relatively recent works describing the development of terminology and its methods, such as Temmerman (2000), Sageder (2010), Picht (2011), or Griniewicz (2011). In the following a brief review of the three classical schools will be provided.

Eugen Wüster (1898-1977), Austrian engineer and terminologist, is commonly considered the founder of modern terminology and the main representative of the Vienna school

of terminology. In 1931, he published his work *Internationale Sprachnormung in der Technik, besonders in der Elektrotechnik/International Language Standardization in Technology, Particularly in Electrical Engineering* (Kocourek, 2012: 41; Cabré, 1999: 2). The work was Wüster's doctoral dissertation, in which "[he] presented arguments for systematizing working methods in terminology, established a number of principles for working with terms and outlined the main points of a methodology for processing terminological data". It is important to highlight that Wüster was particularly interested in methodology and standards, because "he considered terminology a tool that should be used as effectively as possible to eliminate ambiguity from scientific and technical communication". (Cabré, 1999: 5; Griniewicz, 2008: 258). Wüster's (1991) introduction to general terminology is still a valuable source of inspiration.

Having initially arisen from the needs of scientists and technicians to standardize the terminology, the Vienna school of terminology "developed a systematic corpus of principles and methods that constitute the basis of much theoretical work and modern practice": "the principles of this school are reflected in standardized documents on the vocabulary of terminological work, and terminology as a discipline, on the field's methodology and data transfer, and on the presentation of finished terminological products" (Cabré, 1999: 12-13).

Another key figure in the development of terminology is **Dmitrij Lotte** (1889-1950), founder of the Russian (Soviet) school of terminology, who published a series of works on the issues of terminology, with a focus on technical terms, its creation, selection and regulation: *Immediate Tasks of Technical Terminology* (1931), his principal work *Some of the Fundamental Questions about Term Selection and Creation of Scientific and Technical Terms* (1941), to name just a few (Cabré, 1999: 2). It is suggested that Lotte should be seen as the real father of terminology as a scientific discipline. The reason for this is that Lotte was concerned with both theoretical and methodological issues, while Wüster was working on the processing of terminological data and, in fact, did not begin to develop the general theory of terminology until the 1970s (Cabré, 1999: 225).

In subsequent years, terminology became the object of attention in the Soviet Union. **Alexander Reformatzkij** (1900-1978) made a significant contribution to the definition of the term and describes it in his major work *Introduction to Linguistics* (first edition came out in 1996). His ideas on the concept of term (and neologism) make up a significant part of this thesis.

The studies by Lotte and Reformatzkij contributed to the Russian school of terminology and are frequently referred to in modern Russian editions on terminology. A prominent contemporary Russian terminologist quoted throughout this study is **Sergiusz Griniewicz** (also, Sergei Grinev-Grinevich). The representative of the Soviet school of terminology to be also mentioned is **Ernest Dresen** (1892-1937), who became "a pioneer in underscoring the importance

of standardization and the principal force behind the ISA [the International Standardization Association]¹” founded in 1926 (Cabré, 1999: 5). Just like the Vienna school, the Soviet school of terminology was greatly interested in the standardization of terms and concepts, partially because of the problems associated with the multilingualism in the former Soviet Union countries (Cabré, 1999: 13).

The third school of terminology to be described is the Czech school of terminology, with its center in Prague. It appeared as the result of the functional linguistic approach of the Prague linguistic circle (founded 1926). Both Rostislav Kocourek and Teresa Cabré draw attention to the fact that the Czech school was mostly concerned with studying the functional and structural description of ‘special language’ (Kocourek, 2012: 41; Cabré, 1999: 13). ‘Special languages’ are considered a ‘professional style’, and “terms [are] units that make up the functional professional style” (Cabré, 1999: 13). The Czech terminologists include **Lubomir Drozd**, German linguistics specialist, author and co-author of a number of works on terminology – *Deutsche Fach- und Wissenschaftssprache* (1973), *Language planning and standardization of terminology in Czechoslovakia* (1980), ex-president of an international terminology association TERMIA, and a former UNESCO expert on scientific terminology (Poštolková, 1976; Skála, 1989: 66-67) and **Josef Filipec**, Bohemist and lexicographer, co-author of *Česká lexikologie* (1985; together with František Čermak), who regards terminology of a certain field as a ‘specific system’, which varies according to the means of term creation, social aspects of language using, and the number of borrowed, newly created and codified units (Kocourek, 2012: 41-47, Poštolková, 1976). The terminological work conducted by the Czech school of terminology was linked to the Institute of the Czech Language, which is a part of the Academy of Sciences in the Czech Republic. The group of Czech terminologists, in addition to Filipec, included **Běla Poštolková**, **Miroslav Roudný**, and **Antonín Tejnor**, whose work is relevant to the thesis – particularly chapters on the definition and characteristics of term.

Cabré (1999: 7) defines the Austrian, the Soviet, and the Czech school of terminology as ‘classical schools of terminology’, which gives the name to this chapter. What unites the three ‘classical schools of terminology’ – regardless of the Vienna and the Moscow school putting greater emphasis on the standardization of terms and concepts, and Prague’s interest in the functional description of the terms – is that “[they] all share a linguistically based perspective [and] consider terminology a medium of expression and communication”. (Cabré, 1999: 13). More information is provided by Kocourek (2012: 41-42) and Griniewicz (2008: 9-19).

¹ The predecessor of the International Organization for Standardization (ISO) (Cabré, 1999: 225).

2.1.2. Branches of Terminology

The development of terminology resulted in its division into a number of branches, each of which, according to Griniewicz, gained the status of an independent discipline (Griniewicz, 2008: 9-13).

The first distinction he makes is the one between **theoretical terminology** concerned with examining patterns of development and use of terminology, and **applied terminology** which creates and translates terms, describes and evaluates them, develops guidelines and recommendations for eliminating ‘imperfection of terminology’.

General terminology studies the most common features, problems and processes taking place in terminology, whereas **terminology of a specific field of knowledge** deals with the terms and concepts of a specific area of knowledge.

Typological terminology focuses on comparative studies of individual features of different term systems within a particular field of knowledge in order to establish general properties and characteristics, or peculiarities, of each system. **Comparative terminology** differs from typological terminology since it deals with the vocabulary of different languages.

Semasiological terminology researches the problems associated with the meaning (semantics) of terms, meaning change and various semantic phenomena: polysemy, homonymy, synonymy, antonymy, hyponymy – to list just a few. **Onomasiological terminology** explores the form of terms: process of naming concepts and selection of forms.

Historical terminology is concerned with the history of terminology in order to reveal trends in their formation and development. **Functional terminology** is the study of term functions in various texts and situations of professional communication, and the use of term in speech and computer systems (Griniewicz, 2008: 12-13).

New directions in terminology continue to emerge: **cognitive** (see Temmerman, 2000), **or epistemological, terminology** researches the role of terms in scientific knowledge and thinking (Kocourek, 2012: 46); **stylistic terminology** studies the style of scientific and technical texts; **history of terminology sciences** investigates origin and development of the discipline (Griniewicz, 2008: 12-13).

The study of any field of knowledge is invariably associated with terminography, the science of compiling terminological dictionaries (see, e.g., Martin, van der Vliet, 2003; Machová, 1995). In the words of Martin and van der Vliet (2003: 334) terminological dictionaries “differ from general language dictionaries (GD’s) in that they refer to a specific subject field and not to a wide range of all possible subjects and that their function is to define and transfer (expert) knowledge about this field.” Terminography, however, “is not limited to collecting the terms of a particular domain for informative or descriptive purposes, but rather the aim is to establish certain

terminological units as standardized forms, as reference forms, thereby discarding other variants for the same concept” (Cabré, 1999: 37-38). The final goal is to achieve precise and unambiguous professional communication.

The thesis makes extensive reference to these terminology branches, especially, theoretical (investigates the notion of term, core term characteristics, term creation), applied (analyzes terms only within a specific area, i.e. security area), comparative (compares the respective security terms in English and Russian, occasionally, Czech and German) and onomasiological (explores the forms of terms).

2.2. Definition of a Term

The word ‘term’ comes from the Latin ‘terminus’ – ‘boundary marker’, ‘limit’. In English, the OED dates the first example of its use as “A word or phrase used in a definite or precise sense in some particular subject, as a science or art; a technical expression (more fully *term of art*)” to 1377.

In the consulted linguistic references, one can find many different interpretations of the ‘term’ pointing to its specific characteristics and peculiarities of use. Though different aspects of the ‘term’ are considered, there is still no single commonly accepted definition of the ‘term’.

In her report on papers from two terminological colloquia Poštolková (1976) reports on Filipec defining the term as “a specific language sign used by a specific social group for active interpersonal communication” and Drozd describing a term as “a language sign which is capable of acquiring new content”, and claiming that the difference between ‘terms’ and ‘non-terms’ is better seen at the following levels of linguistic analysis: morphological, lexical, syntactic and semantic. Filipec and Čermák (1985: 94) also stress that terms are “borderline” lexical items in that they have only conceptual meaning and are devoid of pragmatic, evaluative and modal meanings, which affects their stylistic function and results in their maximum contextual autonomy.

Reformatskij (1996: 61) similarly indicates that terms are ‘specific words’, they have limited function and have a tendency towards being unambiguous and unique since they express concepts – all of which is important for science, technology, politics and diplomacy.

Kocourek (2012: 44) regards ‘term’ as a specific type of lexical units – defined and explained from a scientific point of view – which function in scientific texts; terms may be composed of a single word or may be multi-word units.

Pearson (1998: 12-16) introduces the ‘traditional’ definition of the term: ‘traditional’ terminologists apply the notion of term to “lexical items with special reference in a restricted subject field”, regard the term as the “label or linguistic symbol for a concept”, and consider it to

be the “equivalent of de Saussure’s linguistic sign”, which is the combination of signifiant and signifié.

These and countless other definitions point out the specific nature of terms, their use for scientific purposes or professional communication, ability to name concepts, uniqueness and artificial creation.

Reformatskij (ibid.) introduces two notions, ‘terms’ and ‘non-terms’, which he uses to investigate the properties of a term and which he believes give a bigger picture of the definition of term. According to him, it is wrong to think that there is an ‘unbridgeable gap’ between ‘terms’ (or ‘special language’, to use the term introduced by the Czech school of terminology) and ‘non-terms’, i.e. units of a ‘common language’: terms are included in the vocabulary of the language and are subject to phonetic and grammar rules. Besides, there is a constant exchange between ‘terms’ and ‘non-terms’, which essentially means that ‘terms’ are capable of entering the domain of a ‘common language’, and ‘common language’ lexical units may acquire characteristics of ‘terms’, and, as a result, they are included in the terminology (sometimes the term ‘terminologization’ is used; see Wright and Brodin, 2001: 752), .

When borrowed from ‘common language’, the term acquires a different meaning, metaphorical – occasionally, metonymical – based on its literal and figurative meaning. In other words, technical or scientific concepts denoted by a word from ‘common language’, may be based on similarity in appearance, property, material, function, purpose or effect. In such a case, to know the everyday meaning of ‘non-terms’ is not enough to know the true meaning of ‘terms’. It is necessary to know the relevant scientific field and those specific concepts related to the other terms within this particular field. As an example, Reformatskij gives the Russian word *мушка* (transliteration: *mushka*): the word has two meanings as a ‘non-term’ it means a ‘midge’, i.e. a small fly, and as a ‘term’ it denotes a ‘front sight’/’foresight’ of a gun. This process is defined as a ‘semantic’ way of creating new terms; it is discussed in more detail in the chapter on term creation.

What is important to stress at this point is that with the penetration of a ‘non-term’ into terminology its meaning becomes ‘specialized’ and ‘limited’. In addition to that, ‘terms’ develop new collocations – different from those that their ‘non-term’ equivalents have – it results in new surrounding words, or clause elements, they combine with, i.e. pre-modifiers, objects, predicates. Even terms with the same form which are a part of different field terminology have different collocations. For example, in phonetics ‘assimilation’ can be progressive and regressive, while in politics ‘assimilation’, e.g. in ‘assimilation policy’, assimilation is either forced or natural.

Reformatskij (ibid.) strongly believes that in order to be ‘a good member of the terminology’, the term should be ‘convenient’ in terms of being capable of forming new derivatives which create ‘a rational and meaningful family of terms’. Nouns are regarded as the most ‘convenient’ parts of speech in terms of deriving new terms: an adjective or a verb can be easily derived from them.

Depending on the nature of their relationship with the ‘non-term’ equivalents or with ‘term’ equivalents from a different field of science, one can distinguish three types of terms (Reformatskij, 1996: 61-67).

Firstly, words that can exist only as ‘terms’ within the terminology of one field: *resection*, *fuel injector*.

Secondly, words that can exist only as ‘terms’, but at the same time can be members of different sets of terms, i.e. they may belong to different fields of science – such as the term *operation* in medicine, military and finance.

And, thirdly, the most frequent type of ‘terms’ are those which function as both ‘terms’ and ‘non-terms’ in one or several fields; when used in ‘special language’ the words usually assume a metaphorical meaning, as has already been pointed out: *road* – in ‘common language’ is a way leading from one place to another, and in ‘special language’ it is an underground passage in a mine.

Kocourek (2012: 45) specifies that semantic analysis of terms can also contribute to the definition of term. He draws attention to the fact that terms can create ‘a broad semantic field’, for example, terminologie – terminology in Czech – denotes a set of terms and a discipline (Kocourek names it ‘a double-term’). Some terms have ‘pseudosynonyms’: linguistics and philology. Of particular interest is the case when the term has many meanings due to the fact that it is defined in a particular way by several different scientists: the term ‘structure’ as it is described in the works of Ferdinand de Saussure, Bohumil Trnka and Louis Trolle Hjelmslev.

2.2.1 Characteristics of a Term

Poštolková et al. (1983) name seven features of terms that distinguish them as specific lexical units:

1. Conceptuality/notionality and lack of expressive traits

The ability of a term to designate a concept is recognized as its most important feature and one of the most stable characteristics of a term. The definition of a term always mentions notionality, and many researchers tend to explain term properties in terms of this close relationship with the concept. Expressive traits are alien to a term, which is ‘accurate’ and ‘intellectual’. This

does not mean that terms may never be associated with expressive meaning; however, expressions used for expressive purposes have no place in terminology (the same applies to the stylistic use of terms; see also Reformatskij, 1996: 63).

2. Stability and systematic character

Terms are stable, i.e. do not change over time. The systematic character of terminology can be achieved through systematic work with terminology of a specific field of knowledge which gives us a good idea of concepts and classifications, and through international cooperation. (Poštolková et al., 1983: 67).

3. Internationality and semantic transparency

Like Poštolková et al., Reformatskij (1996: 63). emphasizes the importance of understanding terms in different languages, especially in politics, science, technology and international relations. Understandable terms help when reading scientific literature in a foreign language: common terminology benefits the reader, even with different phonetic and grammatical shape of terms written in a language unknown to him.

4. Accuracy/precision

A term should be precise: it should not only name the concept but also exclude any other possible meanings. If not so, the term risks to be labeled inaccurate. This tendency towards accuracy may lead to the creation of multi-word terms, difficult to understand. Bohuslav Havránek introduced one more characteristics, which resulted from his analysis of the characteristics of accuracy/preciseness: preference for one-word borrowed terms over respective multi-word Czech equivalents (Poštolková et al., 1983: 75).

5. Single reference

Synonymy in terminology is disadvantageous. Some terms seem to be synonymous (when actually they are not); this knowledge may be available only to experts in a certain field (Poštolková et al., 1983: 77-78).

6. Uniqueness/unambiguity

Ideally, a term stands for one concept, i.e. it is not polysemous or homonymous. Some terms though can have a different meaning when used in a different field, for example, the term *assimilation* in politics and phonetics (Poštolková et al., 1983: 79-80).

7. Respect for norms of literary language and functionality

Terms should respect the existing norms of a given standard language, i.e. declination, patterns of word formation, spelling, and be functional, i.e. serve as a means of communication. (Poštolková et al., 1983: 81-83).

The characteristics of terms were also described in the 1930s by the founder of the Soviet school of terminology Dmitrij Lotte. His activities are associated with the standardization of

Russian scientific and technical terminology. Lotte made a significant contribution to the theory of the term as well as the practice of standardization. He put forward the following requirements that one should apply to a term: **shortness, unambiguity, semantic transparency, simplicity, harmony with other terms available in a language and preference for the Russian terms over new and foreign ones** (Arnold, 1991: 87-90).

2.2.2. Term Creation

The two consulted sources *O české terminologii* (Poštolková et al., 1983: 34-61) and *Terminovedenie* (Griniewicz, 2008: 121-162) suggest that there are four major ways of forming new terms. Although the classifications by Griniewicz and Poštolková et al. differ in the names and the division of categories, both are presented here for comparison and analysis:

Classification Griniewicz	Classification Poštolková et al.
1. Morphological: - derivation; - conversion; - phonetic-morphological; - clipping.	1. Morphological: - derivation; - compounding; - abbreviation.
2. Syntactic: - two-, three-, four-, five-, six-word terms.	2. Syntactic: - two-, three-, four-, five-word terms.
3. Semantic: - narrowing/specialization; - metaphor; - metonymy; - broadening; - borrowing from ‘common language’; - borrowing from other fields of science;	3. Semantic: - narrowing/specialization; - metaphor; - metonymy.
4. Borrowing from other languages	4. Borrowing from other languages
5. Morpho-syntactic: - ellipsis; - compounding; - abbreviation.	

Table 1. Term creation, as described by Griniewicz (2008: 121-162) and Poštolková et al. (1983: 34-61)

It is worth mentioning that Griniewicz includes into the classification “borrowing from ‘common language’” and ‘borrowing from other fields of science’, which are generally not regarded as borrowings.

Analysis of the existing term forms allows to identify the most productive ways of term creation and to advise users on forming new terms with reference to the core term characteristics discussed above.

Terms are divided into two major groups: those which are composed of one word only – ‘**one-word terms**’/‘**single-word terms**’, and those which are multi-word – ‘**multi-word terms**’/‘**phrases**’. According to Griniewicz, multi-word terms make up 60 to 80% of the total number of terms in most European languages.

Three main structural types of ‘one-word terms’ can be distinguished: ‘simple’, ‘derivations’ and ‘compounds’. The ‘simple’, or ‘root’, term is commonly understood to mean a ‘single-word term’, the basis of which coincides with the root: *clay, asbestos*. ‘Derivations’ are ‘single-word’ terms which contain a root and an affix (or affixes): *roofing, welder*. ‘Compounds’ are single-word terms composed of at least two bases (root morphemes or words/stems): *blackout, warehouse*.

It is important to emphasize that the analysis below follows Griniewicz’s classification, since it is more recent and more comprehensive and contains more categories than that of Poštolková et al.. Nevertheless, both viewpoints are presented here and relevant material and examples from *O české terminologii* are frequently quoted throughout the chapter. Griniewicz’s examples mostly include terms from the domain of architecture, construction and engineering, which he extracted when doing research on onomasiological terminology.

It should be noted that Griniewicz’s description is not always in keeping with current Anglo-American morphological practice. Conversion and particularly clipping are usually excluded from morphology, and so are abbreviation and ellipsis. By contrast, compounding is seen as a prototypical morphological process. Similarly, borrowing is only partly a semantic process (semantic calquing), because mostly it is both form and meaning that are borrowed. For simplicity’s sake, however, it seems better to preserve Griniewicz’s classification and to avoid introducing other theoretical points of view.

The first way of creating new terms is **morphological**, which may be further subdivided into derivation, conversion, phonetic-morphological means and clipping.

Derivation is by far the most common and productive word formation process in the creation of new terms. The following suffixes tend to be the most productive: *-ing* and *-ation* – to

name process or action (*programming, extracting, excavation*) or to name the result of action (*ceiling, flooring, insulation*); *-er/-or* and *-an* – to name occupation (*welder, expeditor, electrician*); *-er/-or* to name equipment (*boiler, printer, elevator, capacitor, scraper, loader, ventilator*); *-er* to name construction (*stiffener, girder*); *-er* to name substance with specific function (*hardener, plasticiser*). The ‘special language’ suffixes also include: *-ite* to name minerals (*biotite, diatomite, chromite*) and *-ate, -ine, -ide, -oid, -urn* to name chemicals: *chlorate, chlorine, chloride, celluloid, calcium*.

There is a significant trend towards the use of borrowed prefixes, especially Greek and Latin: *Neo-Classicism, polyethylene, subcontractor*. This trend involves two types of language material – the material already present in the language and the material borrowed from Greek or Latin. Reformatskij calls Latin and Greek elements ‘antique legacy’, and justifies their extensive use by pointing out that they exist both in the form of words and meaningful word-formation elements, and that they belong to the public domain and can be used in any language, and become subject to rules of grammar or phonetics of an individual language.

The process of **conversion** frequently occurs in English: *switch, dump, abrasive, chemical*.

Phonetic-morphological means of term creation assume changing the phonetic structure of words. As a result of this, entirely new terms both in meaning and in form are formed, which does not cause confusion when using the term. The word *salt* was historically used to create the term *silt*, the change of the term *resin* resulted in the creation of another term *rosin*.

The next process, **clipping**, is a borderline way of term formation in English (*nickel - kupfernickel, lab - laboratory*), as both in English and Russian it is usually not stylistically neutral (resulting in colloquialisms), and so is used mainly in spoken language (e.g, in spoken Russian *зав* formed from *заведующий/заведующая* is used to name a person in charge of something).

In the process of **semantic** term creation (semantic extension or shift) the meaning of the word already present in the language changes – we speak of broadening, narrowing/specialization, applying metaphor or metonymy. This may happen as a result of importation from ‘common language’, or from other fields of science.

There are ‘one-word terms’ the meaning of which in ‘common language’ is similar to the one in ‘special language’. According to Griniewicz, these terms typically represent the oldest stratum in the scientific and technical vocabulary. In English, most of them belong to the Old English period. The process adopting **words from ‘common language’ as terms** includes, for example:

1. names of mineral and metal materials: *stone, sand, clay, iron, steel, lead, tin, silver, gold, ore*;

2. names of animals and birds: *ox, cow, sheep, swine, hen, crow*;
3. names of plants: *tree, beech, ash, oak, shrub*;
4. name of landscape elements: *pool, beach, mud, field, ground*;
5. name of constructions, including parts of construction: *barn, gate, beam, roof, floor*.

The development of meaning is closely connected with the enrichment of human experience, the shaping of concepts and, consequently, the need for terms.

The terms described below are the result of semantic shift: there is a significant discrepancy between their old and new meanings.

Broadening (generalization of meaning) refers to a change in term meaning that results in a term acquiring additional, wider meaning, while still retaining the original meaning. A newly created term is applied in more contexts than it previously was. The examples of broadening include the term *column*, which originally denoted only classical columns, after broadening the term acquired a new meaning – *column* now stands for any vertical structure used as a support or standing alone as a monument; the term *parlour* originally meant a reception room in a convent for secular visitors, later came to denote a sitting room in a private house, then a room in a public building, hotel, etc. for receiving guests or private conversation, and later still a shop or business providing specified goods or services. The original meaning of the term *piers*, a supporting structure of a bridge, was broadened – it now names any vertical supporting structure.

Terms created by means of **metaphor** require, for instance, physical resemblance to or similarity in functions with a ‘common language’ word. For example, the following terms are based on their physical resemblance with the referents of ‘common language’ words: *leg, hood, neck, spire*. Similarity in functions resulted in the creation of the following terms: *horn, leader*. Occasionally, resemblance in physical properties is intertwined with similarity in functions: the term *aqueduct* carries a waterway and resembles Roman waterway in form.

According to Griniewicz, three basic types of **metonymy** are applied when creating new terms: one concept is a ‘part’ of another one (*market*; synecdoche), a ‘device’ refers to a ‘process’ (*catch*), or a ‘result’ refers to ‘process’ (*building*).

The process of term creation also involves **narrowing**, or ‘specialization of meaning’: the term *lime* now means terms is formed by a narrowing of specialization values. For example, the term *lime* in Old English denoted any adhesive, in Modern English the meaning is narrowed – *lime* is a white caustic alkaline substance consisting of calcium oxide.

Examples of **borrowing from other fields** of science include the terms, to name to just a few: the term *landscape* was borrowed from painting, *zone* – from geography, *antenna* – from biology, *refrigerant* from medicine.

Linguists point out that the emergence of scientific and technical terms in languages has a one common distinctive feature, i.e. the tendency towards **borrowing from other languages**, there is a limited number of languages with a developed terminology of their own.

The classification below is based on the nature of the foreign borrowed material:

1. The first type includes the ‘material borrowing’, which can be further divided into:

a. ‘Lexical borrowing’ is the situation when the ‘material form’ of a term is borrowed together with its content into the host language: the English term *crib* was borrowed into Russian, the meaning and the form in Russian is the same one as in English;

b. ‘Formal borrowing’ describes the case when the ‘material form’ is borrowed and the term gets a new content in the host language: *lymph* in Latin means ‘water’. This happens because in the host language there is already a word with the same meaning as that of the borrowed term; Nevidím rozdíl mezi “formal” a “morphological” borrowing. jak jsou zde popsány

c. ‘Morphological borrowing’ occurs when roots or derivational morphemes are borrowed into the host language: in English the term *distrust* is made up of the French prefix *dis* and the Scandinavian root *trust*; the term *bolshevism* consists of the Russian root *bolshev* and the Latin suffix *ism*. Greek and Latin term elements *macro-*, *hydro-*, *auto-* are very productive in term creation and are frequently regarded as prefixes.

2. The second type is structural borrowing which includes ‘calques’, a loan translation or a loanshift (semantic calque) from one language to another, which means either the structure or the meaning, but not the ‘material form’, are borrowed into the host language. There are three subtypes of term ‘calques’:

a) Calques which always follow the structure of the foreign language term: chain-smoker in English is a calque of the German term *Kettenraucher*.

b) Calques which are word-for-word translations of foreign terms, the structure of the term is not taken into consideration (‘phraseological calques’): Latin *circulus vitiosus* in English is *vicious circle*;

c) Calques which describe the situation when a term acquires an additional meaning, by analogy with its foreign equivalent (‘semantic calques’): the Russian word *картина* (transliteration: ‘kartina’) got an additional meaning a ‘movie’, because its English counterpart has this meaning.

3. The third group includes ‘mixed borrowing’, which means one part of the lexical unit is borrowed, the other one is translated, or it may already exist in the language. There are two varieties of ‘mixed borrowing’:

a) ‘Hybrid borrowing’ consists of one borrowed element and one calque: in Russian *телевидение* (transliteration: ‘televidenie’) is made up of a Latin element *tele-* and a calque of *vision*.

b) ‘Half-borrowing’ is made up of one borrowed part and one part already present in the language: the English word *disbelief* has a Latin prefix *dis-*.

As one may notice, both ‘calques’ and ‘mixed borrowings’ are formed with the help of the lexical means present in the host language. Thus, such terms rarely show signs of borrowing. Dmitrij Lotte suggested not to view ‘calques’ and ‘mixed borrowings’ as instances of borrowing. On the other hand, ‘calques’ and ‘mixed borrowings’ have identifiable features of borrowings and are often included into the dictionary of foreign words, along with ‘material borrowings’.

Borrowing has always been one of the most controversial issues in terminology and lexicology. Different scholars have opposite views on borrowing – whereas some consider the increase in the number of terms borrowed as an abnormal phenomenon, which infests the language and hinders the development of its word-building resources, others believe that borrowing ‘expands’ and ‘improves’ the language vocabulary, to use Griniewicz’s formulation. Borrowing in derivation, for example, results in the emergence of new borrowed word-formation means, or in the activation of those word-formation means which exist in the language but are unproductive; lexical calques, or loan translations, are words borrowed from another language by word-for-word translation, and result in a compound word, often with a connecting element. Poštolková, Roudný and Tejnor suggest that reasons for resisting borrowing are political and economical. Most craft terms in the Czech language were borrowed from German, but as a result of Czech ‘special language’ development these borrowed terms are regarded as very informal (slang) or old-fashioned nowadays. Czech scholars highlight the fact that the Czech language is ruled by a ‘defensive reflex’, which protects it against any type of intrusion, borrowing being one of them. The research part looks into the issue of borrowing in Slavic languages, Czech and Russian, when analyzing the terms excerpted.

In general, modern linguists are inclined to think that borrowing does not lead to a ‘deterioration’ of the language, and only excessive borrowing may be harmful. At the same time, they point out that what is happening now – the rapid emergence of scientific and technical terminology in many languages – has one distinctive feature which is the tendency to borrow from fully developed languages (Griniewicz, 2008: 121-162).

2.2.3. Reasons for Borrowing Terms

At this point, it is important to discuss Griniewicz's description of reasons for borrowing from other language, which may be of 'extralinguistic' and 'linguistic' nature.

'The five 'linguistic' reasons include: lack of a native language equivalent word for a new concept, which is considered to be the main reason for borrowing; the tendency to use one borrowed word instead of a domestic phrase, even though it is descriptive: in Russian the borrowed word *спринт* (transliteration 'sprint') is used instead of the domestic term *бег на короткие дистанции* ('running over a short distance'); the tendency to avoid homonymy and polysemy; the need to specify the meaning: in Russian culture, two words *varenye* and *jam* should not be confused, as they name slightly different types of desserts – *varenye* is a thick but transparent syrup having the natural colour of the fruits, although it is similar to *jam*, the fruits in *varenye* are not macerated, and no gelling agent should be added into *varenye*; the inability to derive new parts of speech from domestic terms (for this reason, the borrowed adjectives *kinetic* and *infectious* are used in Russian) (Griniewicz, 2008: 121-162).

'Conscious borrowing' of terms – to those countries in which the relevant industry should be developed – is very common. It is unrealistic to hope for appropriate terminology to develop in a very short time, whereas 'conscious borrowing' takes into account the experience of other countries and speeds up the process of introducing new terms (Melnikov, 2014: 17-18).

'Extralinguistic' reasons do not result from the linguistic processes which occur in the individual language; the five 'extralinguistic' reasons are: the cultural influence of one language on another; oral or written communication between the countries with different languages; the increasing interest in the study of a particular language, the credibility of the source language, which also leads to many languages borrowing from a single language and the appearance of internationalisms, or international words; the interest of particular social class groups in the culture of a foreign country (historically conditioned); language conditions set up by social class groups, which borrow a new word (Griniewicz, 2008: 121-162).

2.2.4. Signs Distinguishing Foreign-language Borrowings

There are a number of 'signs', as Griniewicz names them, which distinguish foreign-language borrowings from domestic words; borrowings can be described in terms of phonetics, orthography, morphology, word-formation, syntax and semantics.

'Phonetic signs' of foreign-language borrowings are linked to the sound shape of words, they may be individual sounds or combinations of sounds, which are not typical of the target language: in English, the initial *v-*, *j-*, *z-*, *x-* (*volcano*, *volute*, *vodka*, *vase*, *jungle*, *junta*, *zero*, *zinc*, *xenon*), the initial *pn-*, *ps-* or the unusual pronunciation of the initial *ch-* (*pneumatics*, *psychology*,

chef, chateau, chagrin, character, chronology), and the final *-us, -tz, -o* (*nucleus, thesaurus, waltz, spitz, piccolo*).

If the use of the letter or its combinations is not characteristic of the target language (as with *chateau* and *souffle* when used in English), one may speak about the ‘**orthographic signs**’ of borrowings from other languages. According to Griniewicz, many European languages which use the Latin alphabet, retain the original spelling of borrowed words, and this is particularly strong with the languages marked by its historical and traditional spelling, English being one of them.

‘**Morphological signs**’ of foreign-language borrowings include various deviations from the grammar rules: in English – unusual plural ending (*datum - data, phenomenon - phenomena, nucleus - nuclei*).

‘**Word-formation signs**’ of the borrowings discussed are characterized by the presence of suffixes *-ette, -ello, -osis, -itis* in English (*maisonette, violoncello, neurosis, neuritis*) or the formation of such compound words as *passe-partout, chef-d'oeuvre*.

‘**Syntactic signs**’ include the use of untypical phrase patterns.

If words are borrowed from other languages and used only in specific contexts or subject areas in the target languages, one points to the ‘**semantic signs**’, which are also typical of ‘exotic words’ – for example, the borrowed ‘exotic words’ *bungalow* or *sheriff* in Russian (Griniewicz, 2008: 121-162).

2.2.5. Multi-word and Single-word Terms

Syntactic (syntagmatic) term creation is the most productive means used in terminology. The label ‘syntactic’ is strictly speaking misleading. Syntactic processes produce phrases and sentences but not lexemes. As this method allows the user to convert ‘free word combinations’ into ‘complex word expressions’ or ‘multi-word terms’ it is in fact a phraseological process. Among the main characteristics of ‘multi-word’ terms are ‘stability’ and ‘conceptuality’/‘notionality’. ‘Multi-word terms’ consist of a head and one modifier, or a few modifiers. This means there exist ways of identifying and extracting terms from the text by defining their basic structure, which can be used, for example, to create an algorithm for automatic term recognition in the text.

The most common type of syntactic or precisely phraseological terms in English and in Russian are **two-word terms** with one head, which is a noun, and one modifier, which premodifies or postmodifies the head.

The difference between the types of two-word terms is then based on a formal expression of a modifier. From now on, the following letters will be used to present the term structure: N -

noun, N's - noun in possessive case, A – adjective, Ving - verbal form ending in -ing; Ved - verbal form ending in –ed, Adv - adverb; p - preposition).

The main types of two-word English terms include:

1. NN – premodification is expressed by a noun: *clock tower, clay brick, language unit, storage building*;
2. AN – premodification is expressed by an adjective: *blind arcade, temporary building, peripheral device*;
3. VingN – premodification is expressed by a gerund or a present participle: *bearing wall, bowling alley, building board*;
4. VedN – premodification is expressed by a past participle: *arched bridge*;
5. N'sN – premodification is expressed by a noun in possessive case: *bosun's chair, glazier's diamond*;
6. N of N or N for N – postmodification is expressed by a prepositional phrase: *clerk of works, school for the blind*.

It is important to add that modification in such cases usually refers to a function, property, form, structure or material of the head it modifies: *bar room, blind arcade, angle grain, vinyl roofing*.

The most frequent three-word English terms have the following structure:

1. NNN: *amusement park building*;
2. ANN: *architectural design studio*;
3. VedNN: *butressed foundation wall*;
4. NVingN: *air conditioning system*;
5. NVedN: *bush hammered stone*;
6. NAN: *service main pipes*;
7. VingNN: *hanging roof gutter*;
8. AVing N: *artificial building stone*;
9. AAN: *best bright finish*;
10. N and NN: *bath and shower fittings* (Griniewicz calls this type 'quasi-terms');
11. AVedN: *high pitched roof*;
12. AdvVedN: *automatically opened skylights*;
13. VedVingN: *glazed flooring tile*;
14. VedAN: *cast structural metals*;
15. N'sNN: *bull's eye window*;
16. N for AdvN: *school for the physically handicapped*.

As a rule, three-word terms are formed on the basis of two-word terms, which are characterized by close semantic and structural relations. The relations may be described by expressed by the formulae:

1. $x > (y > z)$: *bush hammered stone* (the word *bush* premodifies the term *hammered stone*);
2. $(x, y) > z$: *glazed flooring tile* (the terms *glazed tile* and *flooring tile* have the same head, but different premodifiers);
3. $(x > y) > z$: *air conditioning system* (the premodifier *air conditioning*, which is also a term, is composed of two words);
4. $\{x > (y) > z\}$: *compression cable connector* (the word *cable* functions as a head in the term *compression cable* and as a premodifier in the term *cable connector*).

The examples of four-word terms include:

1. NNNN: *bottom drapery track rail*;
2. ANNN: *blind corner base cabinet*;
3. VedNNN: *bonded rubber carpet backing*;
4. NVedNN: *air operated door closer*;
5. NVedVingN: *asphalt impregnated building paper*.

The relations may be expressed by the following formula:

1. $(n > x) > (y > z)$, where *n* denotes the fourth element in a term structure: *bonded rubber carpet backing*;
2. $n > [x > (y > z)]$: *baseboard radiant heating equipment*;
3. $[n > (x > y)] > z$: *bottom drapery track rail*;
4. $(n > x) \& y > z$: *air conditioning and ventilating contractor*.

The relations between the five- and six-word terms, if to use the formulae, are: $(m > n) > x > (y > z)$, where *m* denotes the fifth element in a term structure: *building module grid ceiling system*; $(l > m) > (n > x) > (y > z)$, where *l* denotes the sixth element in a term structure: *low voltage alternating current circuit breaker*.

Apparently, increasing the length of terms is striving for accuracy of the expressed concept, for elimination of ambiguity, as with the increase of the number of term elements in the structure its degree of ambiguity decreases. However, increasing the length of term also leads to inconvenience as the term becomes ‘bulky’.

The fourth, and the last, way of term creation is **morpho-syntactic**. Morpho-syntactic means of term creation include those means of forming ‘single-word terms’ out of ‘multi-word terms’, or ‘phrases’ which assume both syntactic and morphological change of lexical units. The term ‘morpho-syntactic’ is confusing and inaccurate – ‘morpho-syntagmatic’ is a better option,

though the review shows that this way of term creation – as described by Griniewicz – contradicts the contemporary studies on the compounding, abbreviation, acronyms and ellipsis.

Morpho-syntactic term creation include: **ellipsis** - the omission of one term in a term structure, the meaning then stays with the term which remains after omission: *window mullien – mullien, church cathedral – cathedral*; **compounding** – two or more roots make up one term: *padlock, aircraft-carrier*; **abbreviation** – base words are combined together and then reduction occurs: *permanent frost - permafrost, helicopter port - heliport, ampere meter - ammeter, motor hotel - motel*; Griniewicz regards **acronyms** as a type of abbreviation – initial letters of a term are put together: *damp-proof course - dpc, light amplification by stimulated emission radiation - laser*.

In the cases listed above (except for ‘compounding’), the result of word-formation process is the reduction of the initial term structure, i.e. the number of its constituent words; what follows is that a new unit becomes independent and may fully function as a term. Thus, Griniewicz justifies his grouping of the morpho-syntactic means together by saying that common term formation material, i.e. phrase, is used to create new terms and that the nature of these processes is similar – in fact, new terms are not created, but become shorter variants of already existing terms.

It is worth mentioning that ellipsis and abbreviation are regarded neither as morphological nor as syntactic process by the majority of scholars. Compounding is not a syntactic process, but a morphological one, not to speak of abbreviation. This means Griniewicz is not in line with the contemporary concepts and his definition is idiosyncratic and contradictable.

When creating new terms, Griniewicz, advises to consider the present ways of term creation in terminology. Morphological means allow to achieve a greater degree of semantic transparency when reflecting the essence of the concept in the term form, while also making it short, which is, according to Dmitrij Lotte, the requirement that one should apply to a term. In addition to that, the application of semantically similar suffixes contribute to an *easily recognizable meaning*.

Semantic way of forming new terms by applying metaphor or narrowing of the word meaning results in obtaining terms that have a lower degree of semantic transparency. However, this method is very efficient for emerging scientific concepts, since it allows to establish an analogy between new and existing concepts.

The syntactic way of term creation is currently considered to be the most productive one in the majority of scientific fields, which can be explained by its simplicity. On top of that, terms created syntactically are often semantically transparent and unambiguous, and may be easily systematized.

The morpho-syntactic means of term creation may hardly be considered as means of forming new terms: the existing terms simply undergo compression or reduction because of their ‘multi-word’ structure, which is inconvenient to use.

Griniewicz concludes by pointing out that the best possible term combines two core characteristics – shortness and semantic transparency (Griniewicz, 2008: 121-162).

2.3. Definition of a Neologism

A neologism – a translation of the French *néologisme*, which comes from Ancient Greek *νέος* (‘new’) and *λόγος* (‘word’) – is commonly defined as a newly coined word or expression, which has recently appeared in the language “in a response to a particular need”. According to Reformatzkij and Newmark (1988), the existing lexical units in the language often acquire a new sense, and these additional meanings should be regarded as neologisms. Therefore, neologism is better defined as “newly coined lexical units or existing lexical units that acquire a new sense”.

It is the development of science and technology that often results in the emergence of neologisms. A large number of new lexical units especially appear with the development of computer technology and its use in everyday life: *computer-assisted* (or *computer-aided*) *translation* is a form of language translation in which a person uses computer software, such as, for example, spell or grammar checkers or translation memory tools, to support the translation process. The appearance of neologisms are also attributed to certain historical events (*Bolshevik*).

Newmark mentions that each language acquires 3000 new words annually. One of the continually expanding sources of new English words is the electronic dictionary *Word Spy* (www.wordspy.com), which tracks new words and phrases as they enter the language. *Word Spy* was advanced by Paul McFedries, the current proprietor of the web page, who describes it as following: “Word Spy features new terms that have some traction [the extent to which an idea, product, etc. gains popularity or acceptance] in the language, meaning that they’ve appeared at least three times in print or online, ideally in significant sources such as newspapers, magazines, and books (although you’ll see plenty of citations here from blogs, forums, and Twitter; you can’t be (or, really, you shouldn’t be) a neologist and a word snob at the same time).” The neologisms here appear together with their definitions, relevant examples and pictures, and indication of the dates of their appearance in print or online. April 6, 2016 the neologism *Google hands* was registered, which are “[i]nadvertent images of the hands of scanner operators who are working on digitization projects for Google” (appeared in 2009, 2013, 2014 and 2016). April 7, 2016, the neologism *vulgarati* – “[m]embers of the elite who are crude or who lack good breeding or taste” – was introduced (appeared in 1997, 2014, 2015 and 2016). The source proves that neologisms are

continually coming into the language, but they are difficult to accurately quantify, as Newmark (1988: 140-150) puts it.

2.3.1. Types of Neologisms

The chapter leans on the previously cited works by Newmark (1988) and Reformatzkij (1996), who describe various types of neologisms.

Newmark reviews twelve types of neologisms: two of them are existing lexical items with new senses – words and collocations; the rest are new forms – new coinages, internationalisms, derived words (including blends), pseudo-neologisms, abbreviations, acronyms, collocations, eponyms, phrasal words, and transferred words.

The analysis of the neologism types presented below is not exhaustive but has been undertaken only to the extent necessary to manage and process the extracted terms in the research part.

‘Existing words with new senses’ – according to Newmark – “do not normally refer to new objects or processes”. For example, the English word *refoulement* describes “return of refugees”, however, in some context, it may also stand for “refusal of entry” and “deportation”, or even “repression” in the field of psychology. Newmark labels this type of neologism as a ‘loose term’.

If a dialect or jargon word starts being used in standard language, a word becomes more general than it previously was – the process of semantic broadening occurs. On the contrary, when a word comes into ‘special language’, its meaning is narrowed and becomes less general – which is a process of semantic narrowing. Reformatzkij introduces two examples with reference to this issue– the word *цель* in Russian, which now has a broad range of meaning ‘goal’, ‘aim’, ‘object’, ‘target’, ‘purpose’, initially had one meaning ‘target’ and was used in shooting only; the word *partisan* originally referred to “a strong supporter of a party, cause, or person”, but now it has also narrowed to “a member of an armed group formed to fight secretly against an occupying force” (Reformatzkij, 1996: 251).

‘Existing collocations with new senses’ are “‘normal’ descriptive terms which suddenly become technical terms”; their meaning may hide behind a more general or figurative meaning, as it happens with the British tax term *ring fence*, the general meaning of which is “a fence completely enclosing a farm or piece of land.” ‘Existing collocations with new senses’ may have a ‘recognised target language translation’, if the referent is already available in the target language (English *unsocial hours* and German *Stunden auferhalb der normalen Arbeitszeit*).

‘New coinages’ are extremely rare, which “confirms the stable nature of language and word-formation” – “language does not tolerate isolated phenomena, deprived of continuity and

tends to put everything in a regular series, forming the language system” (Reformatskij, 1996: 249). Nowadays, ‘new coinages’ are mainly brand or trade names, such as, for example, *Bacardi*, *Schweppes*, *Persil*.

‘**Internationalisms**’, or ‘international terms’ are understandable and possess core term characteristics described above – ‘internationality’ and ‘semantic transparency’: *bionic computer* – *бионический компьютер*, *contact* – *контакт*, *diagram* – *диаграмма*.

‘**Derived words**’ are words with ancient Greek or Latin morphemes, which are naturalised in the target language: English *television*, Czech *televize*, Russian *телевидение*, German *Fernsehen*). The Czech, English and Russian terms are examples of ‘naturalization’, which is transferring and adapting the source language word to the normal pronunciation and morphology of the target language. The German term *Fernsehen* is ‘through-translation’ (to be discussed in the next chapter). Most frequently, ‘derived words’ are international words with ‘recognized target language translation’.

‘**Pseudo-neologisms**’, where a generic word stands in for a specific word: French *la Trilateral* (literary: a ‘triangle’) is translated into English as “a private political commission with representatives from the USA, Western Europe and Japan”.

Abbreviations are shortened or contracted forms of a word or phrase, which Newmarks also labels ‘pseudo-neologisms’ English examples of abbreviations include *Dr.* for *Doctor*, *prof.* for *professor* or *lb.* for *pound*. Abbreviations may sometimes coincide in the source and target languages (Czech and English *prof.*)

‘**Acronyms**’ are abbreviations pronounced as words and formed from the first letters of the words in a phrase. According to Newmark ‘acronyms’ are “an increasingly common feature of all non-literary texts, for reasons of brevity or euphony, and often to give the referent an artificial prestige to rouse people to find out what the letters stand for”. In scientific context the letters may be joined up and become ‘internationalisms’: *laser* (1960s: acronym from *light amplification by stimulated emission of radiation*), *maser* (1950s: acronym from *microwave amplification by the stimulated emission of radiation*.). Acronyms are frequently created to designate products, appliances and processes, and to name institutions and companies. The source language may or may not have a standard equivalent term.

The next type of neologism – called ‘**collocations**’ by Newmark (i.e. multi-word expressions) – is the subject of the thesis. The research part works with the noun-based word sequences – Newmark’s definition of ‘collocations’ here includes ‘noun compounds’ and ‘adjective plus noun’: *sexual harassment*, *domino effect*, *cold-calling*, *acid rain*. This type of neologism, as he puts it, is “particularly common in the social sciences and in computer language”. The analysis conducted by Griniewicz, which is described in the research part following, shows

that ‘collocations’, i.e. ‘noun compounds’ and ‘adjective plus noun’ are also very common in architecture and building – the two most frequent term structures of English terms in Griniewicz’s analysis are NN and AN.

Newmark defines ‘**eponyms**’ as “any word derived from a proper name” (including toponyms): *Murphy’s Law*, *Joycean*. Eponyms deriving from geographical names are rare and most commonly originate from products (wines, cheeses, etc.) of the relevant location; if the product is not well known yet a generic term should be added to it.

‘**Phrasal words**’ are restricted to English verbs converted to nouns, for example *work-out*, *trade-off*, *check-out*, and are translated by their semantic equivalents in the target language. Newark points out that English phrasal words are often more economical than their translation in the target language, and that in English they fall somewhere between informal and colloquial, while their translation is being more formal.

The last type of neologisms to be discussed – ‘**transferred words**’ are the “words whose meanings are least dependent on their contexts”, capable of changing or developing additional senses, and “can sometimes no longer be translated back ‘straight’ into their languages of origin”. As a rule, ‘transferred words’ are the products of media and may be common to several languages: *samizdat*, *nomenklatura*. When presented in the target language, they should be given a functional or descriptive term “for less sophisticated [target language] readerships”, or transferred together with a generic term and, if necessary, specific details. Examples of popular ‘transferred words’ include: *Adidas*, *sari*, *Levi*, *Wrangler*, *kung fu* (Newmark, 1988: 140-150; Reformatskij, 1996: 249-251).

2.4. Procedures for Translating Lexical Units with No Regular Target Language Equivalents

The reviewing of the translation procedures for lexical units with no regular target language translation is essential for the research part of the thesis, which looks into the translation of individual terms from English into Russian, Czech and German. Neologisms are difficult to translate – very often, such words (and meanings) are not readily found in the dictionaries, not even in the recent editions. It is a common knowledge that the entry of newly coined lexical units or additional senses into the dictionary lags behind their actual appearance in the language.

Lev Nelubin, author of *Introduction to the Technique of Translation* (2013), suggests considering translation of lexical units with reference to lexicology, grammar and stylistics, i.e. considering them in terms of lexical, grammatical and stylistic ‘transformations’. Newmark in *A Textbook of Translation* (1988) reviews more than twenty translation procedures, and the only translation procedure here which covers aspects of grammar is ‘transposition’, or ‘shift’ (i.e.

conversion); according to Newmark, “[t]ransposition is the only translation procedure concerned with grammar, and most translators make transpositions intuitively”. Newmark includes many French examples, a few German, and no Russian or Czech in his analysis of translation procedures. Nelubin works with English < > Russian language pair and reviews translation procedures with reference to the terms, which is of importance to this research. For this reason, the thesis exploits the translation procedures in *Introduction to the Technique of Translation* (2013), which is complemented by Newmark’s ideas on the problem, and reviews them in terms of lexical ‘transformation’ only. The definition of translation procedures in Nelubin (2013) is in line with translation studies and terminology – much of Nelubin’s work is based on the research of leading Russian linguists – Stepan Barkhudarov, Yakov Recker, Vilen Komissarov. Stylistic ‘transformation’ is excluded from the analysis – the material is an official translation, which means translators follow the stylistic guidelines to preserve the original style of the document. Grammatical ‘transformation’ of noun-based ‘multi-word’ terms is discussed in the ‘research part’ with reference to the excerpted terms.

According to Nelubin, there are three possible options available that allow the translator to work effectively with lexical units and create a source-to-target language translation accurately:

- (1) the meaning of a lexical unit fully corresponds in the two languages, and does not depend on the context; such lexical units are referred to as ‘permanent equivalents’:
ten, twenty, Monday, January;
- (2) several meanings, or lexical correspondences, of a lexical unit are available in the two languages – ‘equivalents with variants’; after considering the context, the most appropriate ‘equivalent’ should be selected: the English word *test* has several lexical correspondences in Russian: *испытание, мерило, критерий, исследование, проба, анализ, реакция, реактив, контрольная работа* – the choice of the correct variant depends on the context:
 - The *test* (*контрольная работа*) offered to the students contained several sentences for translation.
 - A solution represents the most delicate *test* (*реактив*) for detecting the presence of carbon dioxide;
- (3) lexical units do not have regular lexical correspondences in the target language – ‘non-equivalent lexical units’, or ‘lexical units with no regular target language equivalents’; they include cultural words (*pub, prime TV time, kokoshnik, kalach*) neologisms (*Humpty-Dumpty, Jabber-wocky*), idioms (*to fight like Kilkeney cats*) terms (*hydroponic foods*), place names, names of animals and proper names, slang (*bull pen*

– a temporary holding area for prisoners, for example in a courthouse), archaic words (*Sire* – ‘father’), abbreviations (*vet, loco*).

The five procedures for translating ‘lexical units with no regular target language equivalents’ are:

- (1) ‘transliteration’ and ‘transcription’;
- (2) ‘calque’;
- (3) ‘lexico-semantic substitution’, which includes ‘specification’, ‘generalization’ and ‘semantic development’, or ‘modulation’;
- (4) translator’s notes, comments and additions;
- (5) ‘adequate substitution’, which includes ‘descriptive translation’, ‘antonymous translation’ and interpretation by means of ‘compensation’.

‘**Transliteration**’ is changing letters of the lexical unit into corresponding characters of the target language alphabet: *Уолл-Стрит* (*Wall Street*), *лобби* (*lobby*), *самовар* (*самовар*), *спутник* (*спутник*). To describe ‘transliteration’ Newmark uses the term ‘transference’, which is transferring a source language word to a target language text and, if necessary, putting a new collocation in inverted commas. ‘**Transcription**’ is based on the phonetic principle – the accurate pronunciation of the source lexical unit is what matters most here: *Ньюфаундленд* (*Newfoundland*), *Ньютон* (*Newton*), *Дейли телеграф* (*The Daily Telegraph*).

The next translation procedure to be described is ‘**calque**’ – Newmark prefers the term ‘through-translation’ to the terms ‘calque’ or ‘loan translation’, Reformatzkij sticks to the term ‘calque’. Translating source lexical units by replacing its component parts with the lexical correspondences in the target language is referred to as ‘calque’ in *Introduction to the Technique of Translation* (2013): *mass culture* – *массовая культура*, *green revolution* – *зеленая революция*. In Slavic languages, copying the structure of the source lexical unit is often accompanied by changes in the order of the target ‘calque’ elements: *first-strike weapon* – *оружие первого удара*, *Rapid Deployment Force* – *силы быстрого развертывания*.

‘**Lexico-semantic substitution**’ implies certain ‘logical transformations’ – ‘specification’, ‘generalization’ and ‘semantic development’, or ‘modulation’. ‘**Specification**’ is the procedure which is associated with putting in the target text a lexical unit with a more specific meaning in the place of a lexical unit with a broad meaning: *He was at the ceremony* (the verb *be* has a broad range of meaning) – *Он присутствовал на церемонии* (literally: ‘He was present at the ceremony’ – *присутствовал* is more specific than the source word *be*); *At seven o'clock an excellent meal was served in the dining room* – *В семь часов в столовой был подан отличный обед* – the English word *meal* was replaced by a more specific word *обед*

(‘dinner). On the contrary, ‘**generalization**’ is replacing a narrow meaning with a broader one: *Jane used to drive to market with her mother in their La Salle convertible – Джейн ездила со своей матерью на рынок в их машине*. Very few Russian readers could imagine the car brand *La Salle convertible* – therefore, the word *машина* (‘car’) is used in the target text. A target lexical unit may appear as a result of ‘**semantic development**’, or ‘modulation’, which is associated very often with cause-and-effect relationship: *I do not blame them – Я их понимаю* (‘I understand them’).

Translator uses ‘**comments**’, ‘**notes**’ or ‘**additions**’ when he thinks it is important to explain something unknown to the reader or something which may not be clear from the text. According to Newmark (1988: 91), “[t]he additional information a translator may have to add to his version is normally cultural (accounting for difference between [source language] and [target language] culture), technical (relating to the topic) or linguistic (explaining wayward use of words), and is dependent on the requirement of his, as opposed to the original, readership”: for example, Speyer, ‘the city of Speyer, in West Germany’.

‘**Adequate substitution**’ is the interpretation of the source text through ‘descriptive translation’, ‘antonymous translation’ and ‘compensation’. ‘**Descriptive translation**’ is a more or less common explanation of a source lexical unit: *coil gradient – перепад температуры между катушкой и окружающим маслом; hydraulic water – вода, поступающая в гидравлический классификатор; energy factor – коэффициент остроты настройки*. ‘**Antonymous translation**’ is the use of the opposite meaning in the target text: *take it easy – не волнуйся* (‘don’t worry’). ‘**Compensation**’ is applicable to proverbs, sayings, idioms, when the translator needs to find out proper cultural references: *Paddle your own canoe – Не в свои сани не садись; Curiosity killed the cat – Любопытной Варваре на базаре нос оторвали* (Nelubin, 2013: 89-124).

According to Newmark, the best possible translation procedure for ‘collocations’ (as it has been mentioned above – Newmark’s definition of ‘collocations’ includes ‘noun compounds’ and ‘adjective plus noun’) is to find a ‘recognised target language translation’: *sexual harassment* (Czech – *sexuální obtěžování*; Russian – *сексуальное домогательство*; German – *Sexuelle Belästigung*). However, if it is not available, one should ‘literally translate’ the term, or, to put it differently, use ‘through-translation’ – it is important to highlight that the ‘literal translation’ of phrases, collocations, names of organisations and the components of compounds (English *superman* and German *Urbarmensch*) is referred to as ‘through-translation’ in *A Textbook of Translation* (1988). The next option is to translate the term by a ‘descriptive term’, or transfer it (the English term *jet lag* is transferred: Russian – *джетлаг* (transliterated); German – *Jetlag*), and

add a 'functional term' or a 'descriptive term', if necessary. Lastly, one may present a term in context or explain it, if it is not familiar to the target language culture.

When working with neologisms, one should consider a few points to produce a reliable and consistent translation. If 'recognized target language translation' is not available for a neologism, which is true in most cases, it is strongly advisable to consider the nature of the text and context ('external evidence'), to define the type of neologism and to look into its composition ('internal evidence'), and to choose a proper translation procedure. The basic idea – according to Newmark – “[t]he more formal the language, the more conservative [the translator] should be in respect of neologisms”. With non-literary, or authoritative texts, it is strongly advisable not to create neologisms – exceptions include such situations when the translator creates neologism with the help of Greek or Latin morphemes, which are easily understandable and are regarded as international, or when he is authorized to create neologism in the text. Newmark recommends to leave explanations or footnotes, if necessary, to produce the translation accurately and professionally. When working with literary texts, including advertisement, emphasis should be put on creating the same effect as in the source text. In fiction any neologism should be 'recreated' – a derived word should be replaced by the same, or equivalent, morphemes; a phonaesthetic word should be given phonemes producing analogous sound effects. This means working with neologisms in literary texts involves not only applying a correct translation procedure but also investigating pragmatic effects – studying pragmatics together with translation (Newmark, 1988: 81-93, 140-150).

3. Material and Method

The primary objective of this research is to analyze multi-word terms in the selected EU document, with a particular attention to their common term structures and translation procedures in English and Russian, and occasionally in Czech and German. The two main sources, Poštolková et al. (1983) and Griniewicz (2008), confirm that the use of multi-word terms is the most productive means of forming new terms. According to Griniewicz, this method converts conventional ‘free word combinations’ into complex ‘word equivalents’, and 60-95% of various European languages terms researched are ‘multi-word terms’, which reflects the predominance of ‘multi-word terms’, or ‘phrasemes’, over ‘one-word terms’, or ‘single-word terms’, in modern terminology (Griniewicz, 2008: 135-146).

The six major steps in conducting this research are:

- (1) choosing and describing the material from which the terms will be extracted;
- (2) justifying the choice of multi-word terms for analysis
- (3) describing C-value term recognition method, justifying preference of TerMine over other term extraction tools available, and applying TerMine;
- (4) specifying the principles of processing the multi-word terms extracted by means of C-value term recognition method and the criteria for inclusion of terms into the analysis;
- (5) analyzing and interpreting the structure of English, Russian, Czech and German terms, with a particular attention to the most productive English and Czech term structures in the selected document;
- (6) establishing common translation procedures applied to the multi-word terms, with the focus on new terms, i.e. neologisms, for which ‘recognized target language translation’ is not available yet.

The first four steps are described in the Material and Method Part – they refer directly to the material and method used; the last two concerned with the analysis and consideration of the specific problems arising in the context of terminology and translation are to be described in the Research Part – each step in a separate chapter.

The first step involves selecting a suitable text within the boundaries of the subject area of interest, i.e. the text which is likely to contain the terms related to security. It should be noted that the English version of the text suitable for the research conducted should not only be an authoritative text but also be accompanied by official translations into Russian, Czech and German. Documents issued by the EU institutions, together with the official translation, are in

open-access archives. The problem underlying the choice of a suitable text for the research like this one is that Russian is not an official language of the EU. However, many official translations of EU documents into Russian are made available online at the official web page of Moscow State Academy of Law, The Centre of the European Union Law (www.eulaw.edu.ru).

The document which meets the requirements set out above and serves as the source material for the research is Council Decision 2009/371/ JHA of 6 April 2009 establishing the European Police Office (Europol). The thirty-page document establishes Europol in the Hague to support and strengthen cooperation between Member States in preventing and combating terrorism, tackling organised crime and other related criminal offences. It follows that the document should contain frequently used terms in the field of security. Because the document describes various administrative rules and procedures, budget and financial management, information processing and data protection, a great number of terms excerpted are likely to be related to economics, human resources, information technology, etc. – rather than security.

The second step has to justify the choice of multi-word terms for analysis. Theoretical Part of the work describes various ways of forming new terms – as highlighted at the beginning of this part, Research Part analyzes only multi-word terms. To begin with, ‘stability’ and ‘notionality’ are among the main core characteristics of terms; because they name concepts, ‘multi-word terms’ are often indicated by a nominal head and attributive constituent elements. These properties are grammatically defined, which means that there exist objective conditions of defining the basic term patterns, searching for and extracting terms. In other words, there is a possibility of automatic recognition of ‘multi-word terms’ in the text.

Poštolková et al. (1983) note that the analysis of technical terms shows that the number of ‘one-word terms’ is 22.5%, and ‘multi-word terms’ - 77.5%, i.e. more than three quarter of all the terms analyzed - the two-word terms made up 48.34%, three-word terms - 17.53%, and four-word terms – 7.10%.

Theoretical Part also highlighted the most frequent multi-word term structures in the research conducted by Griniewicz (2008). When analyzing multi-word architectural and building terms in English, Griniewicz found out that the most frequent structure in English (64% of the total number of analyzed ‘multi-word terms’) is a two-term structure with the head expressed by a noun and the modifier by a noun or an adjective. The difference between the types of two-word terms is in the formal expression of the element modifying the noun. The two most frequent structures of English two-word terms in the architectural and building industry are, accordingly, NN (noun premodified by a noun) – 33,3% and AN (noun premodified by an adjective) – 9%. The three-word terms make up 30% of the total number of the analyzed terms, with the two most

frequent structure types being NNN (8,5%) and ANN (5,7%), the four-word terms account approximately for 5%.

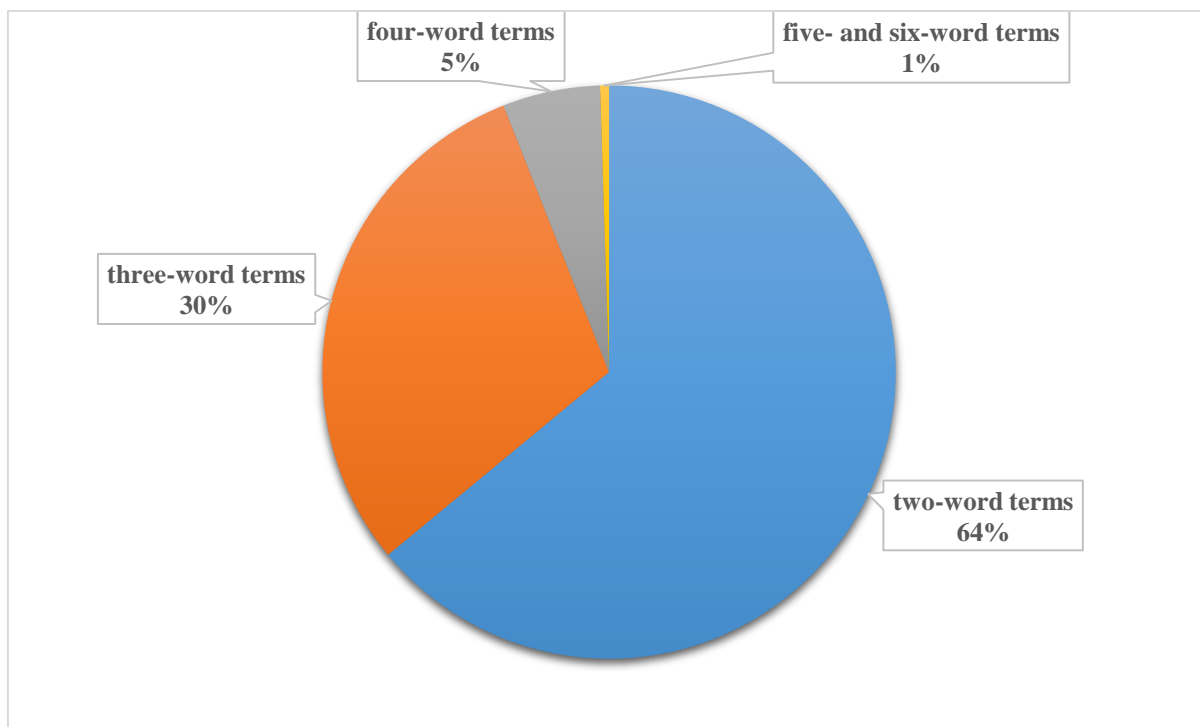


Diagram 1. Quick analysis. English architectural and building multi-word terms – research conducted by Griniewicz (2008: 135-146)

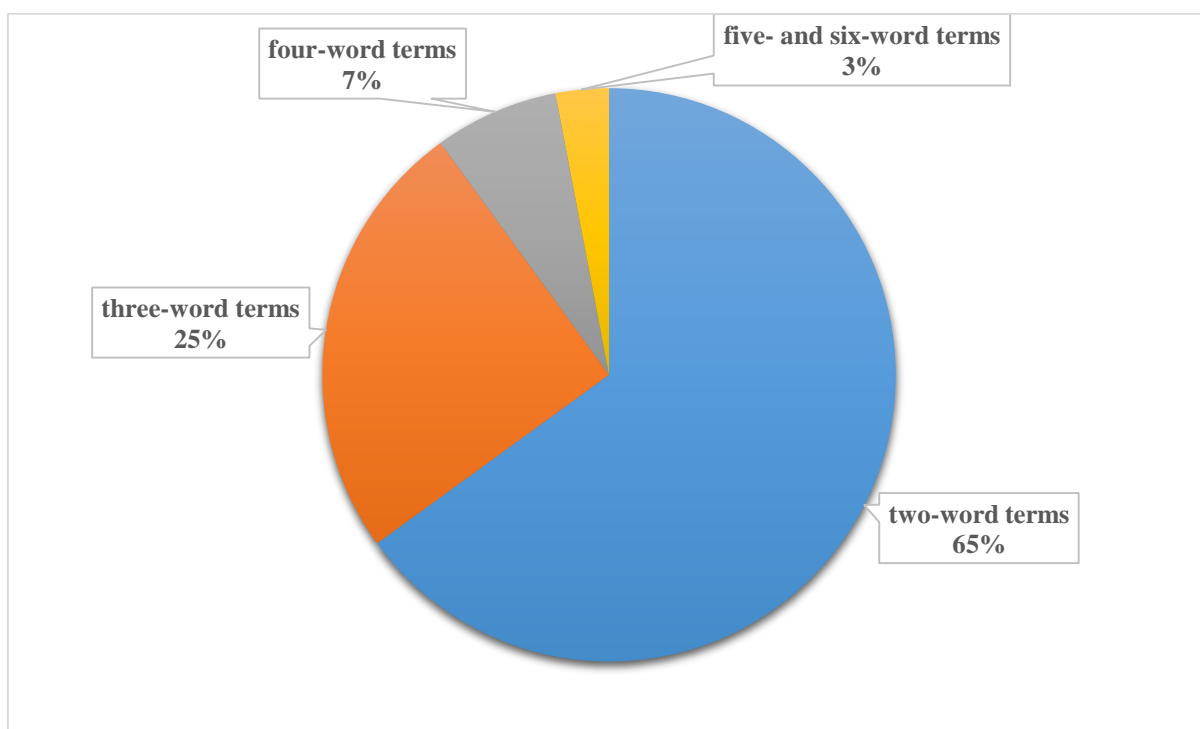


Diagram 2. Quick analysis. Russian architectural and building multi-word terms – research conducted by Griniewicz (2008: 135-146)

With Russian architectural and building terms, the two-word terms constitute 65% of the total number, then follow three-word terms (25%) and four-word terms (7%). Research Part compares the analysis of terms carried out by Griniewicz and the one carried out in this thesis to compare them for similarities or differences.

The data provided in the reviewed literature and the possibility to automatically recognize the multi-word terms with the help of C-value term extraction method (discussed in the next step) in the text justify the choice of multi-word terms for analysis.

The third step describes the TerMine term extraction tool and the C-Value term recognition method, or C-Value analysis, which is applied to extract multi-word terms for the research. TerMine is a free online term extraction service, which is easy to handle and suitable for submitting larger texts for analysis. The source text, Council Decision 2009/371/JHA of 6 April 2009 establishing the Europol, is subject to analysis after specifying the .txt text format (the file conversion is required, as the system may not accurately work with the original .pdf format) and selecting the part-of-speech (POS) tagger, i.e. 'Tree Tagger version 3.1', which is most suited to generic text. The TerMine extraction service then annotates the input text with candidate multiword terms recognised by the C-value method. The output list is the essential starting point for identifying multi-word terms.

The National Centre for Text Mining based in University of Manchester describes the C-value term recognition method as "a domain-independent method for automatic term recognition (ATR) which combines linguistic and statistical analyses, emphasis being placed on the statistical part" (The National Centre for Text Mining – University of Manchester). The linguistic analysis of the text includes applying 'part-of-speech tagging', which is "the assignment of a grammatical tag (e.g. noun, adjective, verb, preposition, determiner, etc.) to each word in the corpus [...] needed by the linguistic filter which will only permit specific strings for extraction", extracting noun-based word sequences and creating a stop-list (in automatic term recognition, this is "a list of words which are not expected to occur as term words in that domain"; using a 'stop-list' results in avoiding the extraction of strings that are unlikely to be terms and in improving the precision of the output list (Frantzi, Ananiadou, Mima, 2000: 117-132).

The statistical analysis assigns a 'termhood score' to a 'candidate term' by using the following four characteristics:

- (1) the frequency of occurrence of the candidate term;
- (2) the frequency of occurrence of the candidate term as part of other longer candidate terms;
- (3) the number of these longer candidate terms;

(4) the length of the candidate term.

As a result, C-value becomes a method which reflect the ‘significance’ of a candidate term: the output is ordered by descending C-values, then within each score by ascending alphabetical order. The list of terms extracted from Council Decision 2009/371/JHA of 6 April 2009 establishing the Europol contains 512 terms, however not all the terms meet the criteria for being included in the research – this to be discussed in the next step.

To sum up, the selected software TerMine automatically recognizes and extracts ‘multi-word’ noun-based terms from the document by applying the C-value term recognition method, which combines both linguistic and statistical information. TerMine has a distinct advantage over many term extraction tools: it is free and available online, it does not require installation, it is easy to manage – the tool extracts the terms with little user ‘assistance’, if any, and the output list of results is available immediately. It is very time saving, but it requires attention on behalf of users to review the excerpted ‘term candidates’ and ignore a few of them which do not fulfil the quality requirements for term inclusion, which has to be described further – together with the key criteria for inclusion of terms into the analysis.

Finally, the extraction procedure used in identifying Russian, Czech and German equivalents of the English terms could not be automated and they were searched for and extracted manually. Only a few term extraction tools work with Cyrillic, and can handle diacritical signs – most software freely available operates with English texts only.

The fourth step in Material and Method Part includes the principles of processing the multi-word terms extracted by means of C-value analysis and the criteria for inclusion or non-inclusion of terms into the research sample. The first 200 terms – out of 512 extracted – are considered. Each extracted term is manually assigned the structure (whenever the word-class of the term components is unclear, Oxford Dictionary online is consulted).

The following ‘candidate terms’ are excluded from the analysis:

- (1) repeating word sequences (for example, the plural form of *Member States*): the frequency of particular terms is not the focus point of the research, the structure of multi-word terms and translation procedures for newly emerging terms are the subject of attention;
- (2) word sequences which lack ‘conceptuality’, or ‘notionality’, one the core term features described in Theoretical Part (*relation with partners, abovementioned sensitive data*);
- (3) units like *oj I, chapter II, information.en I* are excluded, as they are obviously not terms;

- (4) other than noun-based word sequences which appear on the output list (*as follows, Europol staff operating*).

The list of what is added to the ‘candidate terms’ includes:

- (1) a plural form, if necessary (some heads of noun-based sequences, or their premodifying elements, extracted are presented singular, though they are plural in the text, and may be frequently used in plural, and not in singular: *dactyloscopic data**, *data communication equipment**, *security interests** – terms modified are marked by the asterisk in the Appendix;
- (2) a capital letter: *European Atomic Community**, *Europol Information System** – terms modified are marked by asterisk in the Appendix;
- (3) a part of the term, which is ignored by the C-value analysis and which is crucial to this analysis for understanding the translation procedure to be applied: *European Monitoring Centre (for Drugs and Drug Addiction)**, *Automatic Processing (of Personal Data)** – terms modified are marked by asterisk in the Appendix, the part added is put in round brackets.

Russian, Czech and German terms are searched for and extracted manually, they appear on the list, together with the respective term structures assigned to them. German or Russian compound nouns, which consist of two, or more, elements are considered to be one ‘one-word’ structures in this analysis: *правопреемник*, *Verwaltungsrat*, *Mitgliedstaat*, *Verschlussachen*, *Analysegruppe*, *Indexfunktion*, *Datenschutz*, etc; the same applies to the appositives – they become ‘one-word’ terms: *государство-член*.

4. Research Part

4.1. Analysis of Term Structure

The chapter analyses the results of term extraction after applying the C-value term recognition method and collecting the data manually, with the purpose of establishing the most common term structures of the multi-word terms in English, Russian, Czech and German in the source text, and identifying the translation procedures used. The diagrams below present those term structures which appear at least three times on the output list, which means ‘other’ describes term structures which appear two times, or just once. A few terms have more than one equivalent in the target language (Russian, Czech and German) – the first of the extracted equivalent terms is put into the quick analysis, i.e. a diagram. Percentages in the four diagrams are rounded to the nearest whole percent.

4.1.1. Two-word Terms

The most common type of multi-word terms in English, Russian and Czech – and, at the same time, the shortest one in terms of its structure – is **two-word terms**: in English – 72%, in Russian – 57% and in Czech – 56% of the total number of analyzed terms. The two-word terms consist of the head, the governing element, expressed by a noun, and the second element modifying the head. The difference between the English, Russian and Czech two-word terms is in the element which modifies the head.

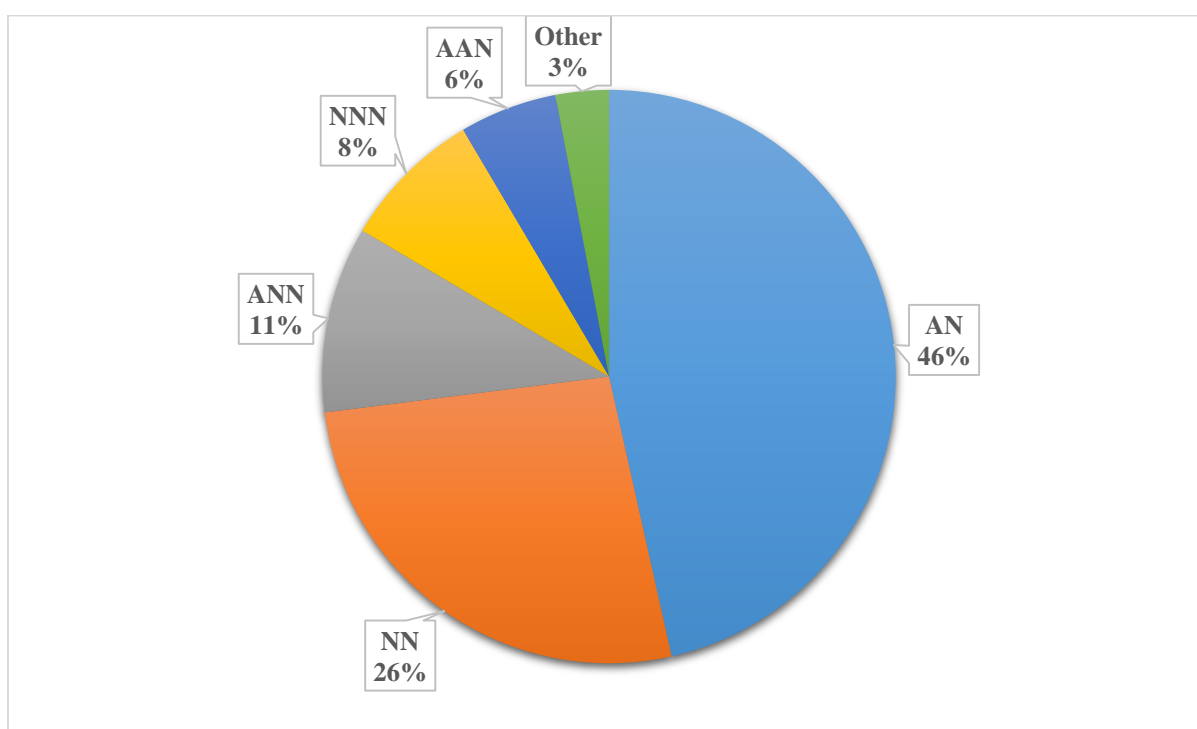


Diagram 3. Quick analysis. Structure of multi-word terms in the English version of Council Decision 2009/371/JHA of 6 April 2009 establishing the Europol

According to the results of the analysis conducted on the source text (the Council Decision 2009/371/JHA of 6 April 2009 establishing the Europol), the most frequent types among the English multi-word terms are the two-word terms with the AN structure, 46%, and those with the NN structure, 26%. The head, a noun, has a fixed end position in the term structure, which means the modifying element, a noun or an adjective, is always a premodifier.

The most frequent English two-word term is the AN type, i.e. a noun premodified by an adjective, which makes up 46% of the total analyzed terms: *strategic intelligence, illicit trafficking, legal persons**, *operational cooperation, internal security, incorrect storage, dactyloscopic data**, *sensitive activity, unauthorised reading, non-automated data**, *injured party, Official Journal**, *classified information, investigative procedures**.

The next most frequent term structure in the English document is the NN type – a noun head premodified by a noun – which accounts for 26% of the total analyzed terms: *information processing, computer crime, security screening, data processing**, *data protection**, *threat assessments**, *discharge procedure, security clearance, input control, security interests**, *system malfunctions**.

There is one more two-word type in the sample: the two-word structure **PartN** which appears just once on the output list: *inputting party*.

The analysis of Russian two-word terms in the Russian version of the document shows that two-word terms are formed in four ways: (1) AN – 43% (2) NNgen – 14% (3) NpNinst – 3% (4) NpNloc – 1%. The Czech two-word terms are similar to Russian, three models are productive here: (1) AN – 43% (2) NNgen – 13% (3) NpNloc – 2%. As follows from the description of the structures, in both languages, as in English, the head, is expressed by a noun. However, the Russian (also, Czech) two-word terms differ from the English ones in that the modifier is expressed by a premodifying adjective and a postmodifying noun. The nominal postmodifier is in the genitive or locative case (in both Russian and Czech).

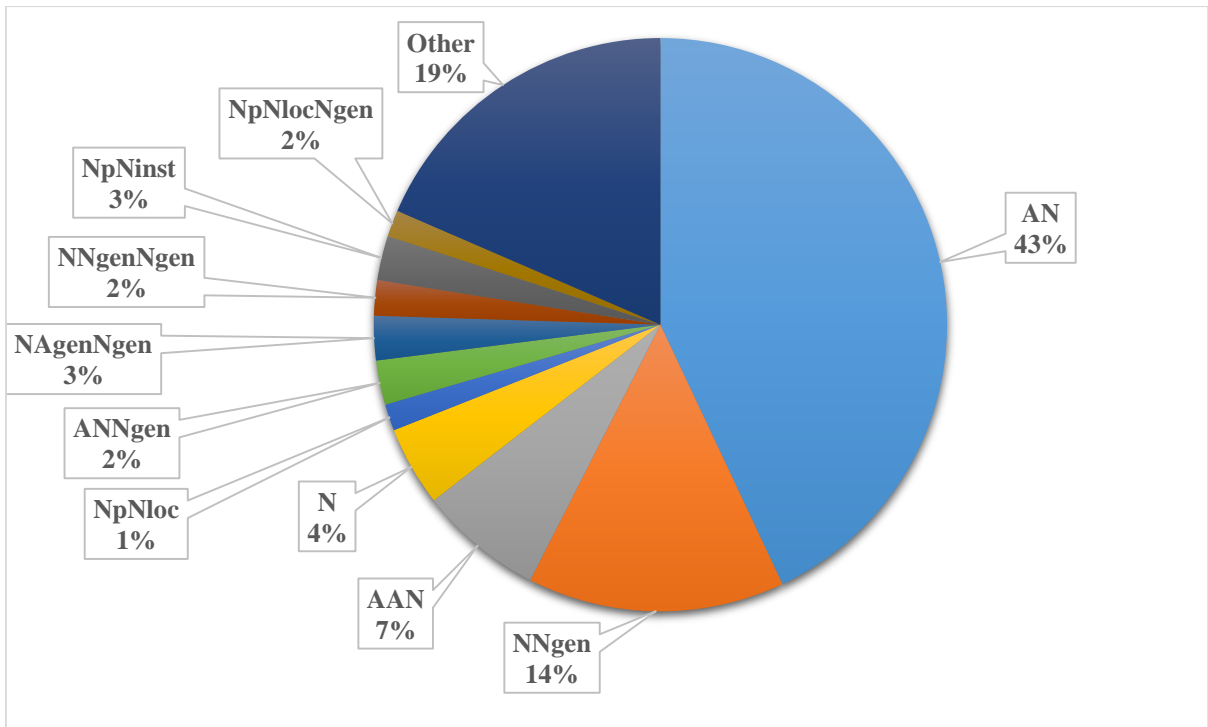


Diagram 4. Quick analysis. Structure of 'multi-word' and 'one-word' terms in the Russian version of Council Decision 2009/371/JHA of 6 April 2009 establishing the Europol

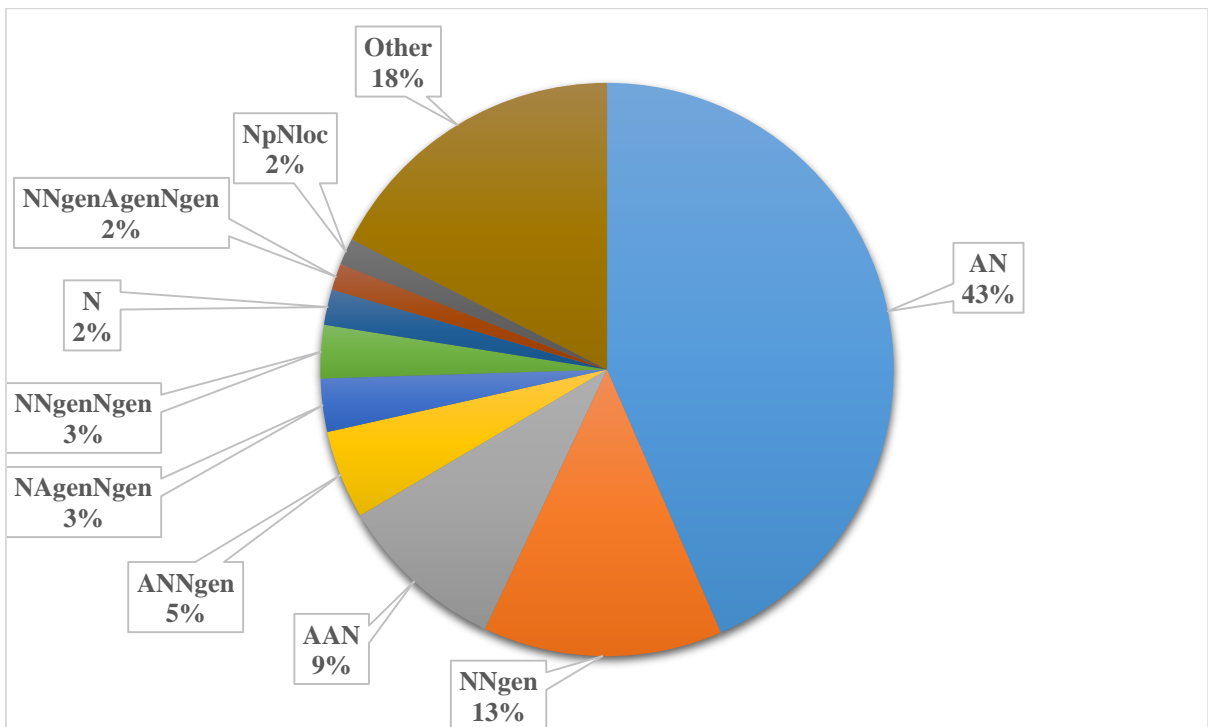


Diagram 5. Quick analysis. Structure of 'multi-word' and 'one-word' terms in the Czech version of Council Decision 2009/371/JHA of 6 April 2009 establishing the Europol

The most frequent 'syntactic' term structure in Czech and Russian is the one with a premodifying adjective followed by the head (noun). In the Russian version, one finds the following examples of AN: *частные лица, свободное перемещение, двусторонний обмен,*

дактилоскопические данные, чувствительная деятельность, Финансовый контролер, компьютерная преступность, Административный совет, аналитическая группа, контактный пункт.

Because Czech and German are presented for comparison in this study and are not the primary subject of attention, only some relevant examples in these languages are listed here. The Czech version contains the following ‘AN’ term structures: *osobní údaje, soukromý subject, nedovolený obchod, předchozí souhlas, veřejný pořádek, volný pohyb, dvoustranná výměna, daktyloskopické údaje, citlivá činnost, trestná činnost, bezprostřední nebezpečí, utajované informace, vnější hranice, kriminalistické metody, kontaktní místo, bezpečnostní prověrka.*

The second most frequent term structure in Russian and in Czech is **NNgen**: the noun in the genitive case follows immediately its governing noun (head): *отношения сотрудничества/связи сотрудничества, процедуры расследования/методы расследования, защита данных, проверка безопасности, обработка данных, Регламент Совета, безопасность данных, носители данных.* Czech examples of the ‘NNgen’ terms include: *přístup veřejnosti, kontrola přepravy, ochrana údajů, nařízení Rady, bezpečnost údajů, doklad totožnosti, kontrola uživatelů, kontrola přenosu, kontrola vkládání, ochrana údajů.*

The two-word terms with the modifying element placed after the head form 18% in Russian (NNgen – 14%, NpNinst – 3% and NpNloc – 1%) and 15% in Czech (NNgen – 13%, NpNloc – 2%) With the most Russian and Czech terms, the grammatical case that marks a noun as modifying another noun, i.e. a head, is the genitive case. Other minor examples also include locative case – **NpNloc** in Russian and Czech (*соглашение о сотрудничестве, Конвенция о Европоле, соглашение о местонахождении, dohoda o spolupráci, Úmluva o Europolu, dohoda o sídle*) and instrumental case – **NpNinst** in Russian (*контроль за перевозкой, контроль за пользователями, контроль за передачей, контроль за доступом, контроль за включением*). Only the adnominal genitive in Russian and Czech is used without a preposition, other case forms are accompanied by prepositions. It is worth mentioning that some Russian and Czech nouns cannot ‘produce’ the respective adjectives, which, apparently, may justify the existence of the term structure with postmodifying element, or, in other words, the frequent use of grammatical case forms.

4.1.2. Three-word Terms

Among the English **three-word terms**, which make up 25% of the total terms, the following model is the most common one: **ANN** (*joint investigation team, European Police Office*, European Police College*, Joint Audit Committee*, commercial intelligence providers**,

internal audit function, automated data-processing systems, illegal immigrant smuggling, unlawful drug trafficking, temporary agent contract.*

Less common models are **NNN** – 8% (*Europol Information System*, Council Framework Decision*, draft establishment plan, Management Board decision*, Europol data files*, data protection matters*, information processing systems*, crime prevention methods*, Data Protection Officer*, data communication equipment*, contract agent contract, motor vehicle crime*) and **AAN** – 6%: *independent external evaluation, Joint Supervisory Body*, European central bank*, sound financial management, European Economic Community*, grievous bodily injury, structured manual files*, alleged criminal offences*, European Atomic Community*, European Anti-Fraud Office*, direct operational aim*. There was just one instance of the model **NAN** in the whole sample: *framework Financial Regulation**.

The Russian three-word terms make up 16% of the total analyzed multi-word terms in Russian, in Czech – 20%. The most frequent three-word term structure in Russian and Czech is **AAN** – two adjectives modify a noun – which forms 7% of the total analyzed terms in Russian and 9% in Czech. The Russian ‘AAN’ terms are illustrated by the following examples: *независимая внешняя оценка, Общий контрольный орган, Европейский центральный банк, тяжкие телесные повреждения, совместная следственная бригада, Европейское полицейское ведомство, Европейский полицейский колледж, Общий контрольный комитет, рамочный финансовый регламент*.

The Czech ‘AAN’ terms include for example: *nezávislé externí hodnocení, společný kontrolní organ, Evropská centrální banka, Evropské hospodářské společenství, společný vyšetřovací tým, Evropský policejní úřad, Evropská policejní akademie, společný revizní výbor, počítačová trestná činnost*.

Less frequent term structures in the collected data, which appear at least 3 times on the list, are:

(1) **NAgenNgen** – 3% – in Russian and in Czech: *меры финансового характера, поставщики коммерческих сведений, подразделение внутреннего аудита, проект штатного расписания, решение Административного совета, and funkce vnitřního auditu, smlouva dočasného zaměstnance, zpracování (osobních) údajů, rozhodnutí správní rady, smlouva smluvního zaměstnance, vyšetřování trestných činů;*

(2) **ANNgen** – 2% in Russian: *Генеральный секретариат Совета, внутренняя процедура отбора, неправильная обработка данных, Информационная система Европола, Рамочное решение Совета* and 5% in Czech: *generální sekretariát Rady, nesprávné zpracování údajů, komerční poskytovatelé zpravodajství, nezákonné převaděčství přistěhovalců, informační systém Europolu, rámcové rozhodnutí Rady;*

(3) **NNgenNgen** – 2% in Russian: *Конвенция Совета Европы, область защиты данных, системы обработки данных/системы обработки информации, методы предотвращения преступности* and 3% in Czech: *Úmluva Rady Evropy, postup udělení absolutoria, soubory údajů Europolu, systémy zpracování informací, inspektor ochrany údajů, kontrola nosičů údajů*;

(4) **NpNlocNgen** – 2% in Russian (no Czech examples for this structure are found among the excerpted terms): *интересы в области безопасности, сбой в функционировании системы, положения о защите данных*.

What follows from the listed examples is that three-word terms are formed on the basis of two-word terms which are extended apparently to express more specific semantic concepts. These initial two-word terms, which constitute the basis for three-word terms, may operate as independent terms. Examples from the document include: *criminal offences** – *alleged criminal offences**; *financial regulation/Financial Regulation** – *framework Financial Regulation**. The added second modifying element which is put initially narrows and explicates the meaning of the term – the new structure is then a single entity with a specific meaning.

4.1.3. Four-word Terms

The English, Russian and Czech instances of **four-word terms** occur infrequently in the respective versions of the source text and so only a few examples are available. In English, the head of the four-word term structure is usually in end position: **AAAN** (*independent Joint Supervisory Body**, *specific objective physical characteristics**), **AANN** (*International Criminal Police Organisation**), but the head may appear in initial position followed by an extended postmodifier of the **NpANN** type (*participation in joint investigation teams**). In the Slavic languages, the occurrence of four-word terms is accompanied by the use of grammatical cases and prepositions and the terms come in several structures: **NpNlocNgenpNdat** (*контроль за получением доступа к оборудованию*), **NpAlocAlocNloc** (*участие в совместных следственных бригадах*), and **NNgenAgenNgen** (*návrh plánu pracovních míst, metody předcházení trestné činnosti*). Just as with the three-word terms, the series of modifying elements in the four-word structure specify the meaning and in principle have a binary structure: head-extended modifier. The increase in the length of terms is apparently due to the need to express the concept accurately and eliminate ambiguity – the number of term elements appears to be proportionate to the specificity of the concept expressed by the term. However, the great length of terms results in the terms becoming bulky and very inconvenient to use. One may assume that for this reason the most frequently used terms are either two- or three-word structures – with the increase in the length of terms, their share in the total number of terms is reduced. Five-word terms

are present only in the translated versions of the source text (which we presume is the English version). They will be discussed in the next chapter with reference to the translation procedure applied to them.

4.1.4. One-word Terms

Some English ‘multi-word’ terms become ‘one-word’ terms in Russian, Czech and German. As stated above, German or Russian compound nouns (or adjectives), which consist of two, or more, elements and appositives are considered to be one ‘one-word’ structures in this analysis. In addition, the Slavic languages seem to have one-word ‘recognized’ equivalents for some of the English ‘two-word’ terms – they will be discussed in the next chapter. The research sticks to ‘one-word term’ regardless of whether the word is complex or not.

‘**One-word**’ terms expressed by a noun (including compound nouns) make up 4% of the total translated terms in the Russian text – *заместитель, преступления, правопреемство, правопреемник, государство-член, протокол, бухгалтер, картотеки, проект* and 2% in the Czech – *náhradník, spolupráce, účetní, zaměstnanec*.

In German, the most productive way of term creation is compounding, in which two or more lexemes combine into a single new word. For this reason, 40% of the English multi-word terms translated in the German text become ‘one-word’ terms – they are usually compound nouns of the type N+N: *Verwaltungsvorschriften, Finanzrahmen, Suchtstoffe, Handelssachen, Übergangsdirektor, Verschlussache, Finanzordnung/Finanzregelung, Strafsachen, Rechtsnachfolger, Verwaltungsrat, Analysegruppe, Kontaktstelle, Mitgliedstaat*. The ‘AN’ term structure is then – in many cases – presents the ‘A N+N’ model: *gemeinsame Kontrollinstanz, wirtschaftliche Haushaltsführung, Europäische Wirtschaftsgemeinschaft, endgültige Jahresabschlüsse, gemeinsame Ermittlungsgruppe, Europäisches Polizeiamt, Europäische Polizeiakademie, interne Sprachenregelung, internes Auswahlverfahren, Europäische Atomgemeinschaft*. The notable grammatical feature of the German compound nouns is the presence of a connecting element in the compound structure.

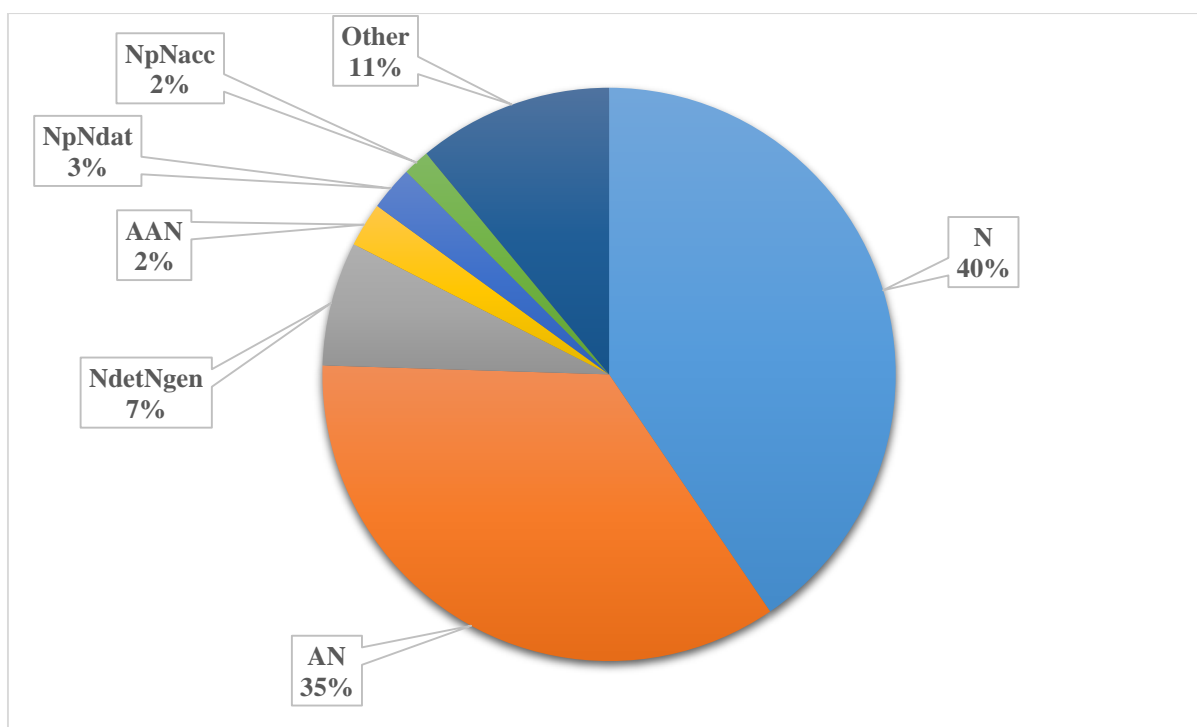


Diagram 6. Quick analysis. Structure of ‘multi-word’ and ‘one-word’ terms in the German version of Council Decision 2009/371/JHA of 6 April 2009 establishing the Europol

4.1.5. Remarks on Term Structure

To conclude – the C-value analysis of the multi-word terms in the selected EU document, i.e. the Council Decision 2009/371/JHA of 6 April 2009 establishing the Europol, supports the results obtained by Griniewicz in his research on architectural and building terms: the most frequent term structure in our English and Russian sample is a two-term structure with a noun head and one modifying element, then followed by three- and four-word structures. In the present research and in the one conducted by Griniewicz, the two most frequent term structures of English two-word terms are NN and AN, and the two most frequent term structures of English three-word terms are NNN and ANN.

The Theoretical Part listed seven features of terms that distinguish them as specific lexical units – according to Poštolková et al., they are: (1) conceptuality/notionality and lack of expressive traits; (2) stability and systematic character; (3) internationality and semantic transparency; (4) accuracy/precision (5) single reference; (6) uniqueness/unambiguity (7) respect for norms of literary language and functionality. Lotte, the founder of the Soviet school of terminology put forward the following requirements: (1) shortness; (2) unambiguity; (3) semantic transparency; (4) simplicity; (4) harmony with other terms available in the language; (5) preference for the domestic terms over new and foreign ones.

In general, the structure of the original English multi-word terms in our samle, and that of their respective translations, is usually ‘semantically transparent’ and unambiguous – the concept

may be easily decoded. The feature of semantic transparency allows the reader to understand the term without a problem: it is clear immediately from the term structure what concept is being referred to. Still, the same shows that some of the core term characteristics are not always taken into consideration or observed when introducing new terms. To begin with, shortness presupposes the use of the least amount of words when presenting a concept, some terms, though, consist of four, or more words: *independent Joint Supervisory Body**, *specific objective physical characteristics*, (German: *insbesondere objektive und unveränderliche körperliche Merkmale*), *kriminalwissenschaftliche Methoden*, *договор о работе в качестве договорного сотрудника*, *posouzení hrozeb (organizované) trestné činnosti*. Apparently, this lexical ‘hyperdensity’ is not convenient. Secondly, the uniqueness of a term implies the absence of polysemy, i.e. the presence of two or more additional senses. The term then may have a double meaning, which means the characteristic of uniqueness is not applicable to this term any more: *private persons** (individuals who are not in the military services and who are not public figures, or individuals who have introvert traits).

4.2. Analysis of Translation Procedures

The analysis focuses on the most productive source text (English) term structures **AN**, **NN**, **ANN**, **NNN** and **AAN** and their translation into Russian, and, occasionally, into Czech and German to establish the most common translation procedures. The respective English > Russian language pairs are listed in the subchapters below (with Czech and German, only the most productive term structure pairs are presented; the scope of this work does not allow for an analysis of all the terms on the output list).

Translation Procedure	Number	Percentage
calquing (through translation)	176	88%
descriptive translation	14	7%
one-word ‘recognized’ equivalent	10	5%
Total	200	100 %

Table 2. Distribution of translation procedures in the Russian version of the source text

The analysis of the English multi-word terms and their respective translations into Russian, as well as into Czech and German, shows that ‘calquing’, or ‘through-translation’ is the most common procedure used when translating ‘lexical units with no regular target language equivalent’. ‘Through translation’ presupposes the existence of semantic correspondences between

lexical units in the two languages, and the correspondence is then used to reconstruct the term structure in the target language.

It is important to point out that ‘calques’ on the output lists are both syntactically corresponding and non-corresponding (according to Lev Nelubin, this is common when working with the English-Russian language pair). The pair **AN** > **AN**, which is an syntactically corresponding ‘calque’ is the most common one when translating from English into Russian, Czech and German, which also indicates the frequency of the analyzed term structures in the source and target languages: *strategic intelligence* > *стратегические сведения*, *illicit trafficking* > *незаконная торговля*, *sensitive activity* > *чувствительная деятельность*, *classified information* > *закрытая информация*; *liaison officer* > *styčný důstojník*, *contact point* > *kontaktní místo*, *unauthorised person* > *neoprávněná osoba*, *security clearance* > *bezpečnostní prověrka*; *legal persons** > *juristische Personen*, *dactyloscopic data** > *daktyloskopische Daten*, *sensitive activity* > *sicherheitsempfindliche Tätigkeit*, *illicit trade* > *illegaler Handel*, *imminent danger* > *unmittelbare Bedrohung*. Indeed, ‘AN’ term structure is the most frequent one in the Russian and Czech versions of the document. With syntactically corresponding ‘calque’, the component parts of the source – English – lexical units are simply replaced with syntactically corresponding lexical items in the target language – the inner form of the term maintains unchanged.

However, in Russian, and Czech copying the structure of the source lexical unit is often accompanied by some modifications in the target ‘calque’ elements. The nature of syntactically non-corresponding ‘calques’ is diverse. Syntactically non-corresponding ‘calques’ include the ones with the change in word order or part of speech, presence (or absence of prepositions), and the use of grammatical cases in the target language. The English > Russian frequent syntactically non-corresponding ‘calques’ include **AN** > **NNgen**, English > Russian and English > Czech – **NN** > **NNgen**, **NN** > **AN** – to name just a few.

Syntactically corresponding and non-corresponding ‘calques’ then must be the subject of a separate study – to analyze to what extent it is allowed to modify the term structure in terms of grammar and semantics. At this point, it is worth mentioning that some calques are accompanied not only by grammatical changes but also by semantic changes – for example, ‘specification’, which is using in the target text a lexical unit with a more specific meaning in the place of a lexical unit with a broad meaning: *draft establishment plan* – *проект штатного расписания* (Russian term is more specific, Russian word *расписание* is close to the English word *timetable*, or *timesheet*; the head *plan* in the English term structure is obviously more general).

The frequent use of ‘calques’ reflects the active interaction between the languages discussed. In addition, the ‘calques’ meet the requirements discussed above, i.e. they are

semantically transparent, short and unambiguous. And, what is more important, they are very often marked by the presence of international words in the structure, which makes them easily understandable – international words are present in all the four languages: *European Police College** > *Европейский полицейский колледж*, *financial controller* > *Финансовый контролер*, *European central bank** > *Европейский центральный банк*, *European Union** > *Evropská unie*, *strategic analyses** > *стратегические анализы* > *strategická analýza/strategické analýzy* > *strategische Analysen*. At the same time, the use of international words is not consistent in the analyzed language pairs, compare the terms with international and domestic words in the structure: *European Economic Community** > *Европейское экономическое сообщество* > *Evropské hospodářské společenství* > *Europäische Wirtschaftsgemeinschaft*. *Europol Convention** > *Конвенция о Европоле* > *Úmluva o Europolu* > *Europol-Übereinkommen*, *Union entities** > *учреждения Союза/образования Союза*, *subjekty Unie* > *Einrichtungen der Union/Unionstellen*.

Calques are frequently used for translation of the English terms into Russian, Czech and German:

(1) names of organizations, institutions, bodies and committees: *European Police Office**, *European Police College**, *European Economic Community**, *Joint Supervisory Body**, *European central bank**, *European Monitoring Centre (for Drugs and Drug Addiction)**, *European Union**, *European Parliament**, *International Criminal Police Organisation**, *European Atomic Community**;

(2) ‘types’ of persons in the legal or security context: *private persons**, *legal persons**, *unauthorised person*;

(3) matters in the legal or security context: *commercial matters**, *criminal matters**, *data protection matters**;

(4) activities in the legal or security context: *specific intelligence activities**, *sensitive activity*, *criminal activities**, *illegal activity*, *illegal money-laundering activities**;

(5) provisions: *specific provisions**, *administrative provisions**, *transitional provisions**, *data-protection provisions**;

(6) agreements: *cooperation agreement*, *Headquarters Agreement**;

(7) types of data: *personal data**, *dactyloscopic data**, *incorrect data**, *non-automated data**, *public data**;

(8) types of processing: *incorrect data processing**, *information processing*.

The minor issue – the presence of target synonyms for different source terms deserves particular attention in this study: *indefinite period* > *неопределенный срок* > *doba neurčitá* and *indefinite duration* > *неопределенный срок* > *doba neurčitá*.

The second translation procedure identified within this analysis is ‘adequate substitution’, and even more specifically – ‘descriptive translation’. The translation procedure ‘descriptive translation’ is applied in the text several times – as an adequate translation of English ‘lexical units with no recognized translation in the target language’. The descriptive equivalents are very different from the ‘calques’ – ‘descriptive translation’ is a more or less common explanation of the source lexical units and it completely disregards the structure of the source term, while ‘calques’ invariably copy the structure of source lexical units to a greater or lesser degree. Examples of ‘descriptive translation’ from English into Russian include: *unauthorised reading* > чтение (данных) неуполномоченным лицом, *motor vehicle crime* > преступность, связанная с торговлей похищенными транспортными средствами, *security clearance* > безопасность в отношении предоставления полномочий, *forensic methods** > полицейский методы научного характера.

A major shortcoming of this technique is that the structure is long, and inconvenient to use or memorize. In other words, descriptive translation makes it possible to express the meaning of a term quite accurately, but it complicates the syntactic structure of the sentences in the target language text. Descriptive terms may be used for translation of terms which are not yet found in the target language.

The translator’s inadequate knowledge of their native ‘special language’ and no experience with a particular area or field of study results in the ignorance of existing terms in the target language, which leads to the misunderstanding of the concepts. The absence of the term in the dictionary does not indicate that such a concept does not exist in the respective ‘special language’, the term may be newly emerging, and no sources are ready to provide this kind of information. Furthermore, the term may not be present in the dictionary because of its very special application in particular areas, as with the selected EU documents - *Joint Supervisory Body**, *joint investigation team* – the definition of the terms is available online only at the official page of Eurojust or Europol. In this case, automatic term recognition tools become essential – they may quickly extract the terms from the text and speed up the process of learning new terms.

4.3. Distribution of the English Term Structures and Their Russian Equivalents

When selecting a proper equivalent, the information about the term structure should not be underestimated – it may provide a complete understanding of the term (many terms have international well-known elements), or it may help to find and select a proper translation equivalent or translation procedure, or it may, at least, indicate the parts of speech of its elements and its syntactic function in the sentence.

Analysis of the multi-word term structure can facilitate the identification of the translation procedure. If the target structure is close to the source one, this may point to the application of the ‘calque’ procedure: **ANN** > **AAN** – *joint investigation team* > *совместная следственная бригада*. If several new elements are added to the target term structure, this may signify the application of ‘descriptive translation’: **AN** > **ANAgenNgen** – *forensic methods** > *полицейский методы научного характера*.

Russian / English	AN	NN	ANN	NNN	AAN	AAAN	AANN	NAN	NpANN	PartN	total
AN	77	7	1	-	1	-	-	-	-	-	86
N	4	5	-	-	-	-	-	-	-	-	9
NNgen	4	25	-	1	-	-	-	-	-	-	29
ANAgenNgen	1	-	-	-	-	-	1	-	-	-	2
NPartinstNinstr	1	-	-	-	-	-	-	-	-	-	1
NpAccNacc	1	-	-	-	-	-	-	-	-	-	1
PartN	1	1	-	-	-	-	-	-	-	-	2
NAgenNgen	1	-	2	2	-	-	-	-	-	-	5
A	1	-	-	-	-	-	-	-	-	-	1
NpNinst	1	3	-	1	-	-	-	-	-	-	5
NpNdat	1	1	-	-	-	-	-	-	-	-	2
NpNloc	-	3	-	-	-	-	-	-	-	-	3
NpNlocNgen	-	3	-	-	-	-	-	-	-	-	3
NpNinstNgenpNdat	-	-	-	1	-	-	-	-	-	-	1
NNgenpNgen	-	1	-	-	-	-	-	-	-	-	1
NpNgenNgenNgen	-	1	-	-	-	-	-	-	-	-	1
NpNgenNgen	-	1	-	1	-	-	-	-	-	-	2
NPartpNgenAgenNgen	-	1	-	-	-	-	-	-	-	-	1
NpAlocNloc	-	1	-	-	-	-	-	-	-	-	1
NNgenNgen	-	-	-	3	-	-	-	-	-	-	4
AAN	-	-	6	-	7	-	-	1	-	-	14
ANNgen	-	-	2	2	-	-	-	-	-	-	4
NNgenAgenNgen	-	-	2	-	-	-	-	-	-	-	2
AANNgen	-	-	1	-	-	-	-	-	-	-	1
ANpNdatNgen	-	-	1	-	-	-	-	-	-	-	1
ANpNlocNgenNgen	-	-	1	-	-	-	-	-	-	-	1
NAgenNgenNgen	-	-	1	-	-	-	-	-	-	-	1
NNgenPartpNinstNgen	-	-	2	-	-	-	-	-	-	-	2
NNinst	-	-	1	-	-	-	-	-	-	-	1
NpNlocpAgenNgen	-	-	1	1	-	-	-	-	-	-	2
NNgenPartN	-	-	-	1	-	-	-	-	-	-	1
NpNdatNgen	-	-	-	1	-	-	-	-	-	-	1
NpNinstNgen	-	-	-	1	-	-	-	-	-	-	1
NPartpNinstPartinstAinst Ninst	-	-	-	1	-	-	-	-	-	-	1
ANpAdatNdat	-	-	-	-	1	-	-	-	-	-	1
ANpNdatpNinst	-	-	-	-	1	-	-	-	-	-	1
AdvAN	-	-	-	-	1	-	-	-	-	-	1
AANA	-	-	-	-	-	1	-	-	-	-	1
AAAN	-	-	-	-	-	1	-	-	-	-	1
NpAlocAlocNloc	-	-	-	-	-	-	-	-	1	-	1
NPart	-	-	-	-	-	-	-	-	-	1	1
total	93	53	21	16	11	2	1	1	1	1	200

Table 3. Correlation of the English terms and their Russian equivalents in the source and translated versions. Note: acc – (adjective or noun) in the accusative; dat – in the dative; gen – in the genitive; inst – (adjective, noun or participle) in the instrumental; loc – (adjective, noun or participle) in the locative.

4.3.1. Russian Equivalents of the Structure AN

The subchapter analyzes the most frequent Russian equivalents of the English term structure AN, with reference to the translation procedures applied – there are 93 different equivalents available.

AN is the most frequent multi-word term structure in Russian – as it follows from the analysis of term structure. 77 equivalents of the English structure AN are syntactically corresponding ‘calques’, with the ‘AN’ term structure: *legitimate performance* > *правомерное выполнение*, *private persons** > *частные лица*, *factual indications** > *конкретные признаки*, *public order* > *общественный порядок*, *internal security* > *внутренняя безопасность*, *illicit trade* > *незаконная торговля*, *external borders* > *внешние границы*.

The English > Russian syntactically non-corresponding ‘calques’ include four ‘NNgen’ terms: *cooperative relations** > *отношения сотрудничества/связи сотрудничества*, *investigative procedures** > *процедуры расследования/методы расследования*, *public access* > *доступ общественности*; one ‘NAgenNgen’ term: *financial actions** > *меры финансового характера*; one ‘NpAccNacc’ term: *fixed-term contract* > *договор на определенный срок*; one ‘NpNdat’ term: *opening order* > *инструкция по созданию*; one ‘NpNinst’ term: *transport control* > *контроль за перевозкой*; and one ‘PartN’ term *injured party* > *пострадавшее лицо*.

‘Descriptive translation’ is presented by one ‘ANAgenNgen’ term: *forensic methods** > *полицейский методы научного характера*; and by one ‘NPartinstrNinstr’ term: *unauthorised reading* > *чтение (данных) неуполномоченным лицом*.

Five ‘AN’ English terms become four ‘one-word’ ‘N’ terms and one ‘one-word’ ‘A’ term in Russian: *alternate member* > *заместитель*, *criminal offences** > *преступления*, *legal succession* > *правопреемство*, *legal successor* > *правопреемник*, all them are ‘recognized’ equivalents.

The Czech ‘two-word’ term with a premodifying adjective, i.e. AN, is also the most frequent equivalent of the English term structure AN, with 73 equivalents available in the Czech version; the Czech ‘AN’ terms are syntactically corresponding ‘calques’: *Official Journal** > *Úřední věstník*, *criminal offences** > *trestné činy*, *European Community** > *Evropské společenství*, *classified information* > *utajované informace*.

The two most frequent German equivalents of the English ‘AN’ terms are ‘AN’ terms, with 51 syntactically corresponding equivalents available: *internal security* > *innere Sicherheit*, *incorrect storage* > *unrichtige Speicherung*, *bilateral exchange* > *bilateraler Austausch*; and one-

word ‘N’ terms, with 31 equivalents present in the German version: *narcotic drugs* > *Suchtstoffe*, *transport control* > *Transportkontrolle*, *commercial matters** > *Handelssachen*, *judicial body* > *Justizbehörde*.

4.3.2. Russian Equivalents of the Structure NN

The English structure NN – presented by 53 examples – does not have syntactically corresponding ‘calques’ in Russian. Syntactically non-corresponding equivalents include: NNgen, AN, NpNinst, NpNloc, NpNlocNgen, NpAlocNloc, NpNdat, PartN.

The most frequent equivalent here is NNgen, with 25 equivalents present in the Russian version’: *security screening* > *проверка безопасности*, *data media** > *носители данных*, *evaluation procedure* > *процедура оценки*.

AN equivalent occurs 7 times in the document: *computer crime* > *компьютерная преступность*, *Management Board** > *Административный совет*, *analysis group* > *аналитическая группа*, *contact point* > *контактный пункт*, *establishment plan* > *штатное расписание*.

‘NpNinst’, ‘NpNloc’ and ‘NpNlocNgen’ term structures have three examples in the text: *communication control* > *контроль за передачей*, *input control* > *контроль за включением*; *cooperation agreement* > *соглашение о сотрудничестве*, *Headquarters Agreement** > *соглашение о местонахождении*.

One example of such syntactically non-corresponding ‘calques’ as: NpAlocNloc – *trade-union membership* > *членство в профессиональных союзах*; NpNdat – *liaison officer* > *офицер по связи*; and Part N – *data input** > *включенные данные/включаемые данные*.

‘Descriptive translation’ include the following equivalents, each Russian term structure has one example only: NNgenpNgen – *discharge procedure* > *процедура освобождения от обязательств*; NpNgenNgen – *security clearance* > *безопасность в отношении предоставления полномочий*; NpNgenNgenNgen – *non-profit organization* > *ассоциация без цели получения прибыли*; NPartpNgenAgenNgen – *data-processing equipment* > *оборудование, используемое для обработки персональных данных*.

Five ‘one-word’ recognized equivalents are available in the Russian version: *Member State** > *государство-член*, *audit log* > *протокол*, *accounting officer* > *бухгалтер*, *data files** > *картотеки*, *draft estimate* > *проект*.

The two most frequent Czech equivalents are: NNgen with 23 examples – *threat assessments** > *posouzení hrozeb*, *draft estimate* > *návrh odhadu*; and AN with 14 examples – *security screening* > *bezpečnostní prověrka*, *liaison officer* > *styčný důstojník*.

The two most frequent German equivalents include ‘one-word’ ‘N’ term structure with 38 examples available – *data protection** > *Datenschutz*, *cooperation agreement* > *Kooperationsabkommen*, *establishment plan* > *Stellenplan*; and 8 syntactically non-corresponding calques, with ‘NdetNgen’ term structure – *threat assessments** > *Bewertungen der Bedrohungslage*; *system malfunctions** > *Fehlfunktionen des Systems*.

4.3.3. Russian Equivalents of the Structure ANN

The English structure ANN has 21 different Russian equivalents available in the target text.

They are 18 syntactically non-corresponding ‘calques’ – six ‘AAN’ terms: *joint investigation team* > *совместная следственная бригада*, *European Police College** > *Европейский полицейский колледж*, *Joint Audit Committee** > *Общий контрольный комитет*; two examples of ‘ANNgen’, ‘NAgenNgen’ and ‘NNgenAgenNgen’ terms: *internal selection process* > *внутренняя процедура отбора*, *illegal immigrant smuggling* > *обеспечение каналов нелегальной иммиграции*; one example of AANNgen, AN, ANpNdatNgen, ANpNlocNgenNgen, NNinst and NAgenNgenNgen: *specific intelligence activities** > *специальные разведывательные виды деятельности*, *illegal money-laundering activities** > *незаконная деятельность по отмыванию денег*, *specific data-protection provisions** > *специальные правила в области защиты данных*, *automated data-processing systems** > *системы автоматизированной обработки данных*.

‘Descriptive translation’ includes 2 examples of NNgenPartpNinstNgen – *endangered plant species* > *виды растений, находящиеся под угрозой исчезновения* and *endangered animal species** > *виды животных, находящиеся под угрозой исчезновения*; and one example of NpNlocpAgenNgen – *temporary agent contract* > *договор о работе в качестве временного сотрудника*.

In the Czech version, the two most frequent equivalents are syntactically non-corresponding calques – AAN, with 8 terms available – *joint investigation team* > *společný vyšetřovací tým*, *European Police Office** > *Evropský policejní úřad*; and ANNgen – with five examples present – *illegal immigrant smuggling* > *nezákonné převaděčství přistěhovalců*, *commercial intelligence providers** > *komerční poskytovatelé zpravodajství*.

In German the most frequent equivalent is ‘AN’ term, a syntactically non-corresponding ‘calque’, which occurs 12 times in the target text: *specific data-protection provisions** > *spezielle Datenschutzbestimmungen*, *Joint Audit Committee** > *gemeinsamer Prüfungsausschuss*.

4.3.4. Russian Equivalents of the Structure NNN

Russian equivalents of the English structure NNN include either syntactically non-corresponding ‘calques’ – 14 ‘calques’ available – or ‘descriptive translation’ – two examples.

‘NNgenNgen’ term structures are represented by 3 examples: *data protection matters** > *область защиты данных*, *crime prevention methods** > *методы предотвращения преступности*; both ANNgen and NAgenNgen have 2 examples in the target text: *draft establishment plan* > *проект штатного расписания*, *Management Board decision** > *решение Административного совета*; examples of the following structures occur just once: NNgen – *Europol data files** > *картотеки Европола*; NNgenPartN – *(organized) crime threat assessments** > *оценки угрозы, порождаемой (организованной) преступностью*; NpNdatNgen – *Data Protection Officer** > *Уполномоченный по защите данных*; NpNgenNgen – *data communication equipment** > *оборудование для передачи данных*; NpNinst – *data access control** > *контроль за доступом*; NpNinstNgen – *data media control** > *контроль за носителями данных*; NpNinstNgenpNdat – *equipment access control* > *контроль за получением доступа к оборудованию*.

Two instances of ‘descriptive translation’ include NpNlocpAgenNgen – *contract agent contract* > *договор о работе в качестве договорного сотрудника*, and NPartpNinstPartinstAinstNinst – *motor vehicle crime* > *преступность, связанная с торговлей похищенными транспортными средствами*.

NNgenNgen is also the most frequent equivalent in the Czech version – four syntactically non-corresponding ‘calques’ are present in the source text: *Data Protection Officer** > *inspektor ochrany údajů*, *contract agent contract* > *smlouva smluvního zaměstnance*.

The two most frequent German equivalents include seven ‘one-word’ ‘N’ terms – *Data Protection Officer** > *Datenschutzbeauftragter*, *information processing systems** > *Informationsverarbeitungssysteme* – and three syntactically non-corresponding ‘calques’, which are ‘NdetNgen’ terms – *draft establishment plan* > *Entwurf des Stellenplans*.

4.3.5. Russian Equivalents of the Structure AAN

Russian equivalents of the English structure AAN include both syntactically corresponding calques – ‘AAN’ terms with 7 examples present in the text: *independent external*

evaluation > *независимая внешняя оценка*, *Joint Supervisory Body** > *Общий контрольный орган*, *European central bank** > *Европейский центральный банк*, *grievous bodily injury* > *тяжкие телесные повреждения*; and syntactically non-corresponding calques, four term structures, with one example of each structure – AN: *alleged criminal offences** > *предполагаемые преступления*; ANpAdatNdat: *European Atomic Community** > *Европейское сообщество по атомной энергии*; ANpNdatpNinst: *European Anti-Fraud Office** > *Европейское ведомство по борьбе с мошенничеством*; AAN > AdvAN: *direct operational aim* > *прямо оперативная направленность*.

The most frequent Czech translation is AAN, with 7 syntactically corresponding ‘calques’ available in the Czech version: *European central bank** > *Evropská centrální banka*, *independent external evaluation* > *nezávislé externí hodnocení*, *grievous bodily injury* > *těžké ublížení na zdraví*.

Frequent English > German translation includes AAN > AN, with 6 examples of syntactically non-corresponding ‘calques’ present: *European central bank** > *Europäische Zentralbank*, *European Economic Community** > *Europäische Wirtschaftsgemeinschaft*.

5. Conclusion

The present thesis investigated two major issues in the selected EU document: (1) the structure of the noun-based ‘multi-word’ terms extracted by means of the C-value term recognition method; and (2) the procedures applied when translating ‘multi-word’ terms.

The research had to meet at least two challenges. One was selection of the excerpted ‘term candidates’ in order to find out whether they meet, or not, the key criteria for term inclusion. The other was the necessity to make manual extraction of Russian, Czech and German terms.

Theoretical Part sought to describe and explain the concept of ‘term’ – looking at it from different perspectives, analyzing ways of term creation suggested by various terminologists and linguists and defining core term characteristics. This made it subsequently possible to effectively review the extracted terms by means of the C-value term recognition method, and ignore those lacking core term features. The translation equivalents of the English terms in the sample were described in terms of Nelubin’s translation procedures, which proved applicable to the analysis of the extracted ‘multi-word’ terms – in both Slavic and Germanic languages.

With reference to the first issue, the analysis of the extracted terms shows that the most common type of multi-word terms in English, Russian and Czech is a **two-word term** (English – 72%, Russian – 61%, Czech – 58% of the total analyzed terms). The difference between the various types of these terms is based on the element modifying the head. The two most productive term structures in English are AN (46%) and NN (26%). Czech is similar to Russian: the languages share the two most productive structures – AN (Russian and Czech – 43%), NNgen (Russian – 14% and Czech – 13%). Because compounding is an extremely productive way of term creation in German, ‘multi-word’ terms become ‘shorter’ in the German version: one-word ‘N’ term structure makes up 40% and ‘AN’ term structure makes up 35% of the total translated terms.

The research then resulted in establishing the most productive structures of **English multi-word terms** – AN, NN, ANN, NNN, AAN, which were translated into Russian by the structures AN, NNgen, AAN, N, NpNloc, ANNgen, NAgenNgen, NNgenNgen, NpNinst, NpNlocNgen. The equivalent Czech structures include AN, NNgen, AAN, ANNgen, NAgenNgen, NNgenNgen, N, NNgenAgenNgen, NpNloc. The corresponding German structures are N, AN, NdetNgen, AAN, NpNdat, NpNacc.

With reference to the second issue, the two most frequent procedures applied when working with English > Russian, English > Czech and English > German translation of multi-word terms, including newly emerging, are ‘**calquing**’ and ‘**descriptive translation**’. In the Russian version of the text, calquing (through translation) makes up 88% of the total analyzed translation

procedures and ‘descriptive translation’ – 7%. Russian one-word ‘recognized’ equivalents form 5% of total analyzed procedures. Analysis of the ‘multi-term’ structure in the source and target languages can facilitate the identification of the translation procedure applied: the closer the target structure to the source one the more likely the ‘calque-based’ translation procedure will be used.

Analyzed ‘calques’ are both syntactically corresponding (for example, English > Russian and English > Czech: AN > AN) and syntactically non-corresponding (English > Russian: AN > NNgen, English > Czech: NN > NNgen, NN > AN) as the translation procedures work with analytic and synthetic languages, which convey grammatical relationships by using inflectional morphemes and denote case by inflecting words.

In syntactically corresponding ‘calques’ – the component parts of the English lexical units are replaced with the lexical correspondences in the target language, so the inner form of the term maintains unchanged. Syntactically non-corresponding ‘calques’ in Russian, Czech and German include the ones with the change in word order, or part of speech, the use of grammatical cases, and presence (or absence of prepositions).

In the analyzed text, ‘calques’ are frequently used for translation of the following lexical units: names of organizations, institutions, bodies and committees; ‘types’ of persons in the legal or security context; matters in the legal or security context; activities in the legal or security context; provisions; agreements; types of data; types of processing.

‘Descriptive translation’ is applied when ‘calques’ cannot accurately express the meaning of the term. This translation procedure completely disregards the source term structure, because essentially it is a common explanation of the source lexical unit, which becomes an ‘adequate substitution’ in the target text.

The English ‘candidate terms’ – including the terms *Joint Supervisory Body* and *joint investigation team*, which definition is available only at the official pages of Eurojust or Europol – excerpted by means of C-value term recognition method and analyzed in the present paper possess ‘conceptuality’, or ‘notionality’, and other core term characteristics, fall under the classification of ways of term creation, occur within an authoritative EU text and have a respective translation in the three languages – this makes it possible to regard them as ‘specific language signs’ used for ‘active interpersonal communication’ (Poštolková, 1976).

Two subchapters of the Research Part resulted in a great number of terms, which are of practical value and application when translating or proofreading security related texts. The spreadsheet is presented in the Appendix. The thesis provides the ground for further research into the ‘multi-word terms’ and the translation procedures to be applied, the issue of syntactically corresponding and non-corresponding ‘calques’ among the translated terms being one of them.

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Résumé

Tématem této diplomové práce jsou víceslovné termíny se substantivem jako řídicím členem v angličtině a ruštině (okrajově v češtině a němčině): analýza nejfrekventovanějších terminologických sousloví a překladatelských postupů. Diplomová práce se skládá z úvodu, teoretické části, metodologie, výzkumu a závěru.

Úvodní kapitola seznamuje s cíli práce, kterými jsou analýza terminologických sousloví nalezených v textu pomocí metody automatického vyhledávání termínů C-value a také analýza překladatelských postupů při jejich překládání. Kapitola také stručně informuje, jak bude vypadat teoretická část, metodologie a výzkum. Ukazuje, že význam této diplomové práce spočívá především v možnosti praktické aplikace výsledků výzkumu. Nadužívání termínů v textu je nejcharakterističtější rysem úředního dokumentu. Použití termínů přispívá k maximalizaci přesnosti informací obsažených v dokumentu: přesnost pak vylučuje možnost libovolné nebo subjektivní interpretace dokumentu. Současná terminologie se neustále mění v důsledku přidávání nových pojmů, zejména v oblasti vědy a techniky. Práce s novými pojmy vyžaduje promyšlený přístup, porozumění procesu tvorby termínů, analýzu pojmů „termín“ a „neologismus“ a dokonalé porozumění jazyku originálu a jazyku překladu při výběru vhodného překladatelského postupu. Tato diplomová práce si dále klade za cíl poskytnout důkazy o tom, že překlad pro nově vznikající víceslovné termíny s určovacím členem substantivem je snadno dostupný v cílovém jazyce, a to i v případech, kdy není dostupný ve slovníku.

Hlavním úkolem teoretické části je sumarizovat a analyzovat, co je známo a napsáno o tomto tématu v odborné literatuře, jako *Terminology: Theory, methods and applications* (Cabré, M. T., 1999), *Terminovedenie* (Griniewicz, S., 2008), *O české terminologii* (Poštolková, B., Roudný, M., Tejnor, A., 1983), *Introduction to Linguistics* (Reformatiskij, A., 1996), a *Introduction to the Technique of Translation* (Nelubin, L., 2013).

První podkapitola teoretické části se věnuje zkoumání terminologie, původu tohoto vědního oboru a charakteristickým rysům tří „klasických škol terminologii“ v Praze, Vídni a Moskvě. Tato část popisuje pojem „termín“, stanovuje jeho specifické vlastnosti a zároveň požadavky kladené na „termín“:

- (1) pojmovost/nocionálnost a absence citového zbarvení
- (2) ustálenost a systémovost
- (3) mezinárodnost a významová průzračnost
- (4) přesnost
- (5) jednojmennost
- (6) jednoznačnost

(7) ústrojnost a úkonnost

Dmitrij Lotte také vyžaduje, aby termín byl (8) krátký a (9) jednoduchý, a (10) preferuje domácí termíny před cizími. Kromě toho se podrobně popisují způsoby tvoření nových termínů. Zde se využívá tabulka, která může lépe ilustrovat způsoby tvoření nových termínů. Jako základ slouží klasifikace způsobů tvoření nových termínů, která je vymezena v následujících zdrojích – *O české terminologii* (Poštolková, Roudný and Tejnor, 1983: 34-61) a *Terminovedenie* (Griniewicz, 2008: 121-162). Je třeba ještě jednou zdůraznit, že tato práce je zaměřena pouze na analýzu víceslovných termínů se substantivem jako řídicím členem, tzv. multi-word terms, a nezabývá se jinými způsoby tvoření nových termínů v praktické části.

Druhá podkapitola teoretické části se věnuje popisu pojmu „neologismus“, druhů neologismů a postupů při překladu lexikálních jednotek, pro něž není v cílovém jazyce k dispozici již vytvořený překladový ekvivalent. Popis se opírá o primární zdroje *A Textbook of Translation* (Newmark, 1988: 81-93; 140-150), *Introduction to Linguistics* (Reformatskij, 1996: 249-251), *Introduction to the Technique of Translation* (Nelubin, 2013: 89-124).

Kapitola popisující metodologii je zaměřená na vymezení materiálu, metod, a nástrojů, používaných v praktické části. Tato kapitola informuje, že materiál je čerpán z rozhodnutí Rady 2009/371/SVV ze dne 6. dubna 2009 o zřízení Evropského policejního úřadu (Europol). Jednotlivé kroky ve výzkumu jsou náležitě popsány.

Prvním krokem je výběr vhodného textu, který bude pravděpodobně obsahovat odborné termíny. Je třeba poznamenat, že anglická verze textu (vhodného pro výzkum) by měla být autoritativním zdrojem termínů a zároveň mít k dispozici oficiální překlady do ruštiny, češtiny a němčiny. Veškeré dokumenty Evropské unie, včetně jejich překladů do češtiny a němčiny, jsou veřejně přístupné na webových stránkách. Ruština není úředním jazykem EU, nicméně oficiální překlady některých dokumentů EU do ruštiny jsou k dispozici na oficiálních webových stránkách Moskevské státní akademie práva (www.eulaw.edu.ru). Rozhodnutí Rady 2009/371/SVV ze dne 6. dubna 2009 o zřízení Evropského policejního úřadu (Europol) je dokumentem, který splňuje požadavky stanovené výše a slouží jako podklad pro výzkum. Tento dokument zajišťuje spolupráci mezi členskými státy při boji proti terorismu, organizovanému zločinu a dalších souvisejícím trestným činům. Z toho vyplývá, že dokument by měl obsahovat často používané pojmy v oblasti bezpečnosti. Avšak vzhledem k tomu, že dokument popisuje různá administrativní pravidla a postupy, rozpočet a finanční řízení, zpracování informací a ochranu údajů, velké množství excerpovaných termínů souvisí s ekonomikou, lidskými zdroji a informačními technologiemi.

Druhým krokem je zdůvodnění výběru víceslovných termínů s určovacím členem substantivem pro analýzu. Víceslovné termíny mají řídicí člen/jádro („head“), což znamená, že

existují objektivní podmínky pro vyhledávání a extrahování termínů. Jinými slovy, je zde možnost automatického vyhledávání termínů v textu. Bela Poštolková, Miroslav Roudný, Antonín Tejnor (*O české terminologii*, 1983) uváděli, že ze statistického zkoumání termínů excerptovaných z technických oborů vyplývalo, že jednoslovných termínů bylo 22,5% a počet víceslovných termínů činil 77,5%, tedy více než tři čtvrtiny. Sergiusz Griniewicz (*Terminovedenie*, 2008) analyzoval architektonické a stavební víceslovné termíny s určovacím členem substantivem v angličtině; výzkum zjistil, že dvě nejfrekventovanější struktury anglických dvouslovných termínů jsou NN (33,3%) a AN (9%). Tříslovné termíny tvořily 30% z celkového počtu analyzovaných termínů se dvěma nejfrekventovanějšími strukturami typu NNN (8,5%) a ANN (5,7%).

Třetím krokem je popis nástroje TerMine a metody automatického vyhledávání termínů C-value, která je použita k extrakci termínů pro tento výzkum. TerMine je bezplatným nástrojem určeným k vyhledávání termínů, který je vhodný pro analýzu větších textů. Tento nástroj byl vyvinut na univerzitě v Manchesteru. Metoda automatického vyhledávání termínů C-value je nezávislým způsobem pro automatické vyhledávání termínů, který v sobě spojuje lingvistické a statistické analýzy (důraz je kladen na statistickou analýzu). Jazyková analýza textu zahrnuje především použití „part-of-speech tagging“: přidělení „tagu“ (např. podstatné jméno, přídavné jméno, sloveso, předložka, atd.).

Statistická analýza přiřadí „potencionálnímu termínu“ („candidate term“) „hodnotu“ („termhood score“) pomocí následujících postupů:

- (1) četnost výskytů „potencionálního termínu“;
- (2) četnost výskytů „potencionálního termínu“ jako součásti jiných delších „potencionálních termínů“;
- (3) počet těchto delších „potencionálních termínů“;
- (4) délka „potencionálního termínu“;

Seznam termínů nalezených v rozhodnutí Rady 2009/371 / SVV ze dne 6. dubna 2009 o zřízení Europolu obsahuje 512 termínů, ovšem ne všechny splňují kritéria pro zařazení do výzkumu.

Čtvrtým krokem je popis kritérií pro zařazení do výzkumu. Výzkum bere v úvahu prvních 200 dokladů. Další jednotky, které jsou z analýzy vyloučeny zahrnují:

- (1) opakování lexikálních jednotek: množné číslo *Member States*;
- (2) lexikální jednotky, kterým chybí „nacionálnost“: *relation with partners, abovementioned sensitive data*);
- (3) jednotky *of I, chapter II, information.en I* jsou vyloučeny, protože samozřejmě nejsou termíny;

- (4) víceslovné termíny s určovacím členem jiným než substantivum: *as follows*,
Europol staff operating;

Seznam toho, co je přidáno do sousloví zahrnuje:

- (1) množné číslo: *dactyloscopic data**, *security interests**, *data communication equipment**;
(2) velké písmeno: *European Atomic Community**, *Europol Information System**;
(3) součást termínu, která je ignorována analýzou C-value, a které má zásadní význam pro výběr překladatelského postupu: *European Monitoring Centre (for Drugs and Drug Addiction)**, *Automatic Processing (of Personal Data)*;

„Modifikované“ termíny jsou označeny hvězdičkou v dodatku; přidaná část je uvedena v kulatých závorkách.

Ruské, české a německé termíny jsou vyhledávány ručně. Excerpovaná kompozita jsou v této analýze považována za jednoslovné termíny: *npaonpeemnyk*, *Verwaltungsrat*, *Mitgliedstaat*, *Verschlussachen*, *Analysegruppe*, *Indexfunktion*, *Datenschutz*, atd. Totéž platí pro přístavek: *зосyдapcтвo-члeн*.

Praktická část je zaměřena na dvě hlavní témata, jednak na analýzu nejfrekventovanějších terminologických sousloví, jednak na analýzu nejfrekventovanějších překladatelských postupů.

Nejfrekventovanější spojení v angličtině byla (struktury seřazené podle četnosti použití) - AN, NN, ANN, NNN, AAN, v ruštině – AN, NNgen, AAN, N, NpNloc, ANNgen, NAgenNgen, NNgenNgen, NpNinst, NpNlocNgen, v češtině - AN, NNgen, AAN, ANNgen, NAgenNgen, NNgenNgen, N, NNgenAgenNgen, NpNloc, v němčině – N, AN, NdetNgen, AAN, NpNdat, NpNacc.

První kapitola praktické části je rozdělena do několika podkapitol - 4.1.1. Dvouslovné termíny, 4.1.2. Tříslovné termíny, 4.1.3. Čtyřslovné termíny a 4.1.4. Jednoslovné termíny. Podkapitoly obsahují charakteristiku jednotlivých terminologických spojení, s ohledem počet prvků ve spojení a aspekty gramatiky.

Z analýzy vyplývá, že nejfrekventovanějším spojením v angličtině, ruštině a češtině je dvouslovný termín: v angličtině – cca 72%, v ruštině – 61%, v češtině – 58% z celkového počtu analyzovaných termínů. Rozdíl mezi různými typy dvouslovných termínů je založen na slově, které určuje substantivum. Nejfrekventovanějšími spojeními anglických dvouslovných termínů jsou AN (46%) a NN (26%). Čeština a ruština sdílejí tři nejfrekventovanější spojení – AN (v ruštině a češtině – 43%), NNgen (v ruštině – 14% a v češtině – 13%), NpNloc (v ruštině – 1% a v češtině – 2%).

Tříslovné termíny jsou často vytvořeny na základě dvouslovných termínů. „Původní“, dvouslovný termín funguje jako nezávislý termín. Další slovo, které určuje substantivum, může být přidáno za účelem zúžení významu tohoto termínu: *criminal offences** - *alleged criminal offences**; *financial regulation/Financial Regulation** - *framework Financial Regulation**.

Čtyřslovné a pětislovné termíny se ve vybraném textu vyskytují zřídka. Stojí za zmínku, že s nárůstem délky termínů, se jejich podíl na celkovém počtu termínů snižuje. Čtyřslovné a pětislovné termíny jsou velmi nevhodné k použití: *specific objective physical characteristics**, *independent Joint Supervisory Body*, *metody předcházení trestné činnosti*, *návrh plánu pracovních míst*.

Anglické víceslovné termíny mohou odpovídat jednoslovným termínům v ruštině, češtině a němčině. Analyzované slovanské jazyky mají jednoslovný ekvivalent pro anglický víceslovný termín (v ruštině – 4% z celkového počtu přeložených termínů, v češtině – 2%): *заместитель*, *правопреемник*, *протокол*, *картотеку*, *проект*, *наhradník*, *spolupráce*, *účetní*, *zaměstnanec*. Skládání je produktivním způsobem tvoření slov v německém jazyce: jednoslovné termíny tvoří 40% z celkového počtu přeložených termínů do němčiny. K nejčastějším německým složeninám patří složenina typu N+N: *Handelssachen*, *Verwaltungsrat*, *Analysegruppe*, *Kontaktstelle*.

Ruské, české a německé termíny by měly být analyzovány s ohledem na mluvnický pád. U většiny slovanských termínů v této analýze se používá genitiv. Použití pádů v ruštině a češtině je často doprovázeno předložkami: v ruštině - *no*, *c*, *za*, *na*, *в*, *о*; v češtině – *na*, *o*, *pro*, *v*, *s*, *k*. Zdá se, že některá podstatná jména tvoří příslušná přídavná jména.

Výsledky výzkumu prováděného v rámci této práce podporují údaje poskytnuté Griniewiczem (*Terminovedenie*, 2008), který analyzoval architektonické a stavební víceslovné termíny s určovacím členem substantivem v angličtině a zjistil, že dvě nejfrekventovanější struktury anglických dvouslovných termínů jsou NN a AN a dvě nejfrekventovanější struktury anglických tříslovných termínů jsou NNN a ANN.

Analýza překladatelských postupů v druhé podkapitole pak odhalila, že nejčastějším způsobem překladu termínů je kalkování; a dalším nejčastějším způsobem je vysvětlující překlad. Kalkování může syntakticky odpovídat (z angličtiny do ruštiny a češtiny: AN > AN), a nebo syntakticky neodpovídat (z angličtiny do ruštiny: AN > NNgen; z angličtiny do češtiny: NN > NNgen, NN > AN), a to proto, že analýza pracuje s analytickými a syntetickými jazyky, které pracují s flexí a různými typy slovtvorby. Pokud kalkování syntakticky odpovídá, jednotlivé součásti anglických lexikálních jednotek jsou nahrazeny lexikálními protějšky v cílovém jazyce, takže struktura zůstává nezměněna. V aktuální analýze syntakticky neodpovídající kalkování v ruštině, češtině a němčině zahrnuje změnu slovosledu, změnu slovního druhu, použití pádu, a „přítomností“ nebo „nepřítomností“ předložek.

Kalkování se často používá u překladu těchto lexikálních jednotek:

- (1) názvů organizací nebo orgánů: *European Police Office**, *European Police College**, *European Economic Community**, *Joint Supervisory Body**, *European central bank**, *European Monitoring Centre (for Drugs and Drug Addiction)**, *European Union**, *European Parliament**, *International Criminal Police Organisation**, *European Atomic Community**;
- (2) „typů“ osob v právní nebo bezpečnostní oblasti: *private persons**, *legal persons**, *unauthorised person*;
- (3) „typů“ záležitostí v právní nebo bezpečnostní oblasti: *commercial matters**, *criminal matters**, *data protection matters**;
- (4) činností v právní nebo bezpečnostní oblasti: *specific intelligence activities**, *sensitive activity*, *criminal activities**, *illegal activity*, *illegal money-laundering activities**;
- (5) ustanovení: *specific provisions**, *administrative provisions**, *transitional provisions**, *data-protection provisions**;
- (6) dohod: *cooperation agreement*, *Headquarters Agreement**;
- (7) „typů“ dat: *personal data**, *dactyloscopic data**, *incorrect data**, *non-automated data**, *public data**;
- (8) „typů“ zpracování dat: *incorrect data processing**, *information processing*.

Vysvětlující překlad se použije, jestliže kalkování neumožňuje přesně vyjádřit význam termínu. Tento překladatelský postup zcela ignoruje zdrojovou strukturu, protože jde o běžné vysvětlení pojmů. Vysvětlující překlad vytváří objemnou strukturu, která celkově komplikuje syntaktickou strukturu věty: *unauthorised reading* > чтение (данных) неуполномоченным лицом, *motor vehicle crime* > преступность, связанная с торговлей похищенными транспортными средствами, *security clearance* > безопасность в отношении предоставления полномочий, *forensic methods** > полицейский методы научного характера.

Analýza struktury termínů ve zdrojovém a cílovém textu může usnadnit identifikaci překladatelského postupu: čím menší rozdíl mezi zdrojovým a cílovým termínem, tím větší je pravděpodobnost, že jde o překladatelský postup kalkování: **ANN** > **AAN** – *joint investigation team* > *совместная следственная бригада* (vysvětlující překlad: **AN** > **ANAgenNgen** – *forensic methods** > *полицейский методы научного характера*).

Absence termínu ve slovníku neznámá, že daný termín neexistuje: termín může být nově vznikající, a být aplikován v určité oblasti: *Joint Supervisory Body*, *joint investigation team*, *contract agent contract*, *specific data-protection provisions**. Takový termín vyjadřuje pojem často

používaný právě v tomto kontextu. Anglické extrahované termíny mají základní charakteristické rysy odborného vyjadřování, jako jsou „nacionálnost“ a „absence citového zbarvení, a spadají pod klasifikaci způsobů tvoření termínů, a proto je možné je považovat za „specifický jazykový znak, užívaný určitou sociální skupinou k aktivní interpersonální komunikaci“ (Poštolková, 1976).

Výsledky diplomové práce jsou shrnuty v závěrečné kapitole.

Diplomová práce vedla také k vytvoření databáze příkladů, které mají praktickou hodnotu a mohou být dále použity, například při překladu termínů nebo při korektuře textů s tématikou bezpečnosti. Příloha (Appendix) obsahuje excerpované příklady, na nichž je tato práce založena.