

PARALLEL AND COMPARABLE CORPORA FOR TERMINOLOGY ANALYSIS IN THE DOMAIN OF MIGRATION

OLGA UŠINSKIENĖ and SIGITA RACKEVIČIENĖ

Mykolas Romeris University, Lithuania

Abstract. The aim of the paper is to present the bilingual (English – Lithuanian) corpora compiled for research on specialised language in the domain of migration. The topic of migration is found to be one of the most significant themes for discussion recently. In 2021-2022, migration through the EU eastern borders increased considerably and obtained new dimensions as it was used for organizing hybrid attacks against EU states. Terminology of migration is of immense importance both for migrating people and politicians, officials and border officers dealing with the migration crisis. Corpus linguistics methods can enable analysing various aspects of migration terms and thus contribute to terminology management of this domain.

Two types of bilingual corpora were compiled for the research: parallel and comparable. The parallel corpus was composed of international legal acts on migration issues: their original version in English and translations into Lithuanian. The parallel corpus includes the EU legal acts and other documents as well as legal acts of international organisations – the United Nations and the Council of Europe. Meanwhile, the comparable corpus was composed of Lithuanian and UK national legal acts and other documents from the migration domain written in the original English and Lithuanian languages. The compiled corpora allow to analyse migration terms in international and national settings: to model and compare the terminological-concept structures of the domain as well as to study formation and usage patterns of the terms in international and national documents.

Key words: specialised language, migration domain, parallel corpus, comparable corpus, terminology analysis

INTRODUCTION

The topic of migration is found to be one of the most significant themes for discussion recently. People migrate for a variety of reasons, e.g., some try to look for better working conditions, others would like to gain education abroad, for some people this is a chance for family reunification, but for others, this is a possibility to flee persecution, torture, war conditions, poverty, fear, etc. In 2021–2022, migration through the EU eastern borders increased considerably and obtained new dimensions as it was used for organizing hybrid attacks against

EU states, and the war in Ukraine and the huge flow of refugees from Ukraine to other countries contributed to it as well. Migratory flows are managed on national and international levels. Therefore, both governmental and non-governmental institutions globally are intensely collaborating to develop, improve and eventually implement migration-related policies and initiatives aimed at protecting the rights of migrants, ensuring their sufficient integration, meeting their needs, and achieving peace and stability in their community. Subsequently, the need to clarify migration-related terminology to big groups of users has increased considerably. Moreover, the migration domain is regulated by international and national documents, and it is necessary to harmonise the terminology used in these different settings.

The paper aims at presenting the resources (bilingual (English – Lithuanian) corpora) of specialised lexis in the domain of migration. The research data (migration terminology) are extracted from bilingual parallel and comparable English-Lithuanian corpora of international and national documents. The present paper presents the principles and stages of corpus building and the composition of the compiled corpora.

RELATED RESEARCH

Two types of bilingual corpora were compiled for the term extraction purpose: parallel and comparable. The corpora are distinguished by the types of texts which are selected to compile the corpora. The majority of researchers define parallel corpora similarly naming their distinctive features as a collection of texts, or source texts, which are translated into other languages (Sinclair, 1996; McEnery and Xiao, 2008: 20). Meanwhile, the explanations of comparable corpora to some extent differ or are more specified by some authors. Thus, Sinclair (1996) defines ‘a comparable corpus as one which selects similar texts in more than one language or variety’. McEnery and Wilson (2001: 57) define comparable corpora as ‘collections of individual monolingual corpora, which use the same or similar sampling procedures and categories for each language but contain completely different texts in several languages’. McEnery and Xiao (2008: 20) define corpora comparable if they ‘contain components that are collected using the same sampling frame and similar balance and representativeness’. Thus, the definitions show that several monolingual corpora can be used as comparable only if they are composed of texts which are different but are selected and compiled according to the same principles.

Parallel and comparable corpora have their advantages. Parallel corpora are indispensable in translation studies and research as they enable analysing translation techniques used to express the same content in different languages and provide insights into various equivalence issues. In addition, parallel texts are necessary for the development of computer-assisted and machine translation

systems (McEnery and Xiao, 2008: 21). Comparable corpora, on the other hand, are composed only of original texts, their language is more natural, include more idiomatic expressions in comparison to target languages texts which are usually affected by the source languages (McEnery and Xiao, 2008: 21; Delpech, 2012). In addition, comparable corpora usually allow achieving much bigger data source diversity as 'parallel data sources are often scarce for less-resourced languages, especially in rapidly evolving domains in which resources become obsolete very quickly. Comparable data sources, on the other hand, are highly diverse, and they include various text genres and text types' (Rackevičienė, 2021: 87; Utkā, 2022: 127-128).

Both parallel and comparable corpora are extensively used for terminology extraction. Though the process of matching terms of different languages is more complex in comparable corpora, in the last decades their application in terminology extraction increased considerably. Various methodologies and software solutions are developed for bilingual or multilingual terminology extraction (Vintar, 2010; Gornostay, 2012; Aker, Paramite and Gaizauskas, 2013). The use of comparable corpora expanded the possibilities of terminology extraction as a combination of both parallel and comparable corpora allow using much bigger data source variety and compare terminology formed and used in various settings (Rackevičienė et al., 2021: 87; Utkā et al., 2022: 127-128).

BUILDING AND COMPOSITION OF THE PARALLEL AND COMPARABLE CORPORA

Two corpora were built for the research: the parallel corpus which was composed of international legal acts on migration issues (their original version in English and translations into Lithuanian) and the comparable corpus which was composed of Lithuanian and UK national legal acts and other documents from the migration domain written in the original English and Lithuanian languages. Thus, both corpora represent the legislative-executive discourse but focus on two different dimensions: the parallel corpus on the international dimensions, while the comparable corpus on the national (UK and Lithuanian) dimensions. The paper presents the principles and stages of building of the corpora and their structural composition.

1 BUILDING OF THE CORPORA

The process of building the corpora included the following steps: (1) data discovery and acquisition; (2) metadata collection; (3) data converting, cleaning and aligning; (4) data uploading to Sketch Engine.

1.1 DATA DISCOVERY AND ACQUISITION

The data discovery process started with the analysis of the international settings. An in-depth analysis of the international organizations responsible for dealing with migration was done. Consequently, it was discovered that there are governmental and non-governmental organizations dealing with the issues of migrants. Among governmental organizations, as the most important ones stand out the United Nations (UN), the International Organization for Migration (IOM), the United Nations High Commissioner for Refugees (UNHCR), the Council of Europe, the Organization of Economic Cooperation and Development (OECD). They collaborate closely with Government bodies and non-governmental organizations implementing migration-related policies, assisting asylum-seekers, refugees, stateless people together with their family members, children, unaccompanied minors to find protection in a host country, to reside there safely and to integrate fully into society in terms of employment, education, health and social protection. Beside the governmental institutions, there are non-governmental ones, such as the International Committee of the Red Cross, Doctors Without Borders which provide medical and other care to refugees in many countries worldwide, people in need, distress, victims of armed conflicts.

Most of the international legal documents extracted for the research were issued by the United Nations General Assembly, UNHCR and the Council of Europe. They have translations into the languages of all the member states which have signed the documents.

Another source for migration-related documents is EUR-Lex. EUR-Lex is an official website of the European Union legal documents used for extracting data for the analysis. The legal documents mainly include Directives, Regulations, EU Treaties, Reports issued by the European Parliament and the Council of the European Union. On the website, the legal documents are published in all official languages of the EU countries. Therefore, the data for the analysis were taken from both the English and Lithuanian languages.

After completing the analysis of the international settings of the migration domain, the scrutiny of national settings was performed. The main source of textual information was Lithuanian and UK national legal acts and other documents on migration, such as Laws, resolutions, reports and studies.

The Seimas of the Republic of Lithuania is the Parliament of Lithuania, the national authority of the legislative body. The implementation of laws is the responsibility of Ministries together with their subordinate institutions. Migration management in Lithuania is administered by three major bodies with their subordinates: the Ministry of Foreign Affairs of the Republic of Lithuania together with Diplomatic and consular offices, which form and implement the position of Lithuania on the common visa policy in the EU; the Ministry of the Interior of the Republic of Lithuania together with The State Border Guard

Service and Migration Department, which form State policy in the field of migration, organize, coordinate and control its implementation, and the Ministry of Social Security and Labour of the Republic of Lithuania with its subordinates the Employment Service and the Refugee Centre, which are in charge of dealing with migration issues regarding labour market and employment support, employment of third-country foreigners in the Republic of Lithuania, the provision of Lithuanian state support for the integration of foreigners granted asylum in the Republic of Lithuania (Online 1). Among Lithuanian legal documents extracted for the research are mainly Laws issued by the Seimas of the Republic of Lithuania, Resolutions issued by the Government of Lithuania, Reports and Studies issued by the (EMN) National Contact Point for the Republic of Lithuania. The documents are originally issued in the Lithuanian language, and there are their translations into English.

Immigration in the United Kingdom is managed mainly by the Home Office. Currently the main functions of the Home Office are managed by its different Directorates: UK Visas and Immigration, Border Force and Immigration Enforcement. All the bodies take tough control over the non-EU nationals who cross the border of the UK, checking them carefully, interviewing, reducing the number of the ones illegally entering the country (Online 2). The Houses of Parliament, the Home Office, the Refugee Council are the main bodies responsible for issuing legal documents on migration policy in the UK. Among the extracted legal documents taken for the analysis are legal acts, reports and studies.

The documents issued by the discussed organisations and institutions were systematised and assessed according to their suitability for the parallel or comparable corpora. The English documents which had Lithuanian translations were used for the compilation of the parallel corpus. Meanwhile, the English and Lithuanian documents, written in the original languages, but on similar topics and in similar genres, were used for the compilation of the comparable corpus. The selected texts are freely accessible as they are legal acts and related documents.

1.2 METADATA COLLECTION

The collected documents were organised in an Excel file and the required metadata were collected. Table 1 and Table 2 represent the samples of the Excel files with the metadata, which include such information as: The name of the document; The title of the document, The author of the document; Source (the site in which the document is published); Publishing year; Home website; URL; The number of the words in the document. The acquired data facilitate further research and simplify the work with the corpora.

Table 1 Extract from the Excel file with the collection of the parallel corpus metadata

Document name	Title of the text	Author of the text (individual or collective)	Source (site in which the text is published)	Publishing year	Home website	URL	Word count
EU LEGAL DOCUMENTS IN ENGLISH							
Directive 2011/95/EU	On standards for the qualification of third-country nationals or stateless persons as beneficiaries of international protection, for a uniform status for	the European Parliament	Europos Sąjungos oficialusis leidinys	2011	https://eur-lex.europa.eu/homepage.html	https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A32011L0095&rid=164258794868	9,66
Council Directive 2001/40/EC	On the mutual recognition of decisions on the expulsion of third country nationals	the European Parliament	Europos Sąjungos oficialusis leidinys	2001	https://eur-lex.europa.eu/homepage.html	https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32001L0040	1,519
Council Directive 2003/86/EC	On the right to family reunification	the European Parliament	Europos Sąjungos oficialusis leidinys	2003	https://eur-lex.europa.eu/homepage.html	https://eur-lex.europa.eu/legal-content/EN/ALL/?uri=CELEX:32003L0086	4,778
Council Directive 2003/109/EC	Concerning the status of third-country nationals who are long-term residents	the European Parliament	Europos Sąjungos oficialusis leidinys	2003	https://eur-lex.europa.eu/homepage.html	https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:32003L0109	6,726

Table 2 Extract from the Excel file with the collection of the comparable corpus metadata

Document name	Title of the text	Author of the text (individual or collective)	Source (site in which the text is published)	Publishing year	Home website	URL	Word count
LITHUANIAN LEGAL DOCUMENTS IN LITHUANIAN							
įstatymas	Lietuvos Respublikos įstatymas Dėl užsieniečių rezidencijos padidinti	Seimas of the Republic of Lithuania	Teisės aktų informacinė sistema	2004 m. balandžio 29 d. Nr. IX-2206	https://e-seimas.lrs.lt/portal/documentSearch.jspx?AD-TAIS:3337	https://e-seimas.lrs.lt/portal/legalAct.jspx?AD-TAIS:3337	47,037
įstatymas	Lietuvos Respublikos asmenų perkėlimo į Lietuvos Respubliką įstatymas	Seimas of the Republic of Lithuania	Teisės aktų informacinė sistema	2019 m. balandžio 24 d. Nr. XIII-2077	https://e-seimas.lrs.lt/portal/documentSearch.jspx?AD-TAIS:3454	https://e-seimas.lrs.lt/portal/legalAct.jspx?AD-TAIS:3454	2,876
įstatymas	Lietuvos Respublikos konsulinio mokėtinio įstatymas	Lietuvos Respublikos Seimas	Teisės aktų informacinė sistema	1994 m. vasario 23 d. Nr. I-509	https://e-seimas.lrs.lt/portal/documentSearch.jspx?AD-TAIS:351	https://e-seimas.lrs.lt/portal/legalAct.jspx?AD-TAIS:351	1,964

1.3 DATA CONVERTING, CLEANING, AND ALIGNING

Most of the texts were acquired in PDF format. The necessary word processing was performed, i.e., the PDF files were converted into TXT format. The texts also presented various problems, which hampered working with the material. Among them there were footnotes interfering with the main text, texts in another language, pictures and diagrams. The files were cleaned so that only coherent texts were left in them.

Subsequently, parallel texts (English documents and their Lithuanian translations) were aligned on the sentence level using LF Aligner software which is freely available on the website (Online 3). The aligner produced translation memory exchange (TMX) files, which were used for building of the parallel corpus.

1.4 DATA UPLOADING TO SKETCH ENGINE

In the final stage, the pre-processed datasets were uploaded to the Sketch Engine platform (Online 4). Two corpora were built: parallel and comparable.

The collected metadata were uploaded to Sketch Engine using the function 'Edit Metadata' (see Table 3). The uploaded metadata enhance the usability of the corpora as the texts can be sorted according to various criteria, for example, time period, source, the author.

Table 3 Example of the uploaded metadata to Sketch Engine platform

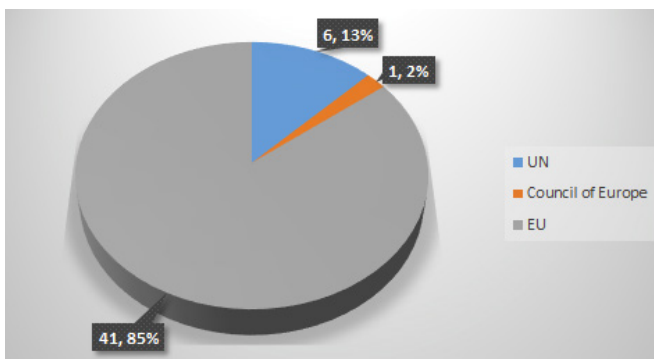
Edit metadata	
1. Immigration Act_2016.pdf	
Attribute	Value
Document_name	UK Public General...
Document_name	
Title_of_the_doc ...	Immigration Act
Author_of_the_d ...	Houses of Parlia ...
Year_of_publicati...	2016
Home_website	https://www.legisl...
URL	https://www.legisl...

2 COMPOSITION OF THE CORPORA

2.1 COMPOSITION OF THE PARALLEL CORPUS ON MIGRATION

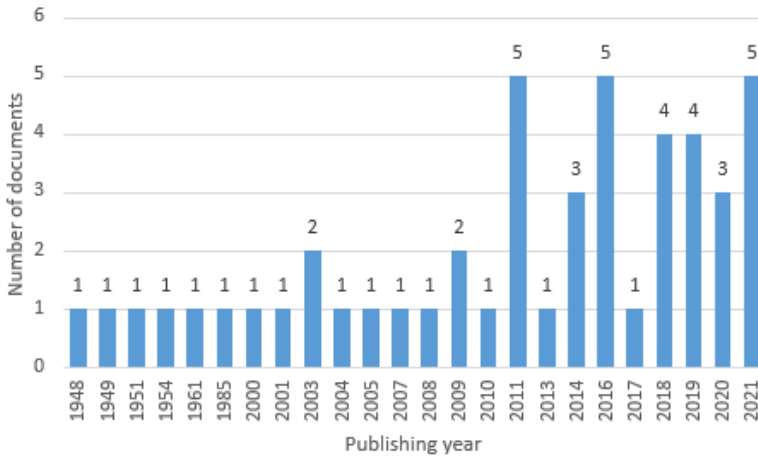
The analysis of the parallel corpus structure was done according to the selected parameters: distribution of documents according to the organisations/publishing year/number of words.

In pie-chart 1 ‘The number of documents by each organization’, it is clearly seen that the majority of international legal documents extracted for the parallel corpus are from the EU (they constitute 85 per cent of the whole number of documents). The rest 15 per cent are the documents of the UN (13 %) and the Council of Europe (2 %).



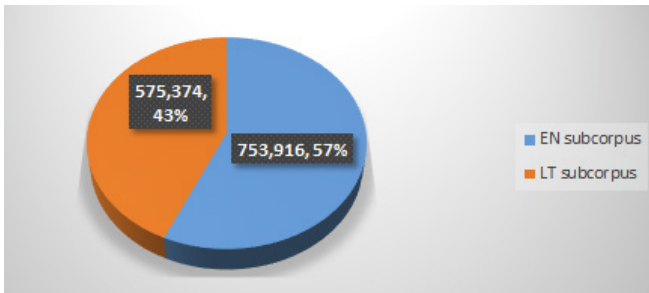
Pie-chart 1 The number of documents by each organization (N = 48 in total)

The parallel corpus includes UN legal acts from the time period 1948-2000, a legal document of the Council of Europe of 2005 and EU legal acts and other documents from 2001-2021, which is shown in bar-chart 1.



Bar-chart 1 The number of documents by the year of publishing

Pie-chart 2 shows the proportion of the number of words in the documents of both corpora. It is obvious that the number of words in the English subcorpus is slightly higher than that in the Lithuanian subcorpus.



Pie-chart 2 The number of words in the documents of EN and LT subcorpora (N = 1329,290 in total)

The compiled parallel corpus was also reviewed for the TOP 10 multi-word expressions in order to check the dominating lexis in it. Table 4 presents TOP 10 key multi-word expressions extracted from the parallel corpus by Sketch Engine.

Table 4 TOP 10 multi-word expressions extracted from the parallel corpus on migration

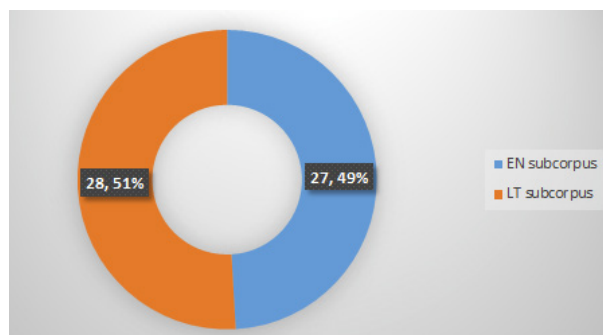
TOP 10 key multi-word expressions in English	TOP 10 key multi-word expressions in Lithuanian
1. <i>Third country</i>	1. <i>Valstybės narės gali</i> [Member States shall]
2. <i>International protection</i>	2. <i>ES mėlyniosios kortelės</i> [Of the EU Blue Card]
3. <i>Third-country national</i>	3. <i>Trečiosios šalies pilietis</i> [Third-country national]
4. <i>Unaccompanied minor</i>	4. <i>Trečiųjų šalių piliečių</i> [Of the third-country nationals]
5. <i>Member state</i>	5. <i>Valstybės nares užtikrina</i> [Member States shall ensure]
6. <i>Asylum seeker</i>	6. <i>Prieglobsčio ir migracijos</i> [Of asylum and migration]
7. <i>Country of origin</i>	7. <i>Sienų ir pakrančių</i> [Border and costal]
8. <i>Residence permit</i>	8. <i>Europos sienų ir pakrančių</i> [European border and costal]
9. <i>National law</i>	9. <i>Europos sienų ir</i> [European border and]
10. <i>External border</i>	10. <i>Sienų ir pakrančių apsaugos</i> [External border and coast guard]

The list of extracted multi-word expressions include many terms relevant to the migration domain, for example, terms denoting participants of migration (*asylum seeker*, *third-country national*, *unaccompanied minor*), terms denoting migration documents (*ES mėlyniosios kortelės* ‘Of the EU Blue Card’, *Residence permit*).

2.2 COMPOSITION OF THE COMPARABLE CORPUS ON MIGRATION

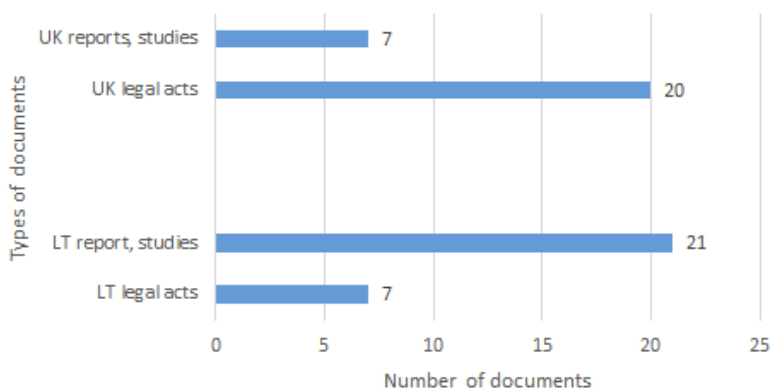
The analysis of the structure of the comparable corpus on migration was done according to the selected parameters.

The analysis of the number of documents in the EN and LT subcorpora reveals that their number in English and Lithuanian does not differ dramatically, as shown in pie-chart 3.



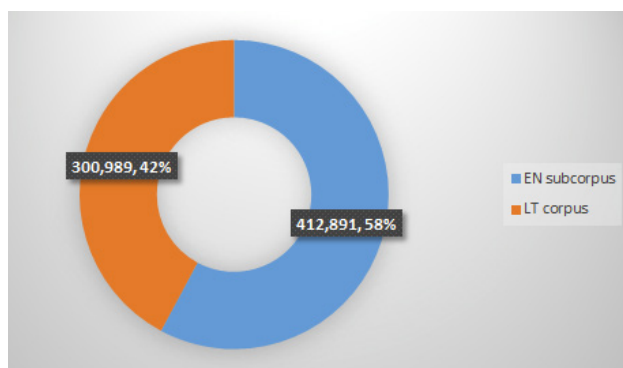
Pie-chart 3 Proportions of the number of documents in EN and LT subcorpora (N = 55 in total)

The analysis of the number of the types of documents in the EN and LT subcorpora shows that the number of UK reports and studies is much lower than that in Lithuanian. At the same time there are much more legal acts in the UK than in Lithuania (see bar-chart 2).



Bar-chart 2 Proportions of the types of documents in EN and LT subcorpora

Analysing the EN and LT subcorpora according to the number of words, it is observed that it is slightly different in both subcorpora, as shown in pie-chart 4.



Pie-chart 4 Proportions of the number of words in EN and LT subcorpora ($N = 713,880$ in total)

The compiled comparable corpus was also reviewed for the TOP 10 multi-word expressions in order to check the dominating lexis in it. Table 5 presents TOP 10 key multi-word expressions extracted from the comparable corpus by Sketch Engine.

Table 5 TOP 10 multi-word expressions extracted from the comparable corpus on migration

Lithuanian subcorpus	UK subcorpus
1. Valstybės sienos apsaugos tarnyba [State Border Guard Service]	1. <i>Immigration officer</i>
2. Leidimą laikinai gyventi [temporary residence permit]	2. <i>Refugee status</i>
3. Trečiųjų šalių piliečių [third-country nationals]	3. <i>Asylum migrant</i>
4. Prašymo suteikti prieglobstį [asylum application]	4. <i>Illegal work</i>
5. Europos migracijos tinkle [European Migration Network]	5. <i>Immigration bail</i>
6. Lietuvos Respublikos pilietybė [Citizenship of the Republic of Lithuania]	6. <i>Statutory instrument</i>
7. Užsieniečių teisinės padėties [the legal status of aliens]	7. <i>Asylum claim</i>
8. Leidimo nuolat gyventi [permanent residence permit]	8. <i>Small boat</i>
9. Trečiųjų šalių piliečiams [for third-country nationals]	9. <i>Refugee convention</i>
10. Pabėgėlių priėmimo centre [in the Refugee Reception Center]	10. <i>Asylum policy</i>

CONCLUSIONS

The analysis of migration sources in the legislative-executive discourse revealed that the issues of this domain are regulated by various legal acts and administrative documents developed in international and national settings which are closely interrelated. On the international level, migration is regulated, discussed and analysed in treaties, conventions, declarations and reports issued by international organisations, such as the United Nations General Assembly, UNHCR and the Council of Europe. On the national level, migration is regulated by national laws, the provisions of which are implemented by national migration departments and other institutions; their work is reflected in various national reports and studies.

The corpus building proved to be a complex task requiring several steps including data discovery and acquisition, metadata collection, data converting, cleaning and aligning, and finally uploading the pre-processed data and the metadata to the selected software (Sketch Engine). The metadata, uploaded to Sketch Engine, enhance the usability of the corpora as the texts contained in them can be sorted according to various criteria: time period, source, author, etc.

The analysis of TOP 10 multi-word expressions extracted from both corpora by Sketch Engine tool 'KEYWORDS' allows stating that migration terminology dominates in both corpora.

According to the analysis, the corpora represent the migration domain in various types of documents issued in international and national settings and are believed to provide sufficient data for terminology research.

REFERENCES


- Aker, A., Paramita, M. L. and Gaizauskas, R. J. (2013) Extracting bilingual terminologies from comparable corpora. In *Proceedings of the 51st Annual Meeting of the Association for Computational Linguistics, ACL 2013, 4-9 August 2013, Sofia, Bulgaria, Vol. 1: Long Papers* (pp. 402-411). The Association for Computer Linguistics.
- Delpech, E., Daille, B., Morin, E. and Lemaire, C. (2012) Extraction of domain-specific bilingual lexicon from comparable corpora: Compositional translation and ranking. In M. Kay and C. Boitet (eds.) *COLING 2012, 24th International Conference on Computational Linguistics, Proceedings of the Conference: Technical Papers, 8-15 December 2012, Mumbai, India* (pp. 745-762). Indian Institute of Technology Bombay.
- Gornostay, T., Ramm, A., Heid, E., Harastani, R. and Planas, E. (2012) Terminology extraction from comparable corpora for Latvian. In A. Tavast, K. Muischnek and M. Koit (eds.) *Human Language Technologies – The Baltic Perspective – Proceedings of the Fifth International Conference Baltic HLT 2012, Tartu, Estonia, 4-5 October 2012. Frontier in Artificial Intelligence and Applications 247* (pp. 66-73). IOS Press.
- McEnery, T. and Wilson A. (2001) *Corpus Linguistics*. Edinburgh: Edinburgh University.
- McEnery, T. and Xiao, R. (2008) Parallel and comparable corpora: What is happening? In G. Anderman and M. Rogers (eds.) *Incorporating Corpora: The Linguist and the Translator* (pp. 18-31). Clevedon: Multilingual Matters Press.
- Rackevičienė, S., Utkā, A., Mockienė, L. and Rokas, A. (2021) Methodological framework for the development of an English-Lithuanian cybersecurity termbase. *Studies about Languages / Kalbų studijos*, 39: 85-92. Available from: <http://doi.org/10.5755/j01.sal.1.39.29156> [Accessed on 28 August 2022].
- Sinclair, J. (1996) *Preliminary Recommendations on Corpus Typology*. EAGLES Document EAG-TCWG-CTYP/P. Available from: <http://www.ilc.cnr.it/EAGLES96/corpusstyp/corpusstyp.html> [Accessed on 1 September 2022].
- Utkā, A., Rackevičienė, S., Mockienė, L., Rokas, A., Laurinaitis, M. and Bielinskienė, A. (2022) Building of parallel and comparable cybersecurity corpora for bilingual terminology extraction. In *Selected Papers from the CLARIN Annual Conference 2021. Linköping Electronic Conference Proceedings*, 189 (pp. 126-138). Available from: <https://doi.org/10.3384/ecp18912> [Accessed on 1 September 2022].
- Vintar, Š. (2010) Bilingual term recognition revisited. *Terminology*, 16: 141-158.

INTERNET SOURCES

- [Online 1] Available from https://migracija.lrv.lt/uploads/migracija/documents/files/Migracijos%20metra%C5%A1%C4%8Diai/MIGRACIJOS%20METRA%C5%A0TIS_2020_1.pdf [Accessed on 9 September 2022].
- [Online 2] Available from https://www.instituteforgovernment.org.uk/sites/default/files/publications/IfG-Migration-After-Brexit_4.pdf [Accessed on 13 February 2022].


3. [Online 3] Available from <https://sourceforge.net/projects/aligner/> [Accessed on 5 December 2021].
4. [Online 4] Available from <https://www.sketchengine.eu/> [Accessed on 15 December 2021].

Olga Ušinskienė (PhD student, Lecturer) is currently working at Mykolas Romeris University in Lithuania. Her research interest is in multilingual contrastive terminology. Her PhD dissertation focuses on the formation and use of migration terminology in English and Lithuanian.

 <https://orcid.org/0000-0001-6999-7214>

E-mail: olga.usinskiene@mruni.eu

Sigita Rackevičienė (Dr., Prof.) is currently working at Mykolas Romeris University in Lithuania. Her scientific interests include multilingual terminology (its conceptual, linguistic and pragmatic dimensions) and computational terminography.

 <https://orcid.org/0000-0001-5794-0296>

E-mail: sigita.rackeviciene@mruni.eu