







CESAR

Central and South-East European Resources Project no. 271022

Deliverable D2.3 Report on resources (actually or potentially) available to the consortium (name)

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EXECUTIVE SUMMARY

The deliverable gives a detailed description on the actually or potentially available resources to the consortium. The first section provides an in-depth analysis on the criteria of such resources, while the second section summarises the language resources (language by language) gathered in the first six month of the project.

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1. Background

1.1. Project objectives

The CESAR project, in close harmony with META-NET and sensitive to the dynamics of community practices, intends to address the needs of Human language technologies (crucially depending on language resources and tools) by means of enhancing, upgrading, standardizing, and cross-linking a wide variety of language resources and tools, as well as making them accessible, thereby contributing to an open linguistic infrastructure.

The main goals of CESAR project are:

- to provide a description of the national (resp. language community) landscape in terms of language use; language-savvy products and services, language technologies and resources; main actors (research, industry, government and society); public policies and programmes; prevailing standards and practices; current level of development;
- to contribute to a pan-European digital resource exchange facility by collecting resources and by documenting, linking and upgrading them to agreed standards and guidelines;
- to help build and operate broad, non-commercial, community-driven, inter-connected repositories, exchanges, facilities etc. that can be used by language researchers, developers and professionals;
- to mobilise national and regional actors, public bodies and funding agencies by raising awareness, organizing meetings and other focused events;
- to bridge the technological gap between this region and the other parts of Europe by filling obvious and important gaps in language resources and tools infrastructure.

1.2. Baseline situation

The CESAR project will specifically focus on the assembly of basic language resources for six Central and South-East European languages, all of them considered, by any comparison, less-resourced: four of them (Hungarian, Polish, Bulgarian, Slovak) being official languages of recently joined member states, while two languages (Croatian and Serbian) represent languages of states scheduled to join the EU in the near future. The coverage of these languages brings about an added benefit of the project, anticipating and meeting foreseeable requirements with respect to resources from these languages. Building on a wide range of already existing resources and previous national or international activities, the project will create, populate and operate a comprehensive language-resource platform enabling and supporting large-scale multi- and cross-lingual products and services. In extensive cooperation with META-NET, resources will be upgraded and updated to widely acknowledged standards, thus ensuring interoperability and creating the ground for widespread and efficient and the potential to modularize them in language technology pipelines.

In the frame of this task language resources and tools already developed or still under development have been and will be identified. The D2.3 Report on resources (actually or potentially) available to the consortium represents the resources for Bulgarian, Croatian, Hungarian, Polsih, Serbian and Slovak identified so far.

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1.3. Target resources and users

CESAR will encompass a large variety of language resources, including language data, such as written and spoken corpora (annotated or in raw form, monolingual as well as multilingual), lexical and terminological databases, grammars, ontologies, etc.; language processing and annotation tools and technologies.

The target users are developers and researchers both in industry and academia. This includes private and public institutions, companies and individuals involved in HLT research and development: industrial organizations and SMEs, academic institutions, research organizations, universities, individual researchers and students, national governments, EC institutions, and private investors.

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2. A common and shared resource description

CESAR supports the goal of a common and shared resource description between the four projects constituting METANET (i.e. CESAR, METANET4U and META-NORD, and T4ME). The focus was to gather all relevant information (metadata) of the resources actually (or potentially) available. This metadata covers features of the localization of the resources, information on IPR holders (the name of the holder as well as the addresses of the main contact person), the distribution of the media (the specified the format used for the delivery of the resource), as well as the licence issues and restrictions of its usage. The metadata also describes the NLP focused usage of the resources both in its actual and in its upcoming state (actual and foreseen usage). The metadata contains wider information of the resources by offering further readings and publications on the resources, as well as links of their main documentation. The metadata scheme of the resources also informs about data types as the media type of the resource or the language covered by the resource.

2.1. The metadata scheme developed in T4ME/META-NET

CESAR adopted the metadata scheme developed in T4ME/META-NET - thereby a common metadata description for language resources in many different European languages will be provided. The Table 1 below describes the metadata scheme with definitions and recommended values used in T4Me and shared by other four projects part of META-NET.

	Definition	Recommended Values
resourceTitle	The title is the complete title of the resource without any abbreviations	
	A short name (e.g. acronym, abbreviation) to identify the language resource.	
IPRholder.orga nizationShortN ame		
surname	Surname of the contact person (anyone who can give further information on the resource); when more than one contact persons repeat the relevant columns	
	Given name of the contact person (anyone who can give further information on the resource)	
contact.Person. email	Email of the contact person	

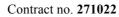
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availability	Terms of availability; please choose one of the recommended values; if restricted, please specify in restrictionsOfUse	Terms of availability; please choose one of the recommended values; if restricted, please specify in restrictionsOfUse
license	A description of the licensing condition under which the resource can be used; see recommended values for examples	Name of licence, e.g. CC Zero, CC-BY, etc. MSC (IF FOR META- SHARE ONLY). ELRA, LDC, GPL, etc.
	Specifies the format used for the delivery of the resource; if possible, use one of the recommended values	internetBrowsing; download; CD-ROM; DVD-R; bluRay; hardDisk; paperCopy; other
restrictionsOfU se	restrictions of use; see recommended values for examples	academic- nonCommercialUse; noDerivatives; shareAlike; attribution; commercialUse (specify details); evaluationUse (specify details if needed); other
	The position (director/head of dept/researcher/etc) of the person in your organisation authorised to sign the licence by which you make the resource available.	
ForeseenUse.fo reseenUse	The use for which the resource has been produced. When more than one values use ";" in between	human use; NLP applications

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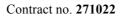






eNLPspecific for indicative values, see recommended values. Discourse analysis;	ForeseenUse.us	the application for which it has been constructed;	speech analysis;
When more than one values use ";" in between Language identification; Speaker verification; Speach recognition; Spoken dialogue systems; Voice control; Speech synthesis; Used in project; Face verification; Speech verification; Speech verification; Speech verification; Lser authentication; Face recognition; Automatic speech recognition;	eNLPspecific		Discourse analysis;
recognition; Talking head synthesis; Avatar synthesis; Multimedia development; Voice control; Speech assisted video control; Information retrieval; Word sense		· ·	Discourse analysis; Language identification; Speaker identification; Speaker verification; Speech recognition; Spoken dialogue systems; Voice control; Speech synthesis; Used in project; Face verification; Speech verification; User authentication; Face recognition; Automatic speech recognition; Automatic person recognition; Talking head synthesis; Avatar synthesis; Multimedia development; Voice control; Speech assisted video control; Information retrieval;
			recognition; Question answering; Automatic text generation and summarization; Document classification; Emotion recognition; Sign language recognition
text generation and summarization; Document classification Emotion recognition; Sign language	ActualUse.actu alUse	the actual use of the resource in the framework of a specific project or application	human use; NLP applications

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Actual Lea useN	the application in which it has been used; for	speech analysis;
		- ·
LPspecific	indicative values, see recommended values. When	Discourse analysis;
	more than one values use ";" in between	Language identification;
		Speaker identification;
		Speaker verification;
		Speech recognition;
		Spoken dialogue
		systems; Voice control;
		Speech synthesis; Used
		in project; Face
		verification; Speech
		verification; User
		authentication; Face
		recognition; Automatic
		speech recognition;
		Automatic person
		recognition; Talking
		head synthesis; Avatar
		synthesis; Multimedia
		development; Voice
		control; Speech assisted
		video control;
		Information retrieval;
		Word sense
		disambiguation;
		Machine Translation;
		Named Entity
		recognition; Question
		answering; Automatic
		text generation and
		summarization;
		Document classification;
		Emotion recognition;
		Sign language
Dagavintian	Description of the measures in mass	recognition
Description	Description of the resource in prose	
resourceType	type of the resource; please use one of the	corpus;
	recommended values	lexicalConceptualResour
		ce; languageDescription;
		technologyToolService
mediaType	Specification of the media type of the resource; can	text; audio; video;
J P	be multiple if the resource is a multimodal set;	image; tactile
	please use one or more of the recommended values	
	product and of more of the recommended values	

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noLanguages		if one language, then corpus is monolingual		
multilinguality Type	Whether the corpus is parallel or comparable.	parallel; comparable		
languageId	Identifier of the language as defined by ISO 639 that is included in the resource or supported by the tool/service. When more than one values use ";" in between	ISO 639-3		
size	The size of the resource with regard to the SizeUnit measurement in form of a number.			
sizeUnit	<u> </u>	word; token; byte; sentence; text;		
annotationType	Specification of the types of annotation levels (tiers) provided by the resource; if possible use recommended values; can be repeated if the values are multiple.			

Table 1. META-NET metadata scheme

2.2. Project specific additions to the scheme

In addition in the CESAR project some new metadata fields are accepted for the metadata scheme. They are as follows - Table 2:

	Definition	Recommended Values
	The acronym of the partner responsible for collecting the resource.	
resourceLocatio	Actual or anticipated	
n	location.	
urlDownload	Where to download the	
	resource.	
urlDocumentati	Where information about the	
on	resource is published	

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e	resource evaluation for the language whitepaper	Tokenization, Morphology; Parsing; Sentence Semantics; Text Semantics; Advanced Discourse Processing; Information Retrieval; Information Extraction; Language Generation; Summarization, Question Answering, Advanced Information Access Technologies; Machine Translation; Speech Recognition; Speech Synthesis; Dialogue Management; Reference Corpora; Syntax-Corpora; Semantics-Corpora; Discourse-Corpora; Parallel Corpora, Translation Memories; Speech-Corpora; Multimedia and multimodal data; Language Models; Lexicons, Terminologies; Grammars; Thesauri, WordNets; Ontological Resources for World Knowledge; Other
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Table 2. Additions accepted in the CESAR project

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3. Resources identified via CESAR by month sixth

The D2.3 Report on resources (actually or potentially) available to the consortium gives an overview of the main language resources of the Central-East Europe. It is compiled to give more than 30 types of information on resources of six languages. A table containing values of the commonly accepted metadata scheme was constructed by a survey on national level with help of national research institutions and private companies to gather all important information concerning available and potential language resources. As a result of the survey, the description of the resources was made, and offers a catalogue of written and spoken language resources that will be contributed to the project.

The description gives a detailed view of the main language resources available on languages covered by the partners of the project. The description contains language resources on Bulgarian, Hungarian, Croatian, Polish, Serbian and Slovak languages. The focus was to gather all relevant information (metadata) of the actually (or potentially) available resources.

3.1. Summary of the language resources developed in Bulgaria and potentially available to the language engineering community

The basic resources developed in Bulgaria, many of which are constantly updated, can be classified in the following categories:

3.1.1. Text corpora

Monolingual corpora

BulNC – The Bulgarian National Corpus is a large-scale, representative, publicly available corpus of Bulgarian. It is a monolingual general corpus, fully morpho-syntactically (and partially semantically) annotated. Presently, the BulNC consists of about 450 000 000 tokens and includes more than 10 000 samples.

BulPoSCor - The POS Tagged Bulgarian Corpus is the result of the manual POS disambiguation of each wordform by language experts. The POS Tagged Bulgarian Corpus comprises more than 150 thousand words. It was designed through the extraction of samples of 300 words minimum (expanded to sentence boundary) from the Structured Brown Corpus of Bulgarian. Parts of the POS Tagged Corpus were used as training and test corpora in the creation of several Bulgarian taggers. The POS Tagged Bulgarian Corpus enables efficient search of language patterns and forms in the text.

BulSemCor - The Sense Tagged Bulgarian corpus contains sense-disambiguated lexical items defined in the context of occurrence. It consists of excerpts from the samples from the "Brown" Corpus of Bulgarian and preserves its overall structure: excerpts of minimum 100 words were clipped according to a methodology accounting for the concentration of the most frequent words from different classes. As a result the input corpus for semantic annotation amounts to app. 100 thousand words since the text excerpts were expanded to the left and right to sentence boundaries. Each lexical item (simple or compound word) in BulSemCor is assigned manually the unique semantic or grammatical meaning from the Bulgarian wordnet

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which occurs in the particular context. BulSemCor is used as a training and test set in the elaboration of a probability formalism for automatic word-sense disambiguation oriented towards machine translation.

Bilingual and Multilingual (with Bulgarian as one language)

Bul-XCor – The Bulgarian-X language parallel corpora contains texts that are Bulgarian translations of English originals and translations from a third language into both English and Bulgarian. The most important condition for a text to be selected for the corpus was that it was either created after 1945 or its Bulgarian translation was made after that year. The fiction subcorpus consists of 340 samples texts per language – 34 553 474 words for the Bulgarian part and 39 590 472 words for the English part. All together the Bulgarian samples approximate 100 000 000 words.

3.1.2. Lexical Conceptual Resources:

BulNet – The Bulgarian WordNet represents an electronic lexical semantic network, containing synsets with glosses and 17 more relations, for the most part semantic ones, such as antonymy, meronymy, causation, category domain, etc. Currently the Bulgarian database amounts to 35 000 synsets and 54 700 conceptual, morpho-semantic and language external relations. Beside intralingual ones wordnet also encodes interlingual relations which associate the equivalent synsets in 18 European languages. It is through these relations that BulNet becomes part of the Global WordNet - a conceptual ontology of concepts lexicalized in natural languages and their relations. Wordnet has been successfully used in intelligent information search and information retrieval from documents in different languages, text categorisation and text summarisation, word sense disambiguation, machine translation, as well as in many other NLP tasks.

BulFrameNet - The Bulgarian FrameNet represents general semantic and language-specific lexical-semantic and syntactic combinatory properties of Bulgarian lexical units. BulFrameNet database so far contains unique descriptions of over 3 000 Bulgarian lexical units, approx. one tenth of them aligned with appropriate semantic frames. Each lexical entry consists of a lexical unit; a semantic frame from the English FrameNet, expressing abstract semantic structure; a grammatical class, defining the inflexional paradigm; a valency frame describing (some of) the syntactic and lexical-semantic combinatory properties (an optional component); and (semantically and syntactically) annotated examples.

BulGram - The Grammar Dictionary of Bulgarian is an inflexion dictionary that consists of approximately 85 000 lemmas and allows automatic word form analysis and generation resulting in approximately 1 mln. 140 thousand word forms. The formal structure of the dictionary is based on finite state transducers (FSTs) that are widely applied in up-to-date electronic dictionaries. In its present state BulGram represents in full the synthetic word formation patterns in Bulgarian and is therefore suitably transformed into spelling checking dictionary.

resourceTitle	resourceNam e	resourceLocation	resourceTyp e	size	sizeUnit	annotationTy pe
Bulgarian National Corpus	BulNC	http://search.dcl.bas.bg	corpus	450 000 000	token	MSD, sense
Bulgarian PoS Annotated Corpus	BulPoSCor	http://search.dcl.bas.bg	corpus	150 000	word	MSD

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Bulgarian Sense Annotated Corpus	BulSemCor	http://search.dcl.bas.bg	corpus	105 000	word	sense
Bulgarian-X language parallel	Bul-XCor	http://search.dcl.bas.bg	corpus	100 000 000	token	MSD, sentence
Bulgarian wordnet	BulNet	http://catalog.elra.info/ product_info.php?prod	lexicalConc eptualResou	35 000	synset	PWN
Bulgarian FrameNet	BulFrameNe t	http://dcl.bas.bg/LexIt	lexicalConc eptualResou	3 000	lemma	FN
Bulgarian Grammatical	BulGram	http://dcl.bas.bg/est	lexicalConc eptualResou	85 000	lemma	

Table 3.2 Summary of Croatian language resources

3.3. Summary of the language resources developed in Hungary and potentially available to the language engineering community

The basic resources developed in Hungary, many of which are still in development or are constantly updated, can be classified in the following categories:

3.3.1. Text corpora

Monolingual (Hungarian) corpora

HNC - The Hungarian National Corpus a the general purpose, representative corpus of today's written Hungarian language. It gives an exact, quantifiable picture of Hungarian language use. It includes bibliographical metadata, and encodes the boundaries of structural units (paragraphs, sentences). The corpus is automatically POS-tagged: we have lemma, part of speech, and morphological analysis for each word. The query interface is freely available to anyone. It incorporates Hungarian texts from Hungary, Slovakia, Transcarpathia, Transylvania and Vojvodina in five different genres: press, literature (from Digital Literature Academy), scientific, official and personal communication. The size of the corpus is currently 187 million words. The partially syncactically parsed form of the whole corpus can be queried by the "Verb Argument Browser" tool: http://corpus.nytud.hu/vab

Szeged NER corpus - The Szeged NER corpusis a manually annotated part of the Szeged treebank, consisting of short business news. The used NER categories are (based on the CoNLL system (http://www.cnts.ua.ac.be/conll2003/ner/)) the following: PERSON, ORGANISATION, LOCATION and OTHER.

Szeged corpus - morpho-syntactically annotated and manually disambiguated corpus of 1,2 million words.

Hungarian webcorpus - over 1.48 billion words unfiltered (589m words fully filtered), this is by far the largest Hungarian language corpus, and it is available in its entirety under a permissive Open Content license. The Hungarian webcorpus was created as part of the WordSword project at the Media Research and Education Centre. The Webcorpus may be

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downloaded in two formats: as a frequency dictionary based on the texts and as the original texts.

Bilingual and Multilingual (with Hungarian as one language)

Hunglish - The Hunglish Parallel Corpus is a free sentence-aligned Hungarian-English parallel corpus of about 2 million sentences. The corpus may be searched through a webbased sentence search service. This service has more than 200,000 visits per month.

3.3.2. Lexical Conceptual Resources

Hungarian Wordnet - The Hungarian WordNetis a multilingual ontology, meaning that most of its synsets were mapped to equivalent concepts in English (Princeton) WordNet v. 2.0. The ontology is also linked to entries of a Hungarian Monolingual explanatory dictionary and to the entries of the Hungarian verb valency frame lexicon.

Szeged treebank - manually checked treebank of 1,2 million words.

3.3.3. Speech databases

BABEL - **BABELHungarian Clear Speech Database**is an EUROM1 compatible database containing records from 60 speakers distributed in 3 speakers set (many, few, very few).

MRBA – The Hungarian Reference Speech Database continuous read speech. During the planning of the corpus, we took into consideration the special characteristics of Hungarian language. Since the Hungarian is an agglutinative language, we needed to create a larger vocabulary in some categories, than it is mandatory. We tried to pay an extra attention to the topic 'phonetically rich sentences and words', to create a phonetically well balanced speech database for text independent speech recognizers. The database contains utterances read by 332 different speakers. The utterances were recorded in acoustically different locations.

MTBA – The Hungarian Telephone Speech Database is a PSTN and mobil telephone voice Hungarian speech database. The database contains records based on the definition in SpeechDatE for the dialectical, age and sex balance and vocabulary. Important and different from the SpeechDatE database is, that the phonetically rich sentences and words have been segmented and labelled at phoneme level. The database has two parts. The first part (2 CDs) contains labeled application words, numbers, dates, spelling and names, the second part (1 CD) contains labeled and segmentated phonetically rich sentences and words.

MTÜBA - Hungarian Telephone Client Speech contains telephone calls recorded at the call centre of a service provider company. The database will be fully anonimized. The corpus consists of dialogues between the operator and the client. The ortographic transcription of the speech utterances is provided, clauses are segmentated (automatically followed by hand-correction). Parts of speech holding emotions acoustically audible are also labelled according to 4 basic emotions.

Emotion Database - Spoken databse holding emotionally reach utterances, labelling is done for emotions (8 basic emotions are labelled)

Sound Gesture Database - Database of sound gestures consisting of 770 tokens.

Medical Database - The Medical database is a speech corpus holding utterances from persons suffering from different speech problems of organic origine.

Hungarian MALACH - Hungarian Speech Database of Holocaust Survovors' Testimonies histories of elderly people from the world war II, typically they are holocaust

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survivors. Originally videos were recorded with 2 microphones on two channel, but in Aitia International only 1 channel audio files are available with transcriptions.

Hungarian Parliamentary Speeches - publicly available corpus with approximate transcriptions of Parliamentary Speeches. In this project, time alignment will be made and not alignable part will be marked.

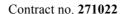
3.3.4. Multimedia databases

BND - Broadcast News Databasewas collected as a member of the Broadcast News Interest Group of COST278, the COST action on Speech and Language Interaction in Telecommunications in cooperation of 10 different institutions throughout Europe. The Hungarian material consists of 3h and 30 minutes of recordings, transcribed and annotated, using the conventions of NIST (National Institute of Standards and Technology, USA).

BLD or ME corpus (ME: Mindentudás Egyeteme) – TheBroadcast Lectures Database contains recorded Broadcast Video Lectures from wide scientific topics for the public.

resourceTitle	resourceName	resourceLocation	resourceType	size	sizeUnit	annotationTyp e
Hunglish parallel corpus	Hunglish	hosted by owner	corpus	54200000	token	segmentation; alignment
Hungarian Wordnet		hosted by the consortium	lexical conceptual resource	42000	synset	PWN
Hungarian National Corpus	HNC	hosted by owner	corpus	187600000	token	MSD
Szeged NER corpus		hosted by owner	corpus	220000	token	POS, NE
Szeged corpus		hosted by owner	corpus	1200000	token	POS (MSD)
Szeged treebank		hosted by owner	corpus	1200000	token	POS (MSD), treebank
Hungarian webcorpus		hosted by owner	corpus	1480000000	token	none
BABELHungarian Clear Speech Database	BABEL	hosted in international repository (ELRA)	corpus	4	hour	annotation, segmentation
Hungarian Reference Speech Database	MRBA	hosted by the consortium	corpus	6,5	hour	annotation, segmentation
Hungarian Telephone Speech Database	MTBA	hosted by the consortium	corpus	5	hour	annotation, segmentation
Hungarian Telephone Client Speech Database	MTÜBA	hosted by owner	corpus	60	hour	annotation
Broadcast News Database	BND	hosted by owner	corpus	5	hour	annotation
Emotion Database		hosted by owner	corpus	50	hour	annotation
Sound Gesture Database		hosted by owner	lexical conceptual resource	770	token	annotation
Medical Database		hosted by the consortium	corpus	1	hour	annotation
Broadcast Lectures Database	BLD or ME corpus	hosted by owner	corpus	~150+	hour	transcription

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Hungarian Speech	Hungarian	AITIA International	corpus	31	hour	transcription
Database of	MALACH					
Holocaust						
Survovors'						
Testimonies						
Hungarian			corpus	1000+	hour	alignment,
Parliamentary						annotation
Speeches						

Table 3.3 Summary of Hungarian language resources

3.4. Summary of the language resources developed in Poland and potentially available to the language engineering community

The basic resources developed in Poland, many of which are still in development or are constantly updated, can be classified in the following categories:

3.4.1. Text corpora

Monolingual (Polish) corpora

NKJP - National Corpus of Polish a shared initiative of four institutions: Institute of Computer Science at the Polish Academy of Sciences (coordinator), Institute of Polish Language at the Polish Academy of Sciences, Polish Scientific Publishers PWN, and the Department of Computational and Corpus Linguistics at the University of Łódź. It has been registered as a research-development project of the Ministry of Science and Higher Education. The list of sources for the corpus contains classic literature, daily newspapers, specialist periodicals and journals, transcripts of conversations, and a variety of short-lived and internet texts. The resources represent wide diversity with respect to the subject and genre. The spoken part covers both male and female speakers, in various age groups, coming from various regions in Poland.

WKSF - The corpus of frequency dictionary of Polish language of the XX century sixties was collected for the purpose of creating general frequency dictionary of contemporary Polish. The work started in 1967. Partial results were published between 1972 and 1977, the completed dictionary in 1990. The corpus was later augmented in various respects, both by manual editing and automated procedures. Corpus data contain 10,000 samples divided into 5 parts: essays, news, scientific texts, fiction and plays. Every sample is approximately 50 words long, they all come from texts published between 1963 and 1967 and contain bibliographic description of its source. Each word is tagged with its base form and some morphological properties. Sentence boundaries are also marked. Currently the corpus undergoes manual verification of the morphological descriptions.

Bilingual and Multilingual (with Polish as one language)

PPC - Polish Parallel Corporawill include various parallel resources, including Acquis Communautaire, Europarl, OPUS (EMEA, KDE, Open Subtitles), Parasol, CORDIS and RAPID news etc.

3.4.2. Lexical Conceptual Resources

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NZM morphological dictionary - two most important morphological dictionaries of Polish – Morfeusz SGJP and Morfologik. Morfeusz was developed by Zygmunt Saloni (author of linguistic data used in the analyser) and Marcin Woliński (programming part). The result morphological codes come from the IPI PAN Tagset (currently de facto standard for Polish) developed by Marcin Woliński and Adam Przepiórkowski for the annotation of the IPI PAN Corpus of Polish. Morfologik is based on current ispell dictionaries and Java libraries interfacing them. The result tags come from IPI Tagset.

plNER - NE resources with gazetteers - The gazetters has been obtained from existing sources and supplemented with additional language-specific resources acquired from the Web. Whenever appropriate, inflected forms were generated using Morfeusz SGJP generator. Gazetteer data was used in the process of named entity annotation of NKJP.

plWordNet - Polish WordNet (Slowosieć) is network of lexical-semantic relations, an electronic thesaurus with a structure modelled on that of the Princeton WordNet and those constructed in the EuroWordNet project. Polish WordNet describes the meaning of a lexical unit of one or more words by placing this unit in a network of links which represent such relations as synonymy, hypernyny, meronymy etc. To reduce the cost of the project, Polish WordNet has been built semi-automatically. Lexical relations were automatically recognized in large corpora of Polish and suggested to linguists/lexicographers via a graphical interface.

Polish Treebank - contains trees created with Świgra - a deep parser of Polish implemented by Marcin Woliński on the basis of a metamorphosis grammar of Polish GFJP created by Świdziński.

3.4.3. Speech database

PSCC - Polish Spoken Conversational Corpus originally a sub-corpus of the spoken part of the PELCRA Reference Corpus of Polish, which has been further expanded withing the National Corpus of Polish project. The corpus is composed of spontaneous natural conversations. After obtaining the participants' permission, the recordings were carefully transcribed and annotated with information about the respondents' sex, age, and educational level. All the original recordings have been digitized so that the conversation may not only be read, but also heard. At present the corpus contains some 1 800,000 words of transcribed speech accompanied by 75 hours of digitized recordings.

3.4.4. Multimedia databases

PSC - The Polish Sejm Corpuswill contain utterances of Polish Sejm members from cadencies 1-6. It will be morphologically annotated and made available for search with NKJP search tool – Poliqarp.

SMC – **The Polish Spoken Multimedia Corpus** contains transcripts of spontaneous informal conversations with the original recording files. It is available as TEI P5 encoded spoken Polish data.

resourceTitle	resourceNam	resourceLocation	resourceType	size	sizeUnit	annotationTy
	e					pe
Polish Sejm Corpus	PSC	http://www.clip.waw.pl/Po	corpus	100000000	words	POS, MSD,
		lish_Sejm_Corpus				chunking,
						NE
NZM morphological	NZM	http://www.clip.waw.pl/N	lexicalConcep	3000000	words	POS, MSD
dictionary		ZM	tualResource			

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Polish Treebank	Treebank	http://www.clip.waw.pl/pl Treebank	corpus; lexicalConce ptualResourc e	6000	sentences	POS, MSD, chunking, deep parsing
National Corpus of Polish	NKJP	http://www.nkjp.pl	corpus	1000000000	words	POS, MSD, chunking, word sense, NE
Polish Parallel Corpora	PPC	http://www.clip.waw.pl/Po lish_Parallel_Corpora	corpus	2000000	words	segmentation
Polish Spoken Multimedia Corpus	SMC	http://www.clip.waw.pl/Po lish_Spoken_Multimedia_ Corpus	corpus	2500000	words	POS
Polish Spoken Conversational Corpus	PSCC	http://www.nkjp.uni.lodz.p l/spoken.jsp	corpus	1500000	words	segmentation , discourse, sociolinguist ic
The corpus of frequency dictionary of Polish language of the XX century sixties		http://clip.ipipan.waw.pl/P olish%20language%20of% 20the%20XX%20century %20sixties		500000	words	segmentation , POS, MSD
NE resources with gazetteers	plNER	http://www.clip.waw.pl/pl NER	lexicalConcep tualResource	229681	word forms	-
Polish WordNet (Słowosieć)	plWordNet	http://plwordnet.pwr.wroc. pl/wordnet/	lexicalConcep tualResource	20223	lemmas (17695 synsets)	_

Table 3.4 Summary of Polish language resources

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3.5. Summary of the language resources developed in Serbia and potentially available to the language engineering community

The basic resources developed in Serbia, many of which are still in development or are constantly updated, can be classified in the following categories:

3.5.1. Text corpora

Monolingual (Serbian) corpora

SrpKor - Corpus of Contemporary Serbian – developed by the NLP group at the Faculty of Mathematics, University of Belgrade (MATF-UBG) was partly funded by the Ministry of Education and Science. The list of sources for the corpus contains literature, monographs, daily newspapers, specialist periodicals and journals, manuals and textbooks. The resources represent wide diversity with respect to the subject and genre. It can be accessed via web interface. Its size is 113 million words.

SrpLemKor - Serbian MSD Annotated Corpus – is being developed by the same group. It will consist of a sample of various texts from SrpKor. It will be lemmatized and MSD tagged. It will contain 5 million words and it will be accessible via web interface at November 2011.

AlfaNumKor - AlfaNum Text Corpus of Serbian – was developed by the research group specialized for speech technologies that works at the Faculty of Technical Sciences and in "AlfaNum - Speech Technologies" in Novi Sad. This resource is developed for the purpose of linguistic research and development of commercial applications of speech and other language technologies. It consists of 100,517 lexemes (3,888,407 inflected forms).

CSL - Corpus of Serbian Language – was developed at the Faculty of Philosophy, University of Belgrade. It was compiled from a sample of 11 million words and spans the Serbian language from the 12th century to the present day. Each word in the CSL is manually tagged for its grammatical status (at the level of inflected morphology), number of graphemes and syllables and phonological structure. The system of tagging consists of about 2000 grammatical (inflected) forms.

Bilingual and Multilingual (with Serbian as one language)

SrpFranKor - French-Serbian Aligned Corpus - includes French or Serbian source literary texts and their translations. Texts are segment aligned and manually checked to obtain one-to-one alignment. Its size is approximately one million and a half words in each language.

SrpEngKor - English-Serbian Aligned Corpus - includes English or Serbian source texts from the domains: education, health, legislation, jurisprudence. Texts are segment and lemmatized and PoS tagged, aligned and manually checked. It will be accessible via web interface. It contains one million words per language.

Verne80days - Multilingual Edition of Verne's Novel "Around the World in 80 Days" - contains 25 translations of Jules Verne's novel "Around the World in 80 Days". Presently 15 of these translations are one-to-one segment aligned with the source text, and the alignment is manually checked. All other translations will also be aligned.

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3.5.2. Lexical Conceptual Resources

SrpWN - Serbian Wordnet – developed by the NLP group at MATF-UBG represents a lexical semantic network, containing synsets with glosses and various semantic relations, such as antonymy, meronymy, causation, category domain, etc. Currently the Serbian Wordnet contains near to 16,000 synsets. The initial version of the Serbian Wordnet was produced in the scope of the EU-funded Balkanet project. Through interlingual relations it is connected to English Wordnet, and wordnets of many other languages. It will be accessible via web interface.

SrpRec - Serbian Morphological Dictionary – developed by the same group is a dictionary that consists of approximately 90 000 simple lemmas and 6,500 multi-word lemmas that allows automatic generation of inflected forms using finite state transducers (approximately 4 million simple word forms). All produced word forms are supplied by detailed morpho-syntactic description. Besides that, all lemmas are equiped with semantic, syntactic, domain and other codes.

SrpNER - Serbian Named Entity Resources – developed by the same group comprise of dictionaries that contain of approximately 35 000 simple and multi-word unit proper names (lemmas) that allow automatic generation of inflected forms. All produced word forms are supplied by detailed morpho-syntactic description. Besides that, all lemmas are equipped with various semantic codes appropriate to named entities. For full and precise recognition of named entities a large collection of finite state transducers is developed.

AlfaNum MD – AlfaNum Morphologic Dictionary of Serbian – was developed for the purpose of linguistic research and development of commercial applications of speech and other language technologies. It consists of 100,517 lexemes (3,888,407 inflected forms) with accentuation.

3.5.3. Speech databases

AlfaNum ASR - AlfaNum Speech Databases for ASR - consists of five speech databases: 1. W50S200 contains studio recordings of 200 speakers (53 words per speaker); 2. W150tf1000 contains recordings over the telephone channel (150 words, 600-1000 pronunciations per word); 3. AN_SPEAKER contains office recordings using computer microphone of 44 speakers (29 male, 15 female); 4. S70W100s120 contains recordings originally done in a studio using reel-to-reel tape recorder, later converted to digital format (120 speakers, 70 sentences + 100 isolated utterances per speaker); 5. AlfaNum SpeechDatII(E) contains recordings over the telephone channel (500 speakers, 50 utterances per speaker, according to the SpeechDatII standard).

AlfaNum TTS - AlfaNum Speech Databases for TTS - consists of five speech databases:

1. TTSlab2g2s contains corpus of diphones and dissylables isolated from logatomes and meaningful words recorded in a studio (961 diphone and 625 dissylables); 2. TTSlsMarina, 3. TTSlsSandra, and 4. TTSlsMarija represent corpora composed of a collection of meaningful texts and meaningless word sequences recorded in a studio (each of them comprising of approximately 2 hours of speech); 5. TTSlsSnezana represent corpora composed of a collection of meaningful texts recorded in a studio (Approximately 12 hours of speech).

3.5.4. Multimedia databases

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DABI - Digital Archive of the Institute for Balkan Studies – was developed by the Institute for Balkan Studies from the Serbian Academy of Sciences and Arts. This database contains digitized audio (2000 hours of speech), video, photo and textual ethnographic material collected in Serbia in the scope of the field research related to Serbian and four minority languages.

resourceTitle	resourceNa me	resourceLocation	resourceType	size	sizeUnit	annotationT ype
Corpus of Contemporary	SrpKor	korpus.matf.bg.ac.rs	corpus	113000000	word	PoS tagging
Serbian French-Serbian Aligned Corpus	SrpFranKor	korpus.matf.bg.ac.rs	corpus	1500000	word (in Serbian)	PoS tagging
English-Serbian Aligned Corpus	SrpEngKor	korpus.matf.bg.ac.rs	corpus	1000000	word (in Serbian)	PoS tagging; lemmatizatio n (Serbian)
Serbian MSD Annotated Corpus	SrpLemKor	korpus.matf.bg.ac.rs	corpus	5000000	word	lemmatizatio n; PoS; MSD
	Verne80days	korpus.matf.bg.ac.rs	corpus	71859	word (in French)	segmentation
	SrpWN	korpus.matf.bg.ac.rs	lexicalConcep tualResource	15200	synset (25579 words)	-
Serbian Morphological Dictionary	SrpRec	korpus.matf.bg.ac.rs	lexicalConcep tualResource	96500	lemma	-
Serbian Named Entity Resources	SrpNER	korpus.matf.bg.ac.rs	lexicalConcep tualResource	35000	lemma	-
AlfaNum Morphologic Dictionary of Serbian	AlfaNum MD	alfanum.ftn.uns.ac.rs	lexicalConcep tualResource	100517	lemma	-
AlfaNum Text Corpus of Serbian	AlfaNumKor	alfanum.ftn.uns.ac.rs	corpus	200027	word	PoS, accentuation
AlfaNum Speech Databases for ASR	AlfaNum ASR	alfanum.ftn.uns.ac.rs	corpus	-	-	phoneme labels
AlfaNum Speech Databases for TTS	AlfaNum TTS	alfanum.ftn.uns.ac.rs	corpus	18	hour	phoneme labels
Digital Archive of the Institute for Balkan Studies	DABI	www.balkaninstitut.com	corpus	2000	hour	-
Corpus of Serbian Language	CSL	www.serbian- corpus.edu.rs/ns/eindex.ht m	corpus	11000000	word	PoS; lemmatized
Corpus of Serbian Language	CSL	www.serbian- corpus.edu.rs/ns/eindex.ht m	corpus	11000000	word	PoS; lemmatized

Table 3.5 Summary of Serbian language resources

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3.6. Summary of the language resources developed in Slovakia and potentially available to the language engineering community

The basic resources developed in Slovakia, many of which are still in development or are constantly updated, can be classified in the following categories:

3.6.1. Text corpora

Monolingual (Slovak) corpora

SNK – **Slovak National Corpus** a representative corpus of contemporary Slovak language written texts. SNK currently contains about 770 million words from broad variety of texts published since 1955 (1953 being the time of most recent substantial Slovak language orthography reform). The corpus is automatically lemmatised and MSD tagged. The documents are annotated with their genre, style and other bibliographic information. There are specialised subcorpora containing fiction, informational texts, professional texts, original Slovak fiction, texts written from 1955 to 1989, and a balanced subcorpus.

SK-WEB – Slovak Web Corpus contains texts downloaded from the .sk domain. The texts are automatically lemmatized and morphologically tagged.

Legal – Slovak Legal Texts Corpus contains the current (2011) body of Slovak Republic laws. The corpus has been prepared in collaboration with the Ministry of Justice of the Slovak Republic.

Bilingual and Multilingual (with Slovak as one language)

SK-EN – **The Slovak-English Parallel Corpus** original English fiction texts and their Slovak translations, with automatically aligned sentences.

SK-CS – **The Slovak-Czech Parallel Corpus** mostly fiction translated between Slovak and Czech (in both direction), with small amount of non-fiction texts and some translations from third language into both Czech and Slovak. The texts are automatically sentence-aligned, with some amount of texts aligned manually.

SK-RU - Slovak–Russian Parallel Corpus original Russian fiction texts and their Slovak translations, with automatically aligned sentences.

SK-FR - Slovak–French Parallel Corpus original French fiction texts and their Slovak translations, with automatically aligned sentences.

3.6.2. Lexical Conceptual Resources

MA - **Slovak Morphological Lexicon** full paradigms of 77000 lemmas, together with MSD tags, as used in the Slovak National Corpus. The lexicon serves as a basis for automatic morphological analysis and disambiguation.

WN - Slovak WordNet a network of lexical-semantic relations, an electronic thesaurus with a structure modelled on that of the Princeton WordNet. The WordNet describes the meaning of a lexical unit of one or more words by placing this unit in a network of links which represent such relations as synonymy, hypernyny, meronymy etc. The Slovak WordNet has been built semi-automatically, using information from bilingual Slovak-English

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dictionary, and the synsets were then manually proofread. The Slovak synsets are mapped to equivalent English Princeton WordNet semantic equivalents, and contain translation into German, Polish and Lithuanian.

Slovak Treebank - Slovak language treebank consists of 50000 manually syntactically annotated sentences, using the Prague Dependency Treebank methodology (analytical level). Most of the sentences has been annotated by two independent annotators.

3.6.3. Speech databases

Hovor - Corpus of Spoken Slovak a corpus of sound recordings of different types of speech, with the emphasis on spontaneous speech. The recordings are transcribed orthographically and phonemically.

resourceTitle	resourceNa me	resourceLocation	resourceTyp e	size	sizeUnit	annotation Type
Slovak National Corpus	prim	LSIL	corpus	770000000	token	PosTagging; MSD
Corpus of Spoken Slovak	hovor	LSIL				
Slovak Morphological Lexicon	ma	LSIL	lexicalConcep tualResource	77000	lemma	MSD
Slovak Treebank	Slovak Treebank	LSIL	corpus; lexicalConce ptualResourc e	50000	sentence	PosTagging; MSD; dependency analysis
Slovak WordNet	wn	LSIL	lexicalConcep tualResource	12500	synset	
Slovak-English Parallel Corpus	sk-en	LSIL	corpus	1500000	sentence	PosTagging; MSD; alignment
Slovak-Czech Parallel Corpus	sk-cs	LSIL	corpus	700000	sentence	PosTagging; MSD; alignment
Slovak Web Corpus	Sk-web	LSIL	corpus	900000000	token	PosTagging; MSD
Slovak Legal Texts Corpus	legal	LSIL	corpus	146000000	token	PosTagging; MSD
Slovak-Russian Parallel Corpus	sk-ru	LSIL	corpus	100000	sentence	PosTagging; MSD; alignment
Slovak-French Parallel Corpus	sk-fr	LSIL	corpus	21000	sentence	PosTagging; MSD; alignment

Table 3.6 Summary of Slovak language resources

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4. Appendices - detailed description of resources actually or potentially available

4.1. Appendix 1 - Bulgarian

resourceTitle	Bulgarian National Corpus
resourceName	BulNC
urlDownload	http://search.dcl.bas.bg
dateCreation	2008- ongoing project
projectPartner	IBL
\mathcal{L}	IBL
hortName	***
	Koeva
contact.Person.givenNam e	
contact.Person.email	svetla@dcl.bas.bg
availability	available (pseudocorpus)
license	PUB / CC BY
	http://search.dcl.bas.bg
distributionMedium	internetBrowsing; web service
restrictionsOfUse	no
licenseSignatory.Person. position	-
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspec ific	Construction of the Dictionary of Bulgarian Language
actualUse.actualUse	-
actualUse.useNLPspecifi c	-
description	The Bulgarian National Corpus is a large-scale, representative, publicly available corpus of Bulgarian. The BulNC can also be defined as a monolingual general corpus, fully morpho-syntactically (and partially semantically) annotated. Presently, the Bulgarian National corpus consists of about 450 000 000 tokens and includes more than 10 000 samples.
	Koeva Sv., D. Blagoeva and S. Kolkovska. Bulgarian National Corpus Project. — In: Proceedings of the Seventh conference on International Language Resources and Evaluation (LREC'10), N. Calzolari, K. Choukri, B. Maegaard, J. Mariani, J. Odjik, S. Piperidis, M. Rosner, D. Tapias (eds.), Valletta, European Language Resources Association (ELRA), 2010, pp. 3678-3684. ISBN 2-9517408-6-7
urlDocumentation	http://ibl.bas.bg/en/BGNC_search_en.htm
resourceType	corpus
resourceSubtype	reference corpus
mediaType	text
noLanguages	one

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multilingualityType	-
languageId	BG
size	450 000 000
sizeUnit	token
annotationType	lemmatization; stemming; PosTagging

resourceTitle	Bulgarian annotated corpora - Bulgarian PoS Annotated Corpus
resourceName	BulPoSCor
urlDownload	http://search.dcl.bas.bg
dateCreation	2005 – 2010
projectPartner	IBL
IPRholder.organizationShortName	IBL
contact.Person.surname	Koeva
contact.Person.givenName	Svetla
contact.Person.email	svetla@dcl.bas.bg
availability	available (pseudocorpus)
license	PUB / META-SHARE ACA NC
resourceLocation	http://search.dcl.bas.bg
distributionMedium	internetBrowsing; download; CD-ROM; DVD-R; bluRay; hardDisk; paperCopy; other
restrictionsOfUse	no
licenseSignatory.Person.po sition	-
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspecifi c	statistical tagger training
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspecific	_
description	The POS Tagged Bulgarian Corpus is the result of the manual POS disambiguation of each wordform by language experts. The POS Tagged Bulgarian Corpus comprises more than 100 thousand words. It was designed through the extraction of samples of 300 words minimum (expanded to sentence boundary) from the Structured Brown Corpus of Bulgarian. Parts of the POS Tagged Corpus were used as training and test corpora in the creation of sevral Bulgarian taggers. The POS Tagged Bulgarian Corpus enables efficient search of language patterns and forms in the text.
relevantPublications	Koeva, Sv., Sv. Leseva, I. Stoyanova, E. Tarpomanova, M. Todorova, Bulgarian Tagged Corpora. In: Proceedings of the Fifth International Conference Formal Approaches to South Slavic and Balkan Languages, 18-20 October 2006, Sofia, Bulgaria, pp. 78-86, 2006.
urlDocumentation	http://dcl.bas.bg/en/corpora_en.html
resourceType	corpus
resourceSubtype	annotated corpus

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mediaType	text
noLanguages	one
multilingualityType	-
languageId	BG
size	150 000
sizeUnit	word
annotationType	lemmatization; stemming; PosTagging

resourceTitle	Bulgarian annotated corpora - Bulgarian Sense Annotated Corpus
resourceName	BulSemCor
urlDownload	http://dcl.bas.bg/semcor/bg/
dateCreation	2005 - 2010
projecti artifici	IBL
IPRholder.organization	IBL
ShortName	
contact.Person.surnam	Koeva
e	
contact.Person.givenN	Svetla
ame	
	svetla@dcl.bas.bg
availability	available (pseudocorpus)
license	PUB / META-SHARE ACA NC
resourceLocation	http://search.dcl.bas.bg
distributionMedium	internetBrowsing; download; CD-ROM; DVD-R; bluRay; hardDisk; paperCopy; other
restrictionsOfUse	no
licenseSignatory.Perso n.position	-
foreseenUse.foreseenU	human use; NLP applications
se	
foreseenUse.useNLPsp	word sense disambiguation of Bulgarian
ecific	
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspec	-
ific	

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1	TTI C TE 1 D 1 : (D 1C C) (: 1: 1: (1
description	The Sense Tagged Bulgarian corpus (BulSemCor) contains sense-disambiguated
	lexical items defined in the context of occurrence (http://dcl.bas.bg/en/corpora en.html). It consists of excerpts from the samples
	from the ""Brown"" Corpus of Bulgarian and preserves its overall structure:
	excerpts of minimum 100 words were clipped according to a methodology
	accounting for the concentration of the most frequent words from different
	classes. As a result the input corpus for semantic annotation amounts to app. 100
	thousand words since the text excerpts were expanded to the left and right to
	sentence boundaries. Each lexical item (simple or compound word) in the
	Semantic Corpus is assigned manually the unique semantic or grammatical
	meaning from the Bulgarian wordnet which occurs in the particular context. The
	SemCor is used as a training and test set in the elaboration of a probability
	formalism for automatic word-sense disambiguation oriented towards machine
	translation.
relevantPublications	Koeva, Sv., Sv. Leseva, M. Todorova, Bulgarian Sense Tagged Corpus. In:
	Proceedings of the 5th SALTMIL Conference on Minority Languages, Genoa,
	pp.79-87, 2006; Koeva, Sv., S. Lesseva, E. Tarpomanova, B. Rizov, Ts.
	Dimitrova and H. Kukova. Bulgarian Sense Annotated Corpus - Results and
	Achievements. In. Proceedings from the seventh international conference
urlDagumantation	FASSBL, Dubtovnik, 41-49, 2010. ISSN 978-953-55375-2-6
urlDocumentation resourceType	http://dcl.bas.bg/en/corpora_en.html corpus
resourceSubtype	annotated corpus
mediaType	text
noLanguages	one
multilingualityType	-
languageId	BG
size	105 000
sizeUnit	word
annotationType	lemmatization; stemming; PosTagging
resourceTitle	Bulgarian-X language parallel corpora
resourceName	Bul-XCor
urlDownload	http://search.dcl.bas.bg
dateCreation	2010-ongoing project
projectPartner	IBL
IPRholder.organizatio	IBL
nShortName	
contact.Person.surnam	Koeva
e	
contact.Person.givenN	Svetla
ame	
contact.Person.email	svetla@dcl.bas.bg
availability	available (pseudocorpus)
license	PUB / CC BY
resourceLocation	http://search.dcl.bas.bg
distributionMediu m	internetBrowsing; web service
	no
L	1

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1: C: , D	
licenseSignatory.Perso	
n.position	
	human use; NLP applications
se	
foreseenUse.useNLPsp	machine translation
ecific	
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspec ific	-
	Most of the texts are Bulgarian translations of English originals but there are also translations from a third language into both English and Bulgarian. The most important condition for a text to be selected for the corpus was that it was either created after 1945 or its Bulgarian translation was made after that year. The fiction subcorpus consists of 340 samples texts per language – 34 553 474 words for the Bulgarian part and 39 590 472 words for the English part.
relevantPublications	
urlDocumentation	-
resourceType	corpus
resourceSubtype	parallel corpus
mediaType	text
noLanguages	one
multilingualityType	parallel
languageId	BG
size	100 000 000
sizeUnit	token
annotationType	alignment; lemmatization; stemming; PosTagging

resourceTitle	Bulgarian FrameNet
resourceName	BulFrameNet
urlDownload	http://dcl.bas.bg/LexIt/
dateCreation	2001-ongoing project
projectPartner	IBL
IPRholder.organization	IBL
ShortName	
contact.Person.surname	Koeva
contact.Person.givenNa	Svetla
me	
contact.Person.email	svetla@dcl.bas.bg

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availability	available-restricted use
license	ELDA / CC BY
resourceLocation	http://dcl.bas.bg/LexIt/
distributionMedium	internetBrowsing; ELDA
	no
licenseSignatory.Person	-
.position	
foreseenUse.foreseenUs	human use; NLP applications
e	
foreseenUse.useNLPspe cific	machine translation
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspecific	-
relevantPublications	The Bulgarian FrameNet (http://dcl.bas.bg/BulFrameNet.html) represents general semantic and language-specific lexical-semantic and syntactic combinatory properties of Bulgarian lexical units. The Bulgarian FrameNet (BulFrameNet) database so far contains unique descriptions of over 3,000 Bulgarian lexical units, approx. one tenth of them aligned with appropriate semantic frames, supports XML import and export and will be accessible, i.e., displayed and queried via the web. Each lexical entry consists of a lexical unit; a semantic frame from the English FrameNet, expressing abstract semantic structure; a grammatical class, defining the inflexional paradigm; a valency frame describing (some of) the syntactic and lexical-semantic combinatory properties (an optional component); and (semantically and syntactically) annotated examples. Koeva Sv. Lexicon and Grammar in Bulgarian FrameNet. – In: Proceedings of the Seventh conference on International Language Resources and Evaluation (LREC'10), N. Calzolari, K. Choukri, B. Maegaard, J. Mariani, J. Odjik, S. Piperidis, M. Rosner, D. Tapias (eds.), Valletta, European Language Resources Association (ELRA), 2010, pp. 3678-3684. ISBN 2-9517408-6-7; Koeva Sv. Integrating Semantic and Syntactic Annotation in Bulgarian FrameNet. In: Proceedings from the 29th International Conference on Lexis and Grammar, Belgrade, Serbia, September 15-18, 2010. ISBN 97886-758-080-5
urlDocumentation	-
resourceType	lexicalConceptualResource
resourceSubtype	framenet
mediaType	text
noLanguages	one
multilingualityType	-
	BG
size	3 000
sizeUnit	lemma
annotationType	

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resourceTitle	Bulgarian Grammatical Dictionary
resourceName	BulGram
urlDownload	http://dcl.bas.bg/est/dict.php
dateCreation	1999-2003
projectPartner	IBL
	IBL
ShortName	
contact.Person.surname	Koeva
contact.Person.givenNa	Svetla
me	
contact.Person.email	svetla@dcl.bas.bg
availability	available-restricted use
11001100	PUB / ELDA
resourceLocation	http://dcl.bas.bg/est
distributionMedium	internetBrowsing; ELDA
restrictionsOfUse	no
licenseSignatory.Person position	
foreseenUse.foreseenUs	human use; NLP applications
e	
foreseenUse.useNLPspe cific	
	human use; NLP applications
actualUse.useNLPspecif	1_
1C	The Common Distinguish of Dulaming is an inflaming distinguish that consists a
	The Grammar Dictionary of Bulgarian is an inflexion dictionary that consists of approximately 80 000 lemmas and allows automatic word form analysis and generation resulting in approximately 1 mln. 140 thousand word forms. The formal structure of the dictionary is based on finite state transducers (FSTs) that are widely applied in up-to-date electronic dictionaries. In its present state the Grammar Dictionary of Bulgarian represents in full the synthetic word formation patterns in Bulgarian and is therefore suitably transformed into spelling checking dictionary.
relevantPublications	Koeva, Sv. and M. Silberztein. Bulgarian and English Semantic Dictionaries for the Purposes of Information Retrieval, In: Computer Treatment of Slavic and East European Languages, ed. Radovan Garabik, Bratislava, Veda, pp. 193-203, 2005. ISBN 80-224-0895-6
urlDocumentation	
resourceType	lexicalConceptualResource
resourceSubtype	lexicon
mediaType	text
noLanguages	one
multilingualityType	-
languageId	BG
size	85 000

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sizeUnit	lemma
annotationType	

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4.2. APPENDIX 2 – CROATIAN

resourceTitle	Croatian National Corpus
resourceName	HNK
urlDownload	http://hnk.ffzg.hr
dateCreation	ongoing work
projectPartner	FFZG
IPRholder.organizationSho	FFZG
rtName	
contact.Person.surname	Tadić
contact.Person.givenName	
	marko.tadic@ffzg.hr
	available-restricted use
license	PUB / CC BY-NC-SA
resourceLocation	FFZG
distributionMedium	internetBrowsing; webservice
restrictionsOfUse	attribution
licenseSignatory.Person.po	
sition	
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspecif	balanced reference corpus of contemporary written Croatian standard language
ic	
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspecific	linguistic evidence; frequency lists; n-grams production; language modelling;
_	morphological processing; information extraction; text-mining; NERC, tree-banking;
	chunking; dependency parsing; document classification; machine translation
description	The Croatian National Corpus (HNK) is the largest balanced representative monolingual
	corpus for Croatian written standard language. It covers different domains, genres and
	topics starting with the topmost classification to prose fiction texts, faction texts and texts
	of mixed type. Its compilation starded in 1998, while the present version (v2.5) appeared in
	2008. This version represents the 101.3 million tokens large, lemmatised and MSD tagged
	corpus of texts produced from 1990 up to present day. The HNK is encoded in XCES and
	tagging was performed by a hybrid tagger using the MULTEXT EAST compliant Croatian
	tagset. The HNK is stored on Manatee server and it is accessible freely for search using
mile and D. I. Handiana	Bonito client. See http://hnk.ffzg.hr for further access details.
relevantPublications	Tadić, M. (2002) Building the Croatian National Corpus, LREC2002 Proceedings, Las
	Palmas, ELRA, Paris-Las Palmas, Vol. II, pp 441-446.
	Tadić, M. (2003) Jezične tehnologije i hrvatski jezik, Exlibris, Zagreb. Tadić, M. (2009) New version of the Croatian National Corpus. In: Hlaváčková, D.; Horák,
	A.; Osolsobě, K.; Rychlý, P. After Half a Century of Slavonic Natural Language
	Processing, Masaryk University, Brno, pp 199-205.
urlDocumentation	http://hnk.ffzg.hr
resourceType	corpus
resourceSubtype	reference corpus
mediaType	text
noLanguages	one
	One
multilingualityType	
languageId	hrv
size	101,300,000
sizeUnit	token
annotationType	structural annotation; lemmatization; PoS Tagging

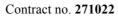
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resourceTitle	Croatian-English Parallel Corpus
resourceName	HR-EN p-corp
urlDownload	
dateCreation	ongoing work
projectPartner	FFZG
IPRholder.organizationShor	FFZG
tName	
contact.Person.surname	Tadić
contact.Person.givenName	Marko
contact.Person.email	marko.tadic@ffzg.hr
availability	available-restricted use
license	PUB / CC BY-NC-SA
resourceLocation	FFZG
distributionMedium	not yet available for internet access
restrictionsOfUse	academic-nonCommercialUse; commercialUse for a fee
licenseSignatory.Person.pos	
ition	
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspecifi	bilingual lexicography; contrastive linguistic research; translation studies; machine
c	translation
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspecific	contrastive linguistic research; machine translation
description	The Croatian-English parallel corpus, which has been collected at the Institute of
	Linguistics at the Faculty of Humanities and Social Sciences, University of Zagreb is a
	bilingual parallel corpus based on the texts from the "Croatia Weekly" newspapers
	published in Zagreb from 1998 to 2000. This weekly newspaper digested texts on all
	important events and covered different domains such as politics, economy and finances,
	culture, tourism, sports, ecology etc. The corpus is 3.5 million tokens (1.9 en, 1.6 hr),
	sentence aligned and manually checked.
relevantPublications	Tadić, M. (2000) Building the Croatian-English Parallel Corpus, LREC2000 Proceedings,
	Athens, ELRA, Paris-Athens, Vol. I, pp 523-530.
	Tadić, M. (2003) Jezične tehnologije i hrvatski jezik, Exlibris, Zagreb
urlDocumentation	
resourceType	corpus
resourceSubtype	parallel corpus
mediaType	text
noLanguages	two
multilingualityType	parallel
languageId	hrv, eng
size	3,500,000
sizeUnit	token
annotationType	segmentation; alignment; structural annotation

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resourceTitle	Croatian Morphological Lexicon
resourceName	HML
urlDownload	http://hml.ffzg.hr
dateCreation	ongoing work
projectPartner	FFZG
IPRholder.organizationShor	
tName	
contact.Person.surname	Tadić
contact.Person.givenName	Marko
contact.Person.email	marko.tadic@ffzg.hr
availability	available-restricted use
license	PUB / CC BY-NC-SA
resourceLocation	FFZG
distributionMedium	internetBrowsing; webservice
restrictionsOfUse	academic-nonCommercialUse; commercialUse for a fee
licenseSignatory.Person.pos	
ition	
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspecifi	lemmatization; PoS tagging; MSD tagging
c	
actualUse.actualUse	human use; NLP applications
	lemmatization; PoS tagging; MSD tagging
description	The Croatian Morphological Lexicon is an inflectional lexicon which is compliant with MULTEXT EAST lexica format. It covers more than 100,000 lemmas: 45,000+ lemmas of general language, 15,000+ personal names and 50,000+ surnames registered in the
	Republic of Croatia. Number of generated word-forms is more than 4 million. This lexicon represents the resource background for Croatian Lemmatization Server (http://hml.ffzg.hr)
relevantPublications	Tadić, M.; Fulgosi, S. (2003) Building the Croatian Morphological Lexicon. In: Proceedings of the EACL2003 Workshop on Morphological Processing of Slavic Languages, Budapest, ACL, pp. 41-46.
	Tadić, M. (2005) The Croatian Lemmatization Server. Southern Journal of Linguistics, Vol. 29 (2005), 1-2, pp. 206-217
	Bekavac, B.; Tadić, M. (2006) Inflectionally Sensitive Web Search in Croatian using
	Croatian Lemmatization Server. Proceedings of ITI2006 Conference, SRCE, Zagreb 2006,
	pp. 481-486.
urlDocumentation	http://hml.ffzg.hr
resourceType	lexicalResource
* 1	lexicon
mediaType	text
noLanguages	one
multilingualityType	
languageId	hrv
size	4,000,000
sizeUnit	lexical entry
annotationType	

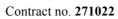
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resourceTitle	Croatian Dependency Treebank
resourceName	HOBS
urlDownload	http://hobs.ffzg.hr
dateCreation	ongoing work
projectPartner	FFZG
IPRholder.organizationShor	
tName	
contact.Person.surname	Tadić
contact.Person.givenName	Marko
contact.Person.email	marko.tadic@ffzg.hr
availability	available-restricted use
license	CC BY-NC-SA
resourceLocation	FFZG
distributionMedium	not yet available for internet access
restrictionsOfUse	academic-nonCommercialUse; commercialUse for a fee
licenseSignatory.Person.pos	
ition	
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspecifi	chunking; parsing; syntactic analysis
С	
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspecific	chunking; parsing; syntactic analysis
description	The Croatian Dependency Treebank is part of the Croatian National Corpus (i.e.
	Croatian part of the Croatian-English Parallel Corpus, CW2000) where ca 5000
	sentences (ca 100,000 tokens) are manually annotated at the analytical layer following
	the Prague Dependency Treebank formalism adapted to Croatian. The treebank is being
1 (D.11)	collected since 2007 and currently it's size is ca 4,700 sentences.
relevantPublications	Tadić, M. (2006) Croatian Dependency Treebank in Multilingual Context. Readings in
	Multilinguality: Selected papers for young researchers, Bulgarian Academy of Sciences, Sofia, pp. 125-128.
	Tadić, M. (2007) Building the Croatian Dependency Treebank: the initial stages.
	Suvremena lingvistika 63, (2007) pp. 85-92
	Vučković, K.; Tadić, M.; Dovedan, Z. (2008) Rule Based Chunker for Croatian.
	LREC2008 Proceedings, Marrakesh, ELRA, Paris-Marrakesh.
urlDocumentation	http://hobs.ffzg.hr
resourceType	corpus
resourceSubtype	reference corpus
mediaType	text
noLanguages	one
multilingualityType	
languageId	hrv
size	4,700
sizeUnit	sentence
annotationType	segmentation
r	pro

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resourceTitle	Croatian Vallency Dictionary
resourceName	CROVALLEX
urlDownload	http://cal.ffzg.hr/crovallex
dateCreation	2008
projectPartner	FFZG
IPRholder.organizationShort	
Name	1120
contact.Person.surname	Mikelić-Preradović
contact.Person.givenName	Nives
contact.Person.email	nmikelic@ffzg.hr
availability	available-restricted use
license	PUB / CC BY-NC-SA
resourceLocation	FFZG
distributionMedium	download
restrictionsOfUse	academic-nonCommercialUse; commercialUse for a fee
licenseSignatory.Person.posit	
ion	
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspecific	chunking; parsing; semantic role detection; NLP understanding
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspecific	chunking; parsing; language generation
description	The Croatian Valency Lexicon (CROVALLEX) provides a formal description of
	valency frames of Croatian verbs. CROVALLEX 2.0008 was developed by Nives
	Mikelic Preradovic. The Functional Generative Description (FGD), being developed by
	Sgall and his collaborators since the 1960s, is used as the background theory in
	CROVALLEX 2.0008. for the description of valency frames of selected verbs.
	CROVALLEX 2.0008 contains 1740 verbs that were selected as the most frequent verbs
	from the Croatian frequency dictionary.
relevantPublications	Mikelić-Preradović, N. (2008) Approaches to the Development of the Machine Lexicon
	for Croatian Language, PhD thesis, University of Zagreb, Faculty of Humanities and
	Social Sciences
	Mikelić Preradović, N. (2010) CROVALLEX lexicon improvements: Subcategorization
ID	and semantic constraints. WSEAS transactions on computers, 9.
urlDocumentation	http://cal.ffzg.hr/crovallex
resourceType	lexicalResource
resourceSubtype	lexicon
mediaType	text
noLanguages	one
multilingualityType	1
languageId	hrv
size	1740
sizeUnit	lexical entry
annotationType	

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4.3. Appendix 3 - Hungarian

resourceTitle	Hunglish parallel corpus
resourceName	Hunglish
urlDownload	http://mokk.bme.hu/resources/hunglishc
dateCreation	2006
projectPartner	MOKK
IPRholder.organizationS hortName	Center for Media Research and Education
contact.Person.surname	Dániel
contact.Person.givenNam	Varga
contact.Person.email	daniel@mokk.bme.hu
availability	available-unrestricted use
license	CC BY
resourceLocation	hosted by owner
distributionMedium	internetBrowsing
restrictionsOfUse	attribution
licenseSignatory.Person. position	-
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspec ific	machine translation; multilingual information retrieval
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspecifi	
description	The Hunglish Corpus is a free sentence-aligned Hungarian-English parallel corpus of about 2 million sentences. The corpus may be searched through a web-based sentence search service. This service has more than 200,000 visits per month.
relevantPublications	Varga Dániel, Németh László, Halácsy Péter, Kornai András, Trón Viktor. Parallel corpora for medium density languages. In the proceedings of the RANLP 2005. (A version of this paper appeared in: Nicolov et al eds: Recent Advances in Natural Language Processing IV. Selected papers from RANLP 2005. John Benjamins 2007.)
urlDocumentation	http://mokk.bme.hu/resources/hunglishcorpus http://hunglish.hu
resourceType	corpus
resourceSubtype	parallel corpus
mediaType	text
noLanguages	2
multilingualityType	parallel

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languageId	hu; en
size	5 420 000
sizeUnit	token
annotationType	segmentation; alignment

m: d	YY • XY 1 .
resourceTitle	Hungarian Wordnet
resourceName	
urlDownload	http://www.inf.u-szeged.hu/rgai/nlp?lang=en&page=nlpproj_hunont
dateCreation	2007
projectPartner	RILHAS
IPRholder.organizationSho	Consortium of RILHAS, Szeged University and Morphologic Ltd.
rtName	
contact.Person.surname	Váradi
contact.Person.givenName	Tamás
contact.Person.email	varadi@nytud.hu
availability	available soon (License construction is under discussion)
license	-
resourceLocation	hosted by the consortium
distributionMedium	CD-ROM
restrictionsOfUse	-
licenseSignatory.Person.po	-
sition	
	human use; NLP use
	information retrieval; word sense disambiguation; machine translation;
c	coreference resolution; emotion detection; sentiment analysis
actualUse.actualUse	NLP applications
	coreference resolution; content analysis
description	The Hungarian WordNet is a multilingual ontology, meaning that most of its synsets were mapped to equivalent concepts in English (Princeton) WordNet v. 2.0. The ontology is also linked to entries of a Hungarian Monolingual explanatory dictionary and to the entries of the Hungarian verb valency frame lexicon.
relevantPublications	Miháltz, Márton, Csaba Hatvani, Judit Kuti, György Szarvas, János Csirik, Gábor Prószéky, Tamás Váradi: Methods and Results of the Hungarian WordNet Project. In: Proceedings of The Fourth Global WordNet Conference, Szeged, Hungary (2008), pp. 311–321. Alexin, Zoltán, János Csirik, György Szarvas, András Kocsor, Márton Miháltz: Construction of the Hungarian EuroWordNet Ontology and its Application to Information Extraction. In Proceedings of the Third International WordNet Conference (GWC 2006), Seogwipo, Jeju Island, Korea, January 22-26, 2006, pp. 291-292. Prószéky, Gábor, Miháltz Márton: Magyar WordNet: az első magyar lexikális szemantikai adatbázis. In: Magyar Terminológia 1 (2008) 1, pp. 43-57.
urlDocumentation	http://www.inf.u-szeged.hu/projectdirs/hlt/index_en.html
resourceType	lexicalConceptualResource
resourceSubtype	thesaurus, WordNet
mediaType	text
noLanguages	1
multilingualityType	-
principality and the property of the property	
languageId	hu

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size	42 000
sizeUnit	synset
annotationType	WordNet relations, link to PWN synsets

resourceTitle	Hungarian National Corpus
resourceName	HNC
urlDownload	http://corpus.nytud.hu/mnsz/
dateCreation	2005
projectPartner	RILHAS
IPRholder.organizationS	RILHAS
hortName	
contact.Person.surname	Váradi
contact.Person.givenNa me	Tamás
contact.Person.email	varadi@nytud.hu
availability	available-unrestricted use
license	CLARIN ACA+NC+Inf
resourceLocation	hosted by owner
distributionMedium	internetBrowsing
restrictionsOfUse	noDerivatives
licenseSignatory.Person. position	
foreseenUse.foreseenUse	
foreseenUse.useNLPspec ific	word sense disambiguation; machine translation; named entity recognition;
	human use, NLP use
actualUse.useNLPspecifi c	word sense disambiguation; machine translation; named entity recognition;
description	The Hungarian National Corpus is a the general purpose, representative corpus of today's written Hungarian language. It gives an exact, quantifiable picure of Hungarian language use. It includes bibliographical metadata, and encodes the boundaries of structural units (paragraphs, sentences). The corpus is automatically POS-tagged: we have lemma, part of speech, and morphological analysis for each word. The query interface is freely available to anyone. It incorporates Hungarian texts from Hungary, Slovakia, Transcarpathia, Transylvania and Vojvodina in five different genres: press, literature (from Digital Literature Academy), scientific, official and personal communication. The size of the corpus is currently 187 million words. The partially syncactically parsed form of the whole corpus can be queried by the "Verb Argument Browser" tool: http://corpus.nytud.hu/vab
relevantPublications	Váradi Tamás: The Hungarian National Corpus. In: Proceedings of the 3rd LREC Conference, Las Palmas, Spanyolország, 2002, 385-389 Sass Bálint: "Mazsola" - eszköz a magyar igék bővítményszerkezetének vizsgálatára. In: Váradi Tamás (szerk.): Válogatás az I. Alkalmazott Nyelvészeti Doktorandusz Konferencia előadásaiból, MTA Nyelvtudományi Intézet, Budapest, 2009
urlDocumentation	http://corpus.nytud.hu/mnsz/index_eng.html
resourceType	corpus
resourceSubtype	reference corpus
mediaType	text
noLanguages	1

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multilingualityType	-
languageId	hu
size	187600000
sizeUnit	token
annotationType	MSD

T: /1	G LVED
resourceTitle	Szeged NER corpus
resourceName	
urlDownload	http://www.inf.u-szeged.hu/rgai/nlp?lang=en&page=corpus_ne
dateCreation	2005
projectPartner	RILHAS
IPRholder.organizationSho	University of Szeged
rtName	
contact.Person.surname	Farkas
contact.Person.givenName	Richárd
contact.Person.email	rfarkas@inf.u-szeged.hu
availability	available - non-commercial use
license	CLARIN ACA NC
resourceLocation	hosted by owner
distributionMedium	download
restrictionsOfUse	non-commercial use
licenseSignatory.Person.po sition	-
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspecifi	automated named entity recognition;
actualUse.actualUse	human use, NLP use
actualUse.useNLPspecific	information extraction, automated named entity recognition
description	The Szeged NER corpus is is a manually annotated part of the Szeged treebank, consisting of short business news. The used NER categories are (based on the CoNLL system (http://www.cnts.ua.ac.be/conll2003/ner/)) the following: PERSON, ORGANISATION, LOCATION and OTHER.
relevantPublications	Szarvas, György; Farkas, Richárd; Felföldi, László; Kocsor, András; Csirik, János 2006: A highly accurate Named Entity corpus for Hungarian. In: Electronic Proceedings of the 5th International Conference on Language Resources and Evaluation (LREC 2006), Genova, Italy, 24-26 May. Farkas, Richárd; Szarvas, György; Kocsor, András 2006: Named Entity Recognition for Hungarian Using Various Machine Learning Algorithms. Acta Cybernetica 17(3): 633-646. Szarvas, György; Farkas, Richárd; Kocsor, András 2006: A Multilingual Named Entity Recognition System Using Boosting and C4.5 Decision Tree Learning Algorithms. In: Discovery Science 2006, pp. 267-278.
urlDocumentation	http://www.inf.u-szeged.hu/rgai/nlp?lang=en&page=corpus_ne
resourceType	corpus
resourceSubtype	reference corpus

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mediaType	text
noLanguages	1
multilingualityType	-
languageId	hu
size	220 000
sizeUnit	token
annotationType	POS tagging, NE tagging

resourceTitle	Szeged corpus
resourceName	-
urlDownload	http://www.inf.u-
	szeged.hu/projectdirs/hlt/en/Szeged%20Corpus%202.0_en.html
dateCreation	2005
projectPartner	RILHAS
IPRholder.organizationShortName	Consortium of University of Szeged, RILHAS, MorphoLogic Ltd.
contact.Person.surname	Vincze
contact.Person.givenName	Veronika
contact.Person.email	vinczev@inf.u-szeged.hu
availability	available-non-commercial use - usage is linked to a license agreement between
	the user and provider
license	CLARIN ACA NC
resourceLocation	hosted by owner
distributionMedium	CD-ROM; download
restrictionsOfUse	non-commercial use
licenseSignatory.Person.po	-
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspecific	morphosyntactic parsing, POS tagging
actualUse.actualUse	human use, NLP use
actualUse.useNLPspecific	information extraction, automated POS tagging
description	A morpho-syntactically annotated and manually disambiguated corpus of 1,2 million words.
relevantPublications	Alexin, Zoltán; Csirik, János; Gyimóthy, Tibor; Bibok, Károly; Hatvani, Csaba; Prószéky, Gábor; Tihanyi, László 2003: Manually Annotated Hungarian Corpus. In: Proceedings of the Research Note Sessions of the 10th Conference of the European Chapter of the Association for Computational Linguistics EACL'03, Budapest, Hungary, 15-17 April, pp. 53-56. Csendes, Dóra; Csirik, János; Gyimóthy, Tibor 2004: The Szeged Corpus: A POS Tagged and Syntactically Annotated Hungarian Natural Language Corpus. In: Proceedings of the 5th International Workshop on Linguistically Interpreted Corpora (LINC 2004) at The 20th International Conference on Computational Linguistics (COLING 2004), Geneva, Switzerland, 23-29 August, pp. 19-23.

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urlDocumentation	http://www.inf.u-
	szeged.hu/projectdirs/hlt/en/Szeged%20Corpus%202.0_en.html
resourceType	corpus
resourceSubtype	reference corpus
mediaType	text
noLanguages	1
multilingualityType	-
languageId	hu
size	1200 000
sizeUnit	token
annotationType	POS tagging (MSD)

resourceTitle	Szeged treebank
resourceName	-
urlDownload	http://www.inf.u-szeged.hu/projectdirs/hlt/hu/szegedtreebank%202.0.html
dateCreation	2007
projectPartner	RILHAS
IPRholder.organizationSh ortName	Consortium of University of Szeged, RILHAS, MorphoLogic Ltd.
contact.Person.surname	Vincze
contact.Person.givenName	Veronika
contact.Person.email	vinczev@inf.u-szeged.hu
availability	available-non-commercial use - usage is linked to a license agreement between
	the user and provider
license	CLARIN ACA NC
resourceLocation	hosted by owner
distributionMedium	CD-ROM; download
restrictionsOfUse	non-commercial use
licenseSignatory.Person.p osition	-
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspecific	morphosyntactic parsing, POS tagging, syntactic parsing
actualUse.actualUse	human use, NLP use
actualUse.useNLPspecific	automated information extraction, semantic frame mapping, semantic role
	labeling, syntactic parsing
description	A manually checked treebank of 1,2 million words.
relevantPublications	Csendes, Dóra; Csirik, János; Gyimóthy, Tibor; Kocsor, András 2005: The Szeged Treebank. In: Matousek, Václav et al. (eds.): Proceedings of the 8th International Conference on Text, Speech and Dialogue (TSD 2005), Karlovy Vary, Czech Republic, September 12-16, 2005, Springer LNAI 3658, pp. 123-131.

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urlDocumentation	http://www.inf.u-
	szeged.hu/projectdirs/hlt/en/Szeged%20Treebank%202.0_en.html
resourceType	corpus
resourceSubtype	syntax-corpus
mediaType	text
noLanguages	1
multilingualityType	-
languageId	hu
size	1200 000
sizeUnit	token
annotationType	POS tagging (MSD), treebank

resourceTitle	Hungarian webcorpus
resourceName	- Hungarian webeer pus
urlDownload	http://mokk.bme.hu/resources/ webcorpus
dateCreation	2003
projectPartner	MOKK
IPRholder.organizationShortName	Center for Media Research and Education
contact.Person.surname	Szakadát
contact.Person.givenName	István
contact.Person.email	i@syi.hu
availability	available-unrestricted use
license	CC-BY
resourceLocation	hosted by owner
distributionMedium	download
restrictionsOfUse	attribution
licenseSignatory.Person.po sition	-
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspecific	language modeling
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspecific	language modeling
description	With over 1.48 billion words unfiltered (589m words fully filtered), this is by far the largest Hungarian language corpus, and it is available in its entirety under a permissive Open Content license. The Hungarian webcorpus was created as part of the WordSword project at the Media Research and Education Centre. The Webcorpus may be downloaded in two formats: as a frequency dictionary based on the texts and as the original texts.

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relevantPublications	"Halácsy Péter, Kornai András, Németh László, Rung András, Szakadát István, Trón Viktor Creating open language resources for Hungarian In Proceedings of the 4th international conference on Language Resources and Evaluation (LREC2004), 2004. Kornai, A, Halácsy, P, Nagy, V, Oravecz, Cs, Trón, V, and Varga, D (2006). Web-based frequency dictionaries for medium density languages In: Proceedings of the 2nd International Workshop on Web as Corpus, edited by Adam Kilgarriff, Marco Baroni ACL-06, pages 19."
urlDocumentation	http://mokk.bme.hu/resources/webcorpus/
resourceType	corpus
resourceSubtype	reference corpus
mediaType	text
noLanguages	1
multilingualityType	-
languageId	hu
size	1 480 000 000
sizeUnit	token
annotationType	none

resourceTitle	BABELHungarian Clear Speech Database
resourceName	BABEL
urlDownload	http://alpha.tmit.bme.hu/speech/databases.php
dateCreation	2001
projectPartner	TMIT
IPRholder.organizationSh ortName	TMIT
contact.Person.surname	Vicsi
contact.Person.givenNam e	Klára
contact.Person.email	vicsi@tmit.bme.hu
availability	available-restricted use
license	ELRA
resourceLocation	hosted in international repository (ELRA)
distributionMedium	CD-ROM
restrictionsOfUse	-
licenseSignatory.Person.p osition	_
foreseenUse.foreseenUse	human use; NLP use
foreseenUse.useNLPspeci fic	speech analysis; speech recognition; automatic speech recognition;
actualUse.actualUse	human use; NLP use
actualUse.useNLPspecific	speech analysis; speech recognition; automatic speech recognition;

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description	BABEL database is an EUROM1 compatible database containing records from 60 speakers distributed in 3 speakers set (many, few, very few).
relevantPublications	-
urlDocumentation	http://alpha.tmit.bme.hu/speech/databases.php
resourceType	corpus
resourceSubtype	speech corpus
mediaType	audio
noLanguages	1
multilingualityType	-
languageId	hu
size	4
sizeUnit	hour
annotationType	annotation, segmentation

resourceTitle	Hungarian Reference Speech Database
resourceName	MRBA
urlDownload	http://alpha.tmit.bme.hu/speech/databases.php
dateCreation	2004
projectPartner	TMIT
IPRholder.organizationSh ortName	TMIT+ Szeged University
contact.Person.surname	Vicsi
contact.Person.givenName	Klára
contact.Person.email	vicsi@tmit.bme.hu
availability	available-restricted use
license	CLARIN RES
resourceLocation	hosted by the consortium
distributionMedium	DVD-R
restrictionsOfUse	
licenseSignatory.Person.p	head of laboratory / dept
foreseenUse.foreseenUse	human use; NLP use
foreseenUse.useNLPspecific	speech analysis; speech recognition; automatic speech recognition;
actualUse.actualUse	human use; NLP use

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actualUse.useNLPspecia	fic speech analysis; automatic speech recognition;
description	The database contains continuous read speech. During the planning of the corpus, we took into consideration the special characteristics of Hungarian language. Since the Hungarian is an agglutinative language, we needed to create a larger vocabulary in some categories, than it is mandatory. We tried to pay an extra attention to the topic 'phonetically rich sentences and words', to create a phonetically well balanced speech database for text independent speech recognizers. The database contains utterances read by 332 different speakers. The utterances were recorded in acoustically different locations.
relevantPublications	
urlDocumentation	http://alpha.tmit.bme.hu/speech/databases.php
resourceType	corpus
resourceSubtype	speech corpus
mediaType	audio
noLanguages	1
multilingualityType	-
languageId	hu
size	6,5
sizeUnit	hour
annotationType	annotation, segmentation

resourceTitle	Hungarian Telephone Speech Database
resourceName	MTBA
urlDownload	http://alpha.tmit.bme.hu/speech/databases.php
dateCreation	2003
projectPartner	TMIT
IPRholder.organizationS hortName	TMIT+ Szeged University
contact.Person.surname	Vicsi
contact.Person.givenNa me	Klára
contact.Person.email	vicsi@tmit.bme.hu
availability	available-restricted use
license	CLARIN RES
resourceLocation	hosted by the consortium
distributionMedium	DVD-R

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restrictionsOfUse	
licenseSignatory.Person.	head of laboratory / dept
foreseenUse.foreseenUse	human use; NLP use
foreseenUse.useNLPspecific	speech analysis; speech recognition; automatic speech recognition;
	human use; NLP use
	speech recognition; automatic speech recognition;
•	MTBA is a PSTN and mobil telephone voice Hungarian speech database. The database contains records based on the definition in SpeechDatE for the dialectical, age and sex balance and vocabulary. Important and different from the SpeechDatE database is, that the phonetically rich sentences and words have been segmented and labelled at phoneme level. The database has two parts. The first part (2 CDs) contains labeled application words, numbers, dates, spelling and names, the second part (1 CD) contains labeled and segmentated phonetically rich sentences and words.
relevantPublications	
urlDocumentation	http://alpha.tmit.bme.hu/speech/databases.php
resourceType	corpus
resourceSubtype	speech corpus
mediaType	audio
noLanguages	1
multilingualityType	-
languageId	hu
size	5
sizeUnit	hour
annotationType	annotation, segmentation

resourceTitle	Hungarian Telephone Client Speech
resourceName	MTÜBA
urlDownload	-
dateCreation	2009
projectPartner	TMIT
IPRholder.organizationS hortName	TMIT
contact.Person.surname	Vicsi
contact.Person.givenNa me	Klára
contact.Person.email	vicsi@tmit.bme.hu

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availability	available-restricted use
license	CLARIN ACA+NC+ReD
resourceLocation	hosted by owner
distributionMedium	DVD-R
restrictionsOfUse	academic-nonCommercialUse; redistributionProhibited
position	head of TMIT-LSA laboratory
foreseenUse.foreseenUse	human use; NLP use
ific	speech analysis; speech recognition; automatic speech recognition; spoken dialogue systems; emotion recognition; automatic person recognition; discourse analysis;
actualUse.actualUse	human use
*	speech analysis; speech recognition; automatic speech recognition; emotion recognition; discourse analysis;
description	The MTÜBA database contains telephone calls recorded at the call centre of a service provider company. The database will be fully anonimized. The corpus consists of dialogues between the operator and the client. The ortographic transcription of the speech utterances is provided, clauses are segmentated (automatically followed by hand-correction). Parts of speech holding emotions acoustically audible are also labelled according to 4 basic emotions.
relevantPublications	_
urlDocumentation	-
resourceType	corpus
resourceSubtype	speech corpus
mediaType	audio
noLanguages	1
multilingualityType	-
languageId	hu
size	60
sizeUnit	hour
annotationType	annotation

resourceTitle	Broadcast News Database
resourceName	BND
urlDownload	-
dateCreation	2005
projectPartner	TMIT
IPRholder.organizationS	TMIT
hortName	

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contact.Person.surname	Vicsi
contact.Person.givenNa	Klára
me	
contact.Person.email	vicsi@tmit.bme.hu
availability	available-unrestricted use
license	CC BY SA NC
resourceLocation	hosted by owner
distributionMedium	download
restrictionsOfUse	academic-nonCommercialUse; shareAlike
licenseSignatory.Person. position	head of TMIT-LSA laboratory
foreseenUse.foreseenUse	human use; NLP use
	speech analysis; speech recognition; emotion recognition; automatic person recognition; discourse analysis;
actualUse.actualUse	human use
	speech analysis; speech recognition; emotion recognition; automatic person
	recognition; discourse analysis;
	The Hungarian Broadcast News (HBN) database was collected as a member of the Broadcast News Interest Group of COST278, the COST action on Speech and Language Interaction in Telecommunications in cooperation of 10 different institutions throughout Europe. The Hungarian material consists of 3h and 30 minutes of recordings, transcribed and annotated, using the conventions of NIST (National Institute of Standards and Technology, USA).
relevantPublications	-
urlDocumentation	
resourceType	corpus
resourceSubtype	multimedia and multimodal data
mediaType	audio; video
noLanguages	1
multilingualityType	-
languageId	hu
size	5
sizeUnit	hour
annotationType	annotation

resourceTitle	Emotion Database
resourceName	
urlDownload	-

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dateCreation	ongoing
projectPartner	TMIT
IPRholder.organizationS	
hortName	1 1/11 1
contact.Person.surname	Vicsi
	Klára
me contact.Person.email	vicsi@tmit.bme.hu
availability	available-restricted use
-	
license	CLARIN ACA+ NC
	hosted by owner
distributionMedium	internet browsing
restrictionsOfUse	academic-nonCommercialUse;
position	head of TMIT-LSA laboratory
foreseenUse.foreseenUse	human use
foreseenUse.useNLPspe cific	emotion recognition
actualUse.actualUse	human use
actualUse.useNLPspecifi c	emotion recognition
description	Spoken databse holding emotionally reach utterances, labelling is done for emotions (8 basic emotions are labelled)
relevantPublications	-
urlDocumentation	-
resourceType	corpus
resourceSubtype	speech corpus
mediaType	audio
noLanguages	1
multilingualityType	-
languageId	hu
size	50
sizeUnit	hour
annotationType	annotation

resourceTitle	Sound Gesture Database
resourceName	-
urlDownload	-

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	ongoing
projectPartner	TMIT
IPRholder.organizationShortName	TMIT
contact.Person.surname	Viesi
contact.Person.givenName	Klára
contact.Person.email	vicsi@tmit.bme.hu
availability	available-restricted use
license	CLARIN ACA+ NC
resourceLocation	hosted by owner
distributionMedium	internet browsing
restrictionsOfUse	academic-nonCommercialUse;
licenseSignatory.Person.po sition	head of TMIT-LSA laboratory
foreseenUse.foreseenUse	human use
foreseenUse.useNLPspecifi c	emotion recognition
actualUse.actualUse	human use
actualUse.useNLPspecific	emotion recognition
description	Database of sound gestures
relevantPublications	-
urlDocumentation	-
resourceType	lexicalConceptualResource
resourceSubtype	speech lexicon
mediaType	audio
noLanguages	1
multilingualityType	-
languageId	hu
size	770
sizeUnit	token
annotationType	annotation

resourceTitle	Medical Database
resourceName	-
urlDownload	-

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dateCreation	ongoing
projectPartner	TMIT
IPRholder.organizationShortName	TMIT+ Semmelweis University
contact.Person.surname	Viesi
contact.Person.givenName	Klára
contact.Person.email	vicsi@tmit.bme.hu
availability	available-restricted use
license	CLARIN RES
resourceLocation	hosted by the consortium
distributionMedium	DVD-R
restrictionsOfUse	-
licenseSignatory.Person.po sition	head of TMIT-LSA laboratory
foreseenUse.foreseenUse	human use
foreseenUse.useNLPspecific	speech recognition
actualUse.actualUse	human use
actualUse.useNLPspecific	-
description	The Medical database is a speech corpus holding utterances from persons suffering from different speech problems of organic origine.
relevantPublications	-
urlDocumentation	-
resourceType	corpus
resourceSubtype	speech corpus
mediaType	audio
noLanguages	1
multilingualityType	-
languageId	hu
size	1
sizeUnit	hour
annotationType	annotation

resourceTitle	Broadcast Lectures Database
resourceName	BLD or ME corpus (ME: Mindentudás Egyeteme)

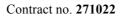
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urlDownload	http://mindentudas.hu/
dateCreation	ongoing
projectPartner	ТМІТ
IPRholder.organizationSh ortName	Hungarian Telecom, HAS
contact.Person.surname	Varga
contact.Person.givenNam	Dániel
contact.Person.email	daniel@mokk.bme.hu
availability	availabe only for derivate works
license	to be clarified
resourceLocation	hosted by owner
distributionMedium	internet browsing
restrictionsOfUse	availabe only for derivate works
licenseSignatory.Person.p	Sallai László? (project managef of Mindentudás Egyeteme)
foreseenUse.foreseenUse	acoustic model training, speech recignition evaluation, etc.
foreseenUse.useNLPspeci fic	seech analysis; speaker identification; speaker verification; speech recognition; face verification; speech verification; face recognition; automatic speech recognition; automatic person recognition; multimedia development; l; information retrieval;
actualUse.actualUse	human use
actualUse.useNLPspecific	-
description	Recorded Broadcast Video Lectures from wide scientific topics for the public.
relevantPublications	-
urlDocumentation	-
resourceType	corpus
resourceSubtype	video corpus
mediaType	video
noLanguages	1
multilingualityType	-
languageId	hu
size	~150+
sizeUnit	hour
annotationType	annotation (?) transcription

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resourceTitle	Hungarian Speech Database of Holocaust Survovors' Testimonies
resourceName	Hungarian MALACH (?)
urlDownload	-
dateCreation	2006
projectPartner	TMIT
IPRholder.organizationS hortName	Spielberg's SOAH Foundation?, AITIA International
contact.Person.surname	Fegyó
contact.Person.givenNam	Tibor
contact.Person.email	tfegyo@aitia.ai
availability	availabe only for derivate works
license	to be clarified
resourceLocation	AITIA International?
distributionMedium	DVD-R?
restrictionsOfUse	availabe only for derivate works
licenseSignatory.Person. position	Speech Research Director of Aitia International?
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspec ific	speech analysis; speaker identification; speaker verification; speech recognition; speech verification; automatic speech recognition; ;1; information retrieval;
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspecifi c	
description	Elderly people tell their history from the world war II, typically they are holocaust survivors. Originally videos were recorded with 2 microphones on two channel, but in Aitia International only 1 channel audio files are available with transcriptions.
relevantPublications	1 IEEE Transactions, 1 Springer LNCS, 1 Interspeech proc. Paper
urlDocumentation	-
resourceType	corpus
resourceSubtype	speech corpus
mediaType	audio
noLanguages	1
multilingualityType	-
languageId	hu
size	31
sizeUnit	hour

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annotationType	annotation (2) transprintion
annotation i ype	annotation (?) transcription

resourceTitle	Hungarian Parliamentary Speeches
resourceName	
urlDownload	
dateCreation	ongoing
projectPartner	TMIT
IPRholder.organizationShortName	
contact.Person.surname	Fegyó
contact.Person.givenNam e	Tibor
contact.Person.email	tfegyo@aitia.ai
availability	availabe only for derivate works
license	to be clarified
resourceLocation	-
distributionMedium	-
restrictionsOfUse	availabe only for derivate works
licenseSignatory.Person.position	-
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspec ific	speech analysis; speaker identification; speaker verification; speech recognition; speech verification; automatic speech recognition; ;l; information retrieval;
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspecifi c	-
description	The Hungarian Parliamentary speeches are publicly available with approximate transcriptions. In this project, time alignment will be made and not alignable part will be marked.
relevantPublications	-
urlDocumentation	_
resourceType	corpus
resourceSubtype	speech corpus
mediaType	audio
noLanguages	1
multilingualityType	
languageId	hu

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size	1000+
sizeUnit	hour
annotationType	alignment, annotation

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4.4. Appendix 4 - Polish

resourceTitle	Polish Sejm Corpus
resourceName	PSC
urlDownload	-
dateCreation	ongoing work
projectPartner	IPIPAN
IPRholder.organizationS hortName	Polish Sejm
contact.Person.surname	Ogrodniczuk
contact.Person.givenNam	Maciej
contact.Person.email	maciej.ogrodniczuk@ipipan.waw.pl
availability	available-unrestricted use
license	BSD 2-clause
resourceLocation	http://www.clip.waw.pl/Polish_Sejm_Corpus
distributionMedium	internetBrowsing/download
restrictionsOfUse	attribution
licenseSignatory.Person.position	-
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspec ific	information retrieval
actualUse.actualUse	ongoing work
actualUse.useNLPspecifi	ongoing work
description	The Polish Sejm Corpus will contain utterances of Polish Sejm members from cadencies 1-6. It will be morphologically annotated and made available for search with NKJP search tool – Poliqarp.
relevantPublications	-
urlDocumentation	-
resourceType	corpus
resourceSubtype	multimodal data
mediaType	text; audio; video
noLanguages	1
multilingualityType	-
languageId	pl
size	100 000 000

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sizeUnit	word
annotationType	segmentation, lemmatization, POS, MSD, chunking, named entities

resourceTitle	NZM morphological dictionary
resourceName	NZM
urlDownload	-
dateCreation	ongoing work
projectPartner	IPIPAN
IPRholder.organizationShortName	
contact.Person.surname	Ogrodniczuk
contact.Person.givenName	Maciej
contact.Person.email	maciej.ogrodniczuk@ipipan.waw.pl
availability	available-unrestricted use
license	BSD 2-clause
resourceLocation	http://www.clip.waw.pl/NZM
distributionMedium	internetBrowsing/download
restrictionsOfUse	attribution
licenseSignatory.Person.po sition	-
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspecific	morphosyntactic analysis
actualUse.actualUse	ongoing work
actualUse.useNLPspecific	ongoing work
description	NZM combines two most important morphological dictionaries of Polish – Morfeusz SGJP and Morfologik. Morfeusz was developed by Zygmunt Saloni (author of linguistic data used in the analyser) and Marcin Woliński (programming part). The result morphological codes come from the IPI PAN Tagset (currently de facto standard for Polish) developed by Marcin Woliński and Adam Przepiórkowski for the annotation of the IPI PAN Corpus of Polish. Morfologik is based on current ispell dictionaries and Java libraries interfacing them. The result tags come from IPI Tagset.
relevantPublications	Marcin Woliński, Morfeusz — a Practical Tool for the Morphological Analysis of Polish, w: Mieczysław Kłopotek, Sławomir Wierzchoń, Krzysztof Trojanowski, red., Intelligent Information Processing and Web Mining, IIS:IIPWM'06 Proceedings, s. 503–512, Springer, 2006.
urlDocumentation	http://sgjp.pl/morfeusz/index.html.en; http://morfologik.blogspot.com/
resourceType	lexicalConceptualResource
resourceSubtype	lexicon
mediaType	text

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noLanguages	1
multilingualityType	-
languageId	pl
size	3000000
sizeUnit	word
annotationType	segmentation, lemmatization, POS, MSD

resourceTitle	Polish Treebank
resourceName	Treebank
urlDownload	-
dateCreation	ongoing work
projectPartner	IPIPAN
IPRholder.organizationShortName	IPIPAN
contact.Person.surname	Woliński
contact.Person.givenName	Marcin
contact.Person.email	wolinski@ipipan.waw.pl
availability	available-restricted use
license	GNU GPL
resourceLocation	http://www.clip.waw.pl/plTreebank
distributionMedium	internetBrowsing/download
restrictionsOfUse	shareAlike
licenseSignatory.Person.po sition	-
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspecific	parsing
actualUse.actualUse	ongoing work
actualUse.useNLPspecific	ongoing work
description	The treebank will contain trees created with Świgra – a deep parser of Polish implemented by Marcin Woliński on the basis of a metamorphosis grammar of Polish GFJP created by Świdziński.
relevantPublications	Marek Świdziński, Marcin Woliński, Towards a Bank of Constituent Parse Trees for Polish, w: Petr Sojka et al., red., Text, Speech and Dialogue, 13th International Conference, TSD 2010, Brno, September 2010, Proceedings, LNAI, tom 6231, s. 197–204, Springer, Heidelberg, 2010.
urlDocumentation	-
resourceType	corpus; lexicalConceptualResource
resourceSubtype	syntax corpus
mediaType	text

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noLanguages	1
multilingualityType	-
languageId	pl
size	6000
sizeUnit	sentences
annotationType	segmentation, lemmatization, POS, MSD, chunking, deep parsing

resourceTitle	National Corpus of Polish
resourceName	NKJP
urlDownload	http://www.nkjp.pl/
dateCreation	June 2011
projectPartner	IPIPAN/ULodz
	IPIPAN for the corpus, various for the sources
ortName	r
contact.Person.surname	Przepiórkowski
contact.Person.givenName	Adam
contact.Person.email	adamp@ipipan.waw.pl
availability	available-restricted use
license	GNU GPL (1-million sample)
resourceLocation	http://www.nkjp.pl/
distributionMedium	internetBrowsing/download
restrictionsOfUse	restricted
licenseSignatory.Person.p	-
osition	
	human use; NLP applications
foreseenUse.useNLPspecif	various
ic	
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspecific	various
description	The National Corpus of Polish is a shared initiative of four institutions: Institute
	of Computer Science at the Polish Academy of Sciences (coordinator), Institute
	of Polish Language at the Polish Academy of Sciences, Polish Scientific
	Publishers PWN, and the Department of Computational and Corpus Linguistics
	at the University of Łódź. It has been registered as a research-development
	project of the Ministry of Science and Higher Education. The list of sources for
	the corpus contains classic literature, daily newspapers, specialist periodicals and
	journals, transcripts of conversations, and a variety of short-lived and internet
	texts. The resources represent wide diversity with respect to the subject and
	genre. The spoken part covers both male and female speakers, in various age
1	groups, coming from various regions in Poland.
relevantPublications	1. Katarzyna Głowińska, Adam Przepiórkowski. (2010). The Design of Syntactic
	Annotation Levels in the National Corpus of Polish. In: LREC 2010 proceedings.
	2. Adam Przepiórkowski and Piotr Bański. (2009). XML Text Interchange
	Format in the National Corpus of Polish. To appear in the proceedings of PALC
	2009. 2. Pietr Poéski and Adam Przeniérkowski (2000). Stand off TEL Appatation: the
	3. Piotr Bański and Adam Przepiórkowski. (2009). Stand-off TEI Annotation: the Case of the National Corpus of Polish. In: the proceedings of the LAW-III
	workshop at ACL-IJCNLP 2009, Singapore, pp. 64-67.
urlDocumentation	http://www.nkjp.pl/

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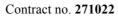




resourceType	corpus
resourceSubtype	reference corpus
mediaType	text
noLanguages	1
multilingualityType	-
languageId	pl
size	1000000000
sizeUnit	word
annotationType	segmentation, lemmatization, POS, MSD, chunking, word sense, named entities

resourceTitle	Polish Parallel Corpora
resourceName	PPC
urlDownload	-
dateCreation	ongoing work
projectPartner	ULodz /IPIPAN
IPRholder.organizationSho	
rtName	, and as
	Pęzik
contact.Person.givenName	Piotr
contact.Person.email	piotr.pezik@gmail.com
availability	available-unrestricted use
license	various (GNU GPL, CC BY-NC and public domain)
resourceLocation	http://www.clip.waw.pl/Polish_Parallel_Corpora
distributionMedium	download
	attribution
licenseSignatory.Person.po	-
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspecif	translation
ic	
actualUse.actualUse	ongoing work
actualUse.useNLPspecific	ongoing work
description	The corpus will include various parallel resources, including Acquis
	Communautaire, Europarl, OPUS (EMEA, KDE, Open Subtitles), Parasol,
	CORDIS and RAPID news etc.
relevantPublications	-
urlDocumentation	-
resourceType	corpus
resourceSubtype	parallel corpus
mediaType	text
noLanguages	5
multilingualityType	parallel
languageId	pl;en;de;es;fr
size	2 000 000
sizeUnit	word
annotationType	segmentation

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resourceTitle	Polish Spoken Multimedia Corpus
resourceName	SMC
urlDownload	-
	ongoing work
	IPIPAN
IPRholder.organizationSh	
ortName	
	Marciniak
contact.Person.givenNam	Małgorzata
e	
contact.Person.email	mm@ipipan.waw.pl
availability	available-restricted use
license	CC BY-NC
resourceLocation	http://www.clip.waw.pl/Polish_Spoken_Multimedia_Corpus
distributionMedium	download
restrictionsOfUse	attribution
licenseSignatory.Person.p	-
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspecific	speech analysis; discourse analysis; spoken dialogue systems
actualUse.actualUse	NLP applications
	speech analysis; spoken dialogue systems
description	The corpus contains transcripts of spontaneous informal conversations with the original recording files. It is available as TEI P5 encoded spoken Polish data.
	"1. Agnieszka Mykowiecka, Małgorzata Marciniak and Katarzyna Głowińska. ""Automatic Semantic Annotation of Polish Dialogue Corpus"". TSD 2008, September 2008. 2. Agnieszka Mykowiecka, Krzysztof Marasek, Małgorzata Marciniak, Joanna Rabiega-Wiśniewska, Ryszard Gubrynowicz. ""On Construction of Polish Spoken Dialogs Corpus, The 2nd Linguistic Annotation Workshop (The LAW II)"" held in conjunction with LREC 2008, Marrakech, Morocco, May 26-28, 2008."
urlDocumentation	-
- 1	corpus
	speech corpus
mediaType	text; audio
noLanguages	1
multilingualityType	-
languageId	pl
size	2 500 000
sizeUnit	words (approx. 1000 conversations)
annotationType	segmentation, POS

resourceTitle	Polish Spoken Conversational Corpus

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resourceName	PSC C
	http://pelcra.pl/?page_id=3
	ongoing work
1 - 3	ULodz
IPRholder.organizationSho	ULOdz, NKJP
rtName contact.Person.surname	Pęzik
contact.Person.givenName	Piotr
	piotr.pezik@gmail.com
	available-restricted use
license	GNU GPL
resourceLocation	http://www.nkjp.uni.lodz.pl/spoken.jsp
	http://www.nkjp.uni.lodz.pl/spoken.jsp
	shareAlike, attribution
licenseSignatory.Person.po sition	
	human use; NLP applications
foreseenUse.useNLPspecific	representation of casual conversational Polish
actualUse.actualUse	speech research
actualUse.useNLPspecific	NKJP/Utrecht Institute of Linguistics parsing phonological structures
	The Polish Spoken Conversational Corpus was originally a sub-corpus of the spoken part of the PELCRA Reference Corpus of Polish, which has been further expanded withing the National Corpus of Polish project. The corpus is composed of spontaneous natural conversations. After obtaining the participants' permission, the recordings were carefully transcribed and annotated with information about the respondents' sex, age, and educational level. All the original recordings have been digitized so that the conversation may not only be read, but also heard. At present the corpus contains some 1 800,000 words of transcribed speech accompanied by 75 hours of digitized recordings.
	Piotr Pęzik. Język mówiony w NKJP. Podręcznik użytkownika NKJP. PWN, 2011.
urlDocumentation	http://nkjp.uni.lodz.pl/spoken.jsp
- 1	corpus
resourceSubtype	speech corpus
mediaType	text; audio
noLanguages	1
multilingualityType	-
languageId	pl
size	1 500 000
sizeUnit	word
annotationType	segmentation, discourse, sociolinguistic

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resourceTitle	The corpus of frequency dictionary of Polish language of the XX century sixties
resourceName	WKSF
urlDownload	http://clip.ipipan.waw.pl/Polish%20language%20of%20the%20XX%20century%20sixties
dateCreation	ongoing work
projectPartner	IPIPAN
IPRholder.organizationSh	Ida Kurcz, Andrzej Lewicki, Jadwiga Sambor, Krzysztof Szafran and Jerzy
ortName	Woronczak
contact.Person.surname	Ogrodniczuk
contact.Person.givenName	Maciej
contact.Person.email	maciej.ogrodniczuk@ipipan.waw.pl
availability	available-restricted use
license	GNU GPL
resourceLocation	http://clip.ipipan.waw.pl/Polish%20language%20of%20the%20XX%20century%20sixties
distributionMedium	download
restrictionsOfUse	shareAlike
licenseSignatory.Person.p osition	_
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspeci	
actualUse.actualUse	NLP applications
actualUse.useNLPspecific	
description	The corpus was collected for the purpose of creating general frequency
	dictionary of contemporary Polish. The work started in 1967. Partial results were published between 1972 and 1977, the completed dictionary in 1990. The corpus was later augmented in various respects, both by manual editing and automated procedures. Corpus data contain 10,000 samples divided into 5 parts: essays, news, scientific texts, fiction and plays. Every sample is approximately 50 words long, they all come from texts published between 1963 and 1967 and contain bibliographic description of its source. Each word is tagged with its base form and some morphological properties. Sentence boundaries are also marked. Currently the corpus undergoes manual verification of the morphological descriptions.
relevantPublications	1. Kurcz, Ida; Lewicki, Andrzej; Sambor, Jadwiga; Szafran, Krzysztof; Woronczak, Jerzy. Słownik frekwencyjny polszczyzny współczesnej. (In Polish, EN: Frequency dictionary of contemporary Polish). Kraków, 1990. Institute of Polish Philology, Polish Academy of Sciences. 2. Bień, Janusz S.; Woliński, Marcin. Wzbogacony korpus Słownika frekwencyjnego polszczyzny współczesnej. (In Polish, EN: Enhanced corpus of the Frequency dictionary of contemporary Polish). [In:] Prace lingwistyczne dedykowane prof. Jadwidze Sambor. Jadwiga Linde-Usiekniewicz (ed.), pp. 6-10, Warszawa 2003, Faculty of Polish Philology, Warsaw University.
urlDocumentation	http://clip.ipipan.waw.pl/Polish%20language%20of%20the%20XX%20centur y%20sixties
resourceType	corpus
resourceSubtype	reference corpus
mediaType	text
noLanguages	
multilingualityType	-
languageId	pl

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size	500 000
sizeUnit	word
annotationType	segmentation, lemmatization, POS, MSD

resourceTitle	NE resources with gazetteers
resourceName	plNER
urlDownload	DIVER
dateCreation	ongoing work
	ongoing work IPIPAN
projectPartner	
C	IPIPAN/University Tours
hortName	
contact.Person.surname	Savary
contact.Person.givenNam e	Agata
contact.Person.email	agata.savary@univ-tours.fr
availability	available-restricted use
license	GNU GPL
resourceLocation	http://www.clip.waw.pl/plNER
distributionMedium	internetBrowsing/download
restrictionsOfUse	shareAlike
licenseSignatory.Person.	-
position	
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspec	
ific	
actualUse.actualUse	NLP applications
actualUse.useNLPspecifi	
c	
description	The gazetters has been obtained from existing sources and supplemented with
	additional language-specific resources acquired from the Web. Whenever
	appropriate, inflected forms were generated using Morfeusz SGJP generator.
	Gazetteer data was used in the process of named entity annotation of NKJP.
relevantPublications	1. Małgorzata Marciniak, Joanna Rabiega-Wiśniewska, Agata Savary, Marcin
	Woliński, Celina Heliasz, Constructing an Electronic Dictionary of Polish
	Urban Proper Names, w: Mieczysław A. Kłopotek, Adam Przepiórkowski,
	Sławomir T. Wierzchoń, Krzysztof Trojanowski, red., Recent Advances in
	Intelligent Information Systems, Challenging Problems of Science, EXIT,
	Warsaw, 2009, ISBN 978-83-60434-59-8, s. 233–246.
	2. Agata Savary, Joanna Rabiega-Wiśniewska, Marcin Woliński, Inflection of
	Polish Multi-Word Proper Names with Morfeusz and Multiflex, w: Aspects
	of Natural Language Processing, LNCS 5070, s. 111–141, Springer, 2009.
urlDocumentation	Di riatarar Languago i rocessing, Lives 3070, 5. 111–141, Springer, 2009.
resourceType	lexicalConceptualResource
resourceSubtype	lexicon
mediaType	text
noLanguages	1
multilingualityType	-
languageId	pl

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size	229681
sizeUnit	word forms
annotationType	_

resourceTitle	Polish WordNet (Słowosieć)
resourceName	plWordNet
urlDownload	http://plwordnet.pwr.wroc.pl/wordnet/
1-4-0	
dateCreation	ongoing work IPIPAN
r J · · · ·	· · · · · · · · · · · · · · · · · · ·
hortName	Wrocław University of Technology
contact.Person.surname	Piasecki
me	Maciej
contact.Person.email	maciej.piasecki@pwr.wroc.pl
availability	available-restricted use
license	free for non-commercial use; license can be obtained on request
resourceLocation	http://plwordnet.pwr.wroc.pl/wordnet/
distributionMedium	internetBrowsing/download
restrictionsOfUse	academic-nonCommercialUse; commercial use possible
position	Prof. Eugeniusz Rusiński, Wrocław University of Technology
	human use; NLP applications
foreseenUse.useNLPspe cific	various
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspecifi	various (e.g. coreference resolution)
description	Polish WordNet is a network of lexical-semantic relations, an electronic thesaurus with a structure modelled on that of the Princeton WordNet and those constructed in the EuroWordNet project. Polish WordNet describes the meaning of a lexical unit of one or more words by placing this unit in a network of links which represent such relations as synonymy, hypernyny, meronymy etc. To reduce the cost of the project, Polish WordNet has been built semi-automatically. Lexical relations were automatically recognized in large corpora of Polish and suggested to linguists/lexicographers via a graphical interface.
relevantPublications	Maciej Piasecki, Stanisław Szpakowicz, Bartosz Broda. A Wordnet from the Ground Up.
urlDocumentation	http://plwordnet.pwr.wroc.pl/wordnet/
resourceType	lexicalConceptualResource
resourceSubtype	wordnet
mediaType	text
noLanguages	1
multilingualityType	-
languageId	pl
size	20223

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sizeUnit	lemmas (17695 synsets)
annotationType	-

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4.5. Appendix 5 - Serbian

T.J. Appendix J	Serbian
resourceTitle	Corpus of Contemporary Serbian
	SrpKor
	nlp.matf.bg.ac.rs
dateCreation	2002-
projectPartner	UBG
IPRholder.organizationShortName	UBG-MATF
contact.Person.surname	Vitas
contact.Person.givenName	Dusko
contact.Person.email	vitas@matf.bg.ac.rs
availability	available-restricted use
license	CC NC BY
resourceLocation	korpus.matf.bg.ac.rs
distributionMedium	internetBrowsing
restrictionsOfUse	academic-nonCommercialUse
licenseSignatory.Person.po sition	Dusko Vitas
foreseenUse.foreseenUse	human use
foreseenUse.useNLPspecif	various
ic	
actualUse.actualUse	human use
actualUse.useNLPspecific	various
	The Corpus of Contemporary Serbian was initially constructed in cooperation of three institutions: Faculty of Mathematics (coordinator) and Faculty of Philology, University of Belgrade and Faculty of Philosophy, University of Novi Sad. It was partly funded by the Ministry of Education and Science. The list of sources for the corpus contains literature, monographs, daily newspapers, specialist periodicals and journals, manuals and textbooks. The resources represent wide diversity with respect to the subject and genre.
relevantPublications	1. Cvetana Krstev, Duško Vitas, "Corpus and Lexicon - Mutual
	Incompletness", in Proceedings of the Corpus Linguistics Conference, 14-17 July 2005, Birmingham, eds. Pernilla Danielsson and Martijn Wagenmakers, ISSN 1747-9398
urlDocumentation	korpus.matf.bg.ac.rs/prezentacija
resourceType	corpus
resourceSubtype	reference corpus
mediaType	text
noLanguages	1
multilingualityType	-
	SR
size	113000000
<u> </u>	<u> </u>
sizeUnit	word

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resourceTitle	French-Serbian Aligned Corpus
resourceName	SrpFranKor
urlDownload	nlp.matf.bg.ac.rs
dateCreation	1999-
projectPartner	UBG
IPRholder.organizationS hortName	UBG-MATF
contact.Person.surname	Vitas
contact.Person.givenNa me	Dusko
contact.Person.email	vitas@matf.bg.ac.rs
availability	available-restricted use
license	CC NC BY
resourceLocation	korpus.matf.bg.ac.rs
distributionMedium	CD-ROM; internetBrowsing
restrictionsOfUse	academic-nonCommercialUse
licenseSignatory.Person. position	Dusko Vitas
	human use; NLP applications
foreseenUse.useNLPspec ific	various
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspecifi	various
description	The corpus includes French or Serbian source literary texts and their translations. Texts are segment aligned and manually checked to obtain one-to-one alignment.
relevantPublications	1. Duško Vitas, Cvetana Krstev, "Literature and Aligned Texts", in Readings in Multilinguality, eds. Milena Slavcheva, Galia Angelova and Kiril Simov, pp. 148-155, Institute for Parallel Processing, Bulgarian Academy of Sciences, Sofia, Bulgaria, 2006.; 2. Duško Vitas, Cvetana Krstev, Eric Laporte, "Preparation and exploitation of Bilingual Texts", in Lux Coreana, No. 1, pp. 110-132, Han-Seine, 2006.; 3. Duško Vitas, Cvetana Krstev, "Structural derivation and meaning extraction: a comparative study on French-Serbo-Croatian parallel texts", in Meaningful Texts: The Extraction of Semantic Information from Monolingual and Multilingual Corpora, eds. Geoff Barnbrook, Pernilla Danielsson, Michaela Mahlberg, pp. 166-178, The University of Birmingham Press, Birmingham, 2005.
urlDocumentation	korpus.matf.bg.ac.rs/prezentacija
resourceType	corpus
resourceSubtype	parallel corpus
mediaType	text
noLanguages	2
multilingualityType	parallel
languageId	FR; SR

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size	1500 000
sizeUnit	word (in Serbian)
annotationType	segmentation; PoS tagging

resourceTitle	English-Serbian Aligned Corpus
resourceName	SrpEngKor
urlDownload	nlp.matf.bg.ac.rs
	, ·
dateCreation	2004-
projectPartner	UBG
IPRholder.organizationS hortName	UBG-MATF
contact.Person.surname	Krstev
contact.Person.givenNam	Cvetana
contact.Person.email	cvetana@matf.bg.ac.rs
availability	available-restricted use
license	CC NC BY
resourceLocation	korpus.matf.bg.ac.rs
distributionMedium	internetBrowsing
restrictionsOfUse	academic-nonCommercialUse
licenseSignatory.Person.	Dusko Vitas
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspec ific	various
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspecifi c	various
description	The corpus includes English or Serbian source texts from the domains: education, health, legislation, jurisprudence. Texts are segment and lemmatized and PoS tagged, aligned and manually checked.
relevantPublications	1. Zoran Popović, Taggers applied on texts in Serbian, Infotheca, Vol. XI (2), Belgrade, 2010
urlDocumentation	korpus.matf.bg.ac.rs/prezentacija
resourceType	corpus
resourceSubtype	parallel corpus
mediaType	text
noLanguages	2
multilingualityType	parallel
languageId	EN; SR
size	1 000 000
sizeUnit	word (in Serbian)
annotationType	segmentation; PoS tagging; lemmatization (Serbian)

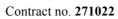
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resourceTitle	Serbian MSD Annotated Corpus
resourceName	SrpLemKor
urlDownload	nlp.matf.bg.ac.rs
dateCreation	2011-
projectPartner	UBG
IPRholder.organizationS hortName	UBG-MATF
contact.Person.surname	Utvić
contact.Person.givenNa me	Miloš
contact.Person.email	misko@matf.bg.ac.rs
availability	available-restricted use
license	CC NC BY
resourceLocation	korpus.matf.bg.ac.rs
distributionMedium	internetBrowsing
restrictionsOfUse	academic-nonCommercialUse
licenseSignatory.Person.	Dusko Vitas
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspec ific	various
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspecifi c	various
description	The Serbian MSD Annotated Corpus will consist of a sample of various texts from SrpKor. It will be lemmatized and MSD tagged.
relevantPublications	-
urlDocumentation	korpus.matf.bg.ac.rs/prezentacija
resourceType	corpus
resourceSubtype	corpus
mediaType	text
noLanguages	1
multilingualityType	-
languageId	SR
size	5 000 000
sizeUnit	word
annotationType	segmentation; lemmatization; PoS; MSD

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resourceTitle	Multilingual Edition of Verne's Novel "Around the World in 80 Days"
resourceName	Verne80days
urlDownload	nlp.matf.bg.ac.rs
dateCreation	1998-
projectPartner	UBG
IPRholder.organizationS	UBG-MATF
hortName	
contact.Person.surname	Vitas
contact.Person.givenNam e	Dusko
contact.Person.email	vitas@matf.bg.ac.rs
availability	available-restricted use
license	CC NC BY
resourceLocation	korpus.matf.bg.ac.rs
distributionMedium	DVD-R
restrictionsOfUse	academic-nonCommercialUse
licenseSignatory.Person. position	Dusko Vitas
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspec ific	
	human use; NLP applications
actualUse.useNLPspecifi	various
description	This edition contains 25 translations of Jules Verne's novel "Around the World in 80 Days". Presently 15 of these translations are one-to-one segment aligned with the source text, and the alignment is manually checked. All other translations will also be aligned.
relevantPublications	1. Duško Vitas, Svetla Koeva, Cvetana Krstev, Ivan Obradović, "Tour du monde through the dictionaries", Actes du 27eme Colloque International sur le Lexique et la Gammaire, L'Aquila, 10-13 septembre 2008, eds. M. Constant, T, Nakamura, M. De Gioia, S. Vecchiato, pp.249-256, Universite Paris-Est, Institut Gaspard-Monge, 2008.; 2. Emeline Lecuit, Denis Maurel, Duško Vitas, Cvetana Krstev, "Temporal Expressions: Comparisons in a Multilingual Corpus", in Proceedings of 4th Language & Technology Conference, November 6-8, 2009, Poznań, Poland, ed. Zygmunt Vetulani, IMPRESJA Widawnictwa Elektroniczne S.A., Poznań, 2009.
urlDocumentation	korpus.matf.bg.ac.rs/prezentacija
resourceType	corpus
resourceSubtype	parallel corpus
mediaType	text
noLanguages	25
multilingualityType	parallel
languageId	FR; SR; EN; DE; PL; BG; HU; CR; SI; SK; RO; RU; GR; AL; PT; ES; IT; TR; CN; NL
size	71859
sizeUnit	word (in French)

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annotationType	segmentation

resourceTitle	Serbian Wordnet
resourceName	SrpWN
urlDownload	nlp.matf.bg.ac.rs
dateCreation	2002-
projectPartner	UBG
IPRholder.organizationS	UBG-MATF
hortName	
contact.Person.surname	Pavlović-Lažetić
contact.Person.givenNam	Gordana
e	
contact.Person.email	gordana@matf.bg.ac.rs
availability	available-restricted use
license	CC NC BY
resourceLocation	korpus.matf.bg.ac.rs
distributionMedium	internetBrowsing; DVD-R
restrictionsOfUse	academic-nonCommercialUse
licenseSignatory.Person.	Gordana Pavlović-Lažetić
position	
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspec	various
ific	
	human use; NLP applications
actualUse.useNLPspecifi	various
c	
description	Serbian WordNet (SrpWN) represents a lexical semantic network,
	containing synsets with glosses and various semantic relations, such as
	antonymy, meronymy, causation, category domain, etc. Currently the
	Serbian Wordnet contains near to 16,000 synsets. The initial version of the
	Serbian Wordnet was produced in the scope of the EU-funded Balkanet
	project. Through interlingual relations it is connected to English
	Wordnet, and wordnets of many other languages.
relevantPublications	1. Ivan Obradović, Cvetana Krstev, Gordana Pavlović-Lažetić, Duško Vitas,
	"Corpus Based Validation of WordNet Using Frequency Parameters", in
	Proceedings of the GWC : Second International WordNet Conference, Brno,
	Czech Republic, January 20-23, 2004, eds. P. Sojka, K. Pala, P. Smrž, Ch.
	Fellbaum, P. Vossen, ed. 1, pp. 181-186, Masaryk University, Brno, 2004.;
	2. Svetla Koeva, Cvetana Krstev, Duško Vitas, "Morpho-semantic Relations
	in WordNet - a Case Study for two Slavic Languages", In the Proceedings
	of Global WordNet Conference 2008, eds. Attila Tanacs et al, University of
	Szeged, Department of Informatics, pp. 239-253, 2008.;3. Cvetana Krstev,
	Ivan Obradović, Duško Vitas, "An Approach to the Development of
	Language Specific Concepts in Wordnets", In Southern Journal of
	Linguistics, Special Theme: South Slavic and Balkan Languages, Mila Dimitrova-Vulchanova (ed.), Vo. 29, No. 1/2, pp. 106-118, Department of
	Modern Linguistics, University of Mississippi, 2008.
urlDocumentation	korpus.matf.bg.ac.rs/prezentacija
resourceType	lexicalConceptualResource
resourceSubtype	wordnet
mediaType	text
птесна г урс	ICAL

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noLanguages	1
multilingualityType	-
languageId	SR
size	15 200
sizeUnit	synset (25579 words)
annotationType	-

resourceTitle	Serbian Morphological Dictionary
resourceName	Stan Morphological Dictionary Standard Morphological Dictionary
urlDownload	nlp.matf.bg.ac.rs
dateCreation	2000-
	UBG
projectPartner	
\mathcal{E}	UBG-MATF
hortName	TZ ,
contact.Person.surname	Krstev
contact.Person.givenNa	Cvetana
me	
contact.Person.email	cvetana@matf.bg.ac.rs
availability	available-restricted use
license	CC NC BY
resourceLocation	korpus.matf.bg.ac.rs
distributionMedium	DVD-R
restrictionsOfUse	academic-nonCommercialUse
licenseSignatory.Person.	
position	
foreseenUse.foreseenUse	NLP applications
foreseenUse.useNLPspec	
ific	
actualUse.actualUse	NLP applications
actualUse.useNLPspecifi	various
c	
description	The Morphological Dictionary of Serbian is a
	dictionary that consists of approximately 90 000 simple lemmas and 6,500
	multi-word lemmas that allows automatic generation of inflected forms
	using finite state transducers (approximately 4 million simple
	word forms). All produced word forms are supplied by detailed morpholo-
	syntactic description. Besides that, all lemmas are equipped with semantic,
	syntactic, domain and other codes.
relevantPublications	1. Cvetana Krstev, Duško Vitas, Gordana Pavlović-Lažetić, "Resources and
	Methods in the Morphosyntactic Processing of Serbo-Croatian", In Formal
	Description of Slavic Languages: The Fifth Conference, Leipzig 2003,
	Zybatow, Gerhild et al. (eds.), Peter Lang: Frankfurt am Main, pp. 3-17,
	2008.; 2. Cvetana Krstev, Ranka Stanković, Ivan Obradović, Duško Vitas,
	Miloš Utvić, "Automatic Construction of a Morphological Dictionary of
	Multi-Word Units", in Proceedings of the 7th International Conference on
	NLP, IceTAL 2010, Reykjavik, Iceland, August 16-18, 2010. eds. Hrafn
	Loftsson, Eiríkur Rögnvaldsson, Sigrún Helgadóttir, Lecture Notes in
	Computer Science 6233 Springer 2010, ISBN 978-3-642-14769-2, pp. 226-
	237, 2010.
urlDocumentation	korpus.matf.bg.ac.rs/prezentacija

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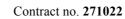




resourceType	lexicalConceptualResource
resourceSubtype	lexicon
mediaType	text
noLanguages	1
multilingualityType	-
languageId	SR
size	96 500
sizeUnit	lemma
annotationType	-

resourceTitle	Serbian Named Entity Resources
resourceName	SrpNER
urlDownload	nlp.matf.bg.ac.rs
dateCreation	2005-
projectPartner	UBG
IPRholder.organizationS	UBG-MATF
hortName	
contact.Person.surname	Krstev
contact.Person.givenNa	Cvetana
me	
contact.Person.email	cvetana@matf.bg.ac.rs
availability	available-restricted use
license	CC NC BY
resourceLocation	korpus.matf.bg.ac.rs
distributionMedium	DVD-R
restrictionsOfUse	academic-nonCommercialUse
licenseSignatory.Person.	Dusko Vitas
position	
foreseenUse.foreseenUse	
foreseenUse.useNLPspec ific	various
	NLP applications
actualUse.useNLPspecifi	
c	
description	The Serbian Named Entity resources comprise of
•	dictionaries that contain of approximately 35 000 simple and multi-word
	unit proper names (lemmas) that allow automatic generation of inflected
	forms using finite state transducers. All produced word forms are supplied
	by detailed morpholo-syntactic description. Besides that, all lemmas are
	equiped with various semantic codes appropriate to named entities. For full
	and precise recognition of named entities a large collection of finite state
	transducers is developed.

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relevantPublications	1. Gordana Pavlović-Lažetić, Duško Vitas, Cvetana Krstev, "Towards Full Lexical Recognition", in Proceedings of the 7th International Conference TSD 2004: Text, Speech and Dialogue, Brno, Czech Republic, September 8-11, 2004, eds. Petr Sojka, Ivan Kopček, Karel Pala, serija "Lecture Notes in Artificial Intelligence": Subseries of Lecture Notes in Computer Science, eds. J.G. Carbonell, J. Siekmann, pp. 179-186, Springer, Berlin, Heidelberg, 2004.; 2. Cvetana Krstev, Duško Vitas, Ivan Obradović, Miloš Utvić, "E-Dictionaries and Finite-State Automata for the Recognition of Named Entities", FSMNLP, Blois 2011.
urlDocumentation	korpus.matf.bg.ac.rs/prezentacija
resourceType	lexicalConceptualResource
resourceSubtype	lexicon
mediaType	text
noLanguages	1
multilingualityType	-
languageId	SR
size	35 000
sizeUnit	lemma
annotationType	-

resourceTitle	AlfaNum Morphologic Dictionary of Serbian
resourceName	AlfaNum MD
urlDownload	alfanum.ftn.uns.ac.rs
dateCreation	2001 – 2010
projectPartner	AlfaNum
IPRholder.organizationS hortName	AlfaNum - Speech Technologies, Novi Sad
contact.Person.surname	Sečujski
contact.Person.givenNam e	Milan
contact.Person.email	secujski@uns.ac.rs
availability	notAvailable
license	-
resourceLocation	alfanum.ftn.uns.ac.rs
distributionMedium	-
restrictionsOfUse	-
licenseSignatory.Person. position	-
foreseenUse.foreseenUse	NLP applications
foreseenUse.useNLPspec ific	development of various speech technologies
actualUse.actualUse	NLP applications
	development of various speech technologies

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description	This resource is developed for the purpose of linguistic research and development of commercial applications of speech and other language technologies. It consists of 100,517 lexemes (3,888,407 inflected forms)
relevantPublications	1. Milan Sečujski: "Automatic Part-of-Speech Tagging of Texts in Serbian" (PhD Thesis), Faculty of Technical Sciences, Novi Sad, 2009
urlDocumentation	no online documentation provided
resourceType	lexicalConceptualResource
resourceSubtype	lexicon
mediaType	text
noLanguages	1
multilingualityType	-
languageId	SR
size	100517
sizeUnit	lemma
annotationType	-

resourceTitle	AlfaNum Text Corpus of Serbian
resourceName	AlfaNumKor
urlDownload	alfanum.ftn.uns.ac.rs
dateCreation	2006 – 2009
projectPartner	AlfaNum
IPRholder.organizationS hortName	AlfaNum - Speech Technologies, Novi Sad
contact.Person.surname	Sečujski
contact.Person.givenNa me	Milan
contact.Person.email	secujski@uns.ac.rs
availability	notAvailable
license	-
resourceLocation	alfanum.ftn.uns.ac.rs
distributionMedium	-
restrictionsOfUse	-
licenseSignatory.Person. position	-
foreseenUse.foreseenUse	NLP applications
foreseenUse.useNLPspe cific	development of various speech technologies
actualUse.actualUse	NLP applications
actualUse.useNLPspecifi c	development of various speech technologies
description	This resource is developed for the purpose of linguistic research and development of commercial applications of speech and other language technologies. It consists of 200,027 words with accentuation and PoS tags.
relevantPublications	1. Milan Sečujski: "Automatic Part-of-Speech Tagging of Texts in Serbian" (PhD Thesis), Faculty of Technical Sciences, Novi Sad, 2009

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urlDocumentation	no online documentation provided
resourceType	corpus
resourceSubtype	corpus
mediaType	text
noLanguages	1
multilingualityType	-
languageId	SR
size	200027
sizeUnit	word
annotationType	PoS, accentuation

resourceTitle	AlfaNum Speech Databases for ASR
resourceName	AlfaNum ASR
urlDownload	alfanum.ftn.uns.ac.rs
dateCreation	1996 –
projectPartner	AlfaNum
	AlfaNum - Speech Technologies, Novi Sad
hortName	
contact.Person.surname	Delić
contact.Person.givenNa	Vlado
me	
contact.Person.email	vdelic@uns.ac.rs
availability	partially available-unrestricted use; partially notAvailable
license	-
resourceLocation	alfanum.ftn.uns.ac.rs
distributionMedium	-
restrictionsOfUse	partially available-unrestricted use; partially notAvailable
licenseSignatory.Person.	-
position	
foreseenUse.foreseenUse	NLP applications
foreseenUse.useNLPspec	automatic speech recognition
ific	
actualUse.actualUse	NLP applications
actualUse.useNLPspecifi	automatic speech recognition
c	
description	This resource consists of five speech databases: 1. W50S200 contains studio
	recordings of 200 speakers (53 words per speaker); 2. W150tf1000 contains
	recordings over the telephone channel (150 words, 600-1000 pronunciations
	per word); 3. AN_SPEAKER contains office recordings using computer
	microphone of 44 speakers (29 male, 15 female); 4. S70W100s120 contains
	recordings originally done in a studio using reel-to-reel tape recorder, later
	converted to digital format (120 speakers, 70 sentences + 100 isolated
	utterances per speaker); 5. AlfaNum SpeechDatII(E) contains recordings
	over the telephone channel (500 speakers, 50 utterances per speaker,
	according to the SpeechDatII standard). Databases AN_SPEAKER and
	S70W100s120 are publicly available, W50S200, W150tf1000 and AlfaNum
	SpeechDatll(E) are not available.

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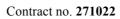




relevantPublications	1. Vlado Delić: "Serbian Speech Databases Recorded Within the AlfaNum Project", Proceedings of DOGS 2000, Novi Sad, 2000, pp. 29-32; 2. Ivan Jokić, Tomislav Dobrijević, Nikša Jakovljević, Vlado Delić: "A Description of a Speech Database intended for Speaker Recognition in Serbian", Proceedings of TELFOR 2009, Belgrade, 2009.; 3. Nikola Đurić, Darko Pekar, Ljubomir Jovanov: "Structure of the Serbian SpeechDat(E) Database Recorded over Public Telephone Network"; Proceedings of DOGS 2002, Becej, Serbia, 2002, pp. 57-60.
urlDocumentation	no online documentation provided
resourceType	corpus
resourceSubtype	speech corpus
mediaType	audio
noLanguages	1
multilingualityType	-
languageId	SR
size	-
sizeUnit	-
annotationType	phoneme labels, markers of inaccurate pronunciation

resourceTitle	AlfaNum Speech Databases for TTS
resourceName	AlfaNum TTS
urlDownload	alfanum.ftn.uns.ac.rs
dateCreation	2000-
projectPartner	AlfaNum
IPRholder.organizationS	AlfaNum - Speech Technologies, Novi Sad
hortName	
contact.Person.surname	Delić
contact.Person.givenNa	Vlado
me	
contact.Person.email	vdelic@uns.ac.rs
availability	notAvailable
license	-
resourceLocation	alfanum.ftn.uns.ac.rs
distributionMedium	-
restrictionsOfUse	-
licenseSignatory.Person.	-
position	
foreseenUse.foreseenUse	NLP applications
foreseenUse.useNLPspe	text-to-speech synthesis
cific	
actualUse.actualUse	NLP applications
actualUse.useNLPspecifi	text-to-speech synthesis
С	

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A. a. ami meti a m	This resource consists of five greath databases, 1 TTClab 2-2s contains
description	This resource consists of five speech databases: 1. TTSlab2g2s contains corpus of diphones and dissylables isolated from logatomes and meaningful
	words recorded in a studio (961 diphone and 625 dissylables); 2.
	TTSIsMarina, 3. TTSIsSandra, and 4. TTSIsMarija represent corpora
	composed of a collection of meaningful texts and meaningless word
	sequences recorded in a studio (each of them comprising of approximately 2
	hours of speech); 5. TTSIsSnezana represent corpora composed of a
	collection of meaningful texts recorded in a studio (Approximately 12 hours
	of speech).
relevantPublications	1. Milan Secujski, Radovan Obradovic, Darko Pekar, Ljubomir Jovanov,
	and Vlado Delic: "AlfaNum System for Speech Synthesis in Serbian
	Language"; Proceedings of TSD 2002, Brno, Czech Republic, 2002, pp.
	237-244.; 2. Milan Sečujski, Vlado Delić, Darko Pekar, Radovan Obradović,
	Dragan Knežević: "An Overview of the AlfaNum Text-to-Speech Synthesis
	System", Proceedings of SPECOM 2007, Moscow, Russia, 2007, pp. 3-7
	(Add. Vol.); 3. Milan Sečujski, Darko Pekar, Dragan Knežević, Vladimir
	Svrkota, "Prosody prediction in speech synthesis based on regression trees",
	Proceedings of SinFonIJA 2010, Novi Sad, 2010.
urlDocumentation	no online documentation provided
resourceType	corpus
resourceSubtype	speech corpus
mediaType	audio
noLanguages	1
multilingualityType	-
languageId	SR
size	18
sizeUnit	hour
annotationType	phoneme labels, position of stress, markers of inaccurate pronunciation

resourceTitle	Digital Archive of the Institute for Balkan Studies
resourceName	DABI
urlDownload	www.balkaninstitut.com
dateCreation	2007 -
projectPartner	BI-SANU
IPRholder.organizationS	BI-SANU
hortName	
contact.Person.surname	Sikimić
contact.Person.givenNam	Biljana
e	
contact.Person.email	Biljana.Sikimic@bi.sanu.ac.rs
availability	available-restricted use
license	according to regulations of the Institute
resourceLocation	www.balkaninstitut.com
distributionMedium	DVD-R
restrictionsOfUse	academic-nonCommercialUse

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licenseSignatory.Person.	Biljana Sikimić
position	
foreseenUse.foreseenUse	human use
foreseenUse.useNLPspec	various
ific	
actualUse.actualUse	human use
actualUse.useNLPspecifi	various
c	
description	This database contains digitized audio, video, photo and textual
	ethnographic material collected in Serbia in the scope of the field research.
relevantPublications	-
urlDocumentation	no online documentation provided
resourceType	corpus
resourceSubtype	multimedia database
mediaType	multimedia
noLanguages	4
multilingualityType	-
languageId	SR; RO; BG; ROM
size	2000
sizeUnit	hour
annotationType	

resourceTitle	Corpus of Serbian Language
resourceName	CSL
urlDownload	www.serbian-corpus.edu.rs/ns/eindex.htm
dateCreation	1996 -
projectPartner	UBG-FF
IPRholder.organizationS hortName	UBG-FF
contact.Person.surname	Kostić
contact.Person.givenNam e	Aleksandar
contact.Person.email	akostic@f.bg.ac.yu
availability	available-restricted use
license	according to regulations of the Laboratory
resourceLocation	www.serbian-corpus.edu.rs/ns/eindex.htm
distributionMedium	-
restrictionsOfUse	academic-nonCommercialUse
licenseSignatory.Person.	Aleksandar Kostić
foreseenUse.foreseenUse	human use
foreseenUse.useNLPspec	various
ific	
actualUse.actualUse	human use
actualUse.useNLPspecifi	various
С	

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description	The Corpus of Serbian Language CSL was compiled from a sample of 11
uescription	
	million words and spans the Serbian language from the 12th century to the
	present day. Each word in the CSL is manually tagged for its grammatical
	status (at the level of inflected morphology), number of graphemes and
	syllables and phonological structure. The text is also tagged for the
	beginning and end points of sentences and paragraphs. The system of
	tagging consists of about 2000 grammatical (inflected) forms.
relevantPublications	1. Ševa Nada, Kostić Aleksandar Đ., Annotated corpus and the empirical
	evaluation of probability estimates of grammatical forms, Psihologija, 2003,
	vol. 36, iss. 3, pp. 255-270
urlDocumentation	no online documentation provided
resourceType	corpus
resourceSubtype	corpus
mediaType	text
noLanguages	1
multilingualityType	-
languageId	SR
size	11000000
sizeUnit	word
annotationType	segmentation; PoS; lemmatized
_	

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4.6. Appendix 6 - Slovak

resourceTitle	Slovak National Corpus
resourceName	prim
urlDownload	http://korpus.juls.savba.sk
dateCreation	ongoing work
projectPartner	LSIL
	LSIL/various
hortName	ESIL/ various
contact.Person.surname	Garabík
contact.Person.givenNa	Radovan
me	rado van
contact.Person.email	radovan.garabik@kassiopeia.juls.savba.sk
availability	available (pseudocorpus)
license	other
resourceLocation	LSIL
distributionMedium	internetBrowsing
restrictionsOfUse	academic-nonCommercialUse
licenseSignatory.Person.	director
position	
	human use; NLP applications
foreseenUse.useNLPspec ific	various
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspecifi	
description	The Slovak National Corpus (SNK) is a representative corpus of
description	contemporary Slovak language written texts. SNK currently contains about
	770 million words from broad variety of texts published since 1955 (1953
	being the time of most recent substantial Slovak language orthography
	reform). The corpus is automatically lemmatised and MSD tagged. The
	documents are annotated with their genre, style and other bibliographic
	information. There are specialised subcorpora containing fiction,
	informational texts, professional texts, original Slovak fiction, texts written
	from 1955 to 1989, and a balanced subcorpus.
relevantPublications	ŠIMKOVÁ, Mária: Slovenský národný korpus – východiská a plány. In:
	Slovenčina na začiatku 21. storočia. Ed. Mária Imrichová. Prešov: Prešovská
	univerzita, Fakulta humanitných a prírodných vied 2004, p. 150 – 158.;
	HORÁK, Alexander, GIANITSOVÁ, Lucia, ŠIMKOVÁ, Mária,
	ŠMOTLÁK, Martin, GARABÍK, Radovan: Slovak National Corpus. In:
	Text, Speech and Dialogue. 7th International Conference TSD 2004.
	Proceedings. Ed. P. Sojka, I. Kopeček, K. Pala. Berlin, Heidelberg: Springer
	– Verlag 2004, p. 89 – 94.; GARABÍK, Radovan: Štruktúra dát v
	Slovenskom národnom korpuse a ich vonkajšia anotácia. In: Slovenčina na
	začiatku 21. storočia. Ed. Mária Imrichová. Prešov: Prešovská univerzita,
ID.	Fakulta humanitných a prírodných vied 2004, p. 164 – 173.
urlDocumentation	http://korpus.juls.savba.sk
resourceType	corpus
resourceSubtype	reference corpus
mediaType	text
noLanguages	1
multilingualityType	-

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languageId	slk
size	7 700 000
sizeUnit	token
annotationType	segmentation; lemmatization; PosTagging; MSD

resourceTitle	Corpus of Spoken Slovak
resourceName	hovor
urlDownload	https://data.juls.savba.sk/oral/
dateCreation	ongoing work
projectPartner	LSIL
IPRholder.organizationS	LSIL
hortName	
	Gajdošová
contact.Person.givenNa	Katarína
me	
contact.Person.email	katarinag@korpus.juls.savba.sk
availability	available-unrestricted use
license	GNU FDL v1.3, Affero GPL v3, CC-BY-SA
resourceLocation	LSIL
distributionMedium	internetBrowsing
restrictionsOfUse	-
licenseSignatory.Person.	director
position	
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspe cific	various
actualUse.actualUse	human use
actualUse.useNLPspecifi	_
description	Corpus of spoken Slovak is a corpus of sound recordings of different types
	of speech, with the emphasis on spontaneous speech. The recordings are transcribed orthographically and phonemically.
relevantPublications	GARABÍK, Radovan, RUSKO, Milan: Corpus of Spoken Slovak Language.
	In: Computer Treatment of Slavic and East European Languages. Proceedings of the conference Slovko 2007. Eds. J. Levická, R. Garabík. Brno: Tribun 2007.; GARABÍK, Radovan, KARČOVÁ, Agáta, ŠIMKOVÁ, Mária, GAJDOŠOVÁ, Katarína: Hovorený korpus slovenčiny. In: Čeština v mluveném korpusu. Ed. M. Kopřivová, M. Waclawičová. Praha: Nakladatelství Lidové noviny 2008, p. 227 – 233.
urlDocumentation	https://data.juls.savba.sk/oral/
resourceType	
resourceSubtype	-
mediaType	-
noLanguages	
multilingualityType	-
languageId	-
size	-
sizeUnit	-

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annotationType	-

resourceTitle	Slovak Morphological Lexicon
resourceName	ma
urlDownload	https://data.juls.savba.sk/ma/
	nttps://data.juis.suvod.sk/mu/
dateCreation	-
projectPartner	LSIL
IPRholder.organizationS	LSIL/various
hortName	
	Garabík
contact.Person.givenNam	Radovan
e	
contact.Person.email	radovan.garabik@kassiopeia.juls.savba.sk
availability	available-unrestricted use
license	GNU FDL v1.3, Affero GPL v3, CC-BY-SA
resourceLocation	LSIL
distributionMedium	internetBrowsing; download
restrictionsOfUse	attribution; shareAlike
licenseSignatory.Person.	director
foreseenUse.foreseenUse	human use; NLP applications
	morphosyntactic analysis
ific	Transfer and the second
actualUse.actualUse	human use; NLP applications
actualUse.useNLPspecifi	
c	
description	The lexicon contains full paradigms of 77000 lemmas, together with MSD
	tags, as used in the Slovak National Corpus. The lexicon serves as a basis
	for automatic morphological analysis and desambiguation.
relevantPublications	GARABÍK, Radovan: Slovak morphology analyzer based on Levenshtein
	edit operations. In: Proceedings of the WIKT'06 conference, Bratislava
	2006, p. 2 – 5.; Garabík, Radovan: Storing Morphology Information in a
	Wiki. In: Lexicographic Tools and Techniques. Moscow: IITP RAS 2008, p.
	55 – 59.
urlDocumentation	http://korpus.juls.savba.sk/morpho.html
resourceType	lexicalConceptualResource
resourceSubtype	lexicon
mediaType	text
noLanguages	1
multilingualityType	-
languageId	slk
size	77 000
sizeUnit	lemma
annotationType	MSD

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resourceTitle	Slovak Treebank
resourceName	Slovak Treebank
urlDownload	-
dateCreation	-
projectPartner	LSIL
IPRholder.organizationS hortName	LSIL
	Gajdošová
me	Katarína
contact.Person.email	katarinag@korpus.juls.savba.sk
availability	available-restricted use
license	ANA +NC
resourceLocation	LSIL
distributionMedium	-
restrictionsOfUse	academic-nonCommercialUse
licenseSignatory.Person. position	director
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspe cific	parsing
actualUse.actualUse	human use
actualUse.useNLPspecifi c	parsing
description	Slovak language treebank consists of 50000 manually syntactically annotated sentences, using the Prague Dependency Treebank methodology (analytical level). Most of the sentences has been annotated by two independent annotators.
relevantPublications	ŠIMKOVÁ, Mária, GARABÍK, Radovan: Синтаксическая разметка в Словацком национальном корпусе. In: Труды международной конференции Корпусная лингвистика — 2006. Sankt-Petersburg: St. Petersburg University Press 2006, p. 389 — 394.; ŠIMKOVÁ, Mária, GAJDOŠOVÁ, Katarína: Slovenský závislostný korpus. In: Gramatika a korpus 2007. Ed. F. Štícha, M. Fried. Praha: Academia 2008. p. 135 — 141.
urlDocumentation	-
resourceType	lexicalConceptualResource
resourceSubtype	treebank
mediaType	text
noLanguages	1
multilingualityType	-
languageId	slk
size	50 000
sizeUnit	sentence
annotationType	segmentation; lemmatization; PosTagging; MSD; dependency analysis

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resourceTitle	Slovak WordNet
resourceName	wn
urlDownload	-
dateCreation	-
projectPartner	LSIL
IPRholder.organizationS	LSIL
hortName	
	Garabík
contact.Person.givenNa me	Radovan
contact.Person.email	radovan.garabik@kassiopeia.juls.savba.sk
availability	available-unrestricted use
license	-ВҮ
	LSIL
distributionMedium	internetBrowsing; download
restrictionsOfUse	-
licenseSignatory.Person. position	director
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspecific	semantic analysis
	human use
actualUse.useNLPspecifi c	_
	Slovak WordNet is a a network of lexical-semantic relations, an electronic thesaurus with a structure modelled on that of the Princeton WordNet. The WordNet describes the meaning of a lexical unit of one or more words by placing this unit in a network of links which represent such relations as synonymy, hypernyny, meronymy etc. The Slovak WordNet has been built semi-automatically, using information from bilingual Slovak-English dictionary, and the synsets were then manually proofread. The Slovak synsets are mapped to equivalent English Princeton WordNet semantic equivalents, and contain translation into German, Polish and Lithuanian.
relevantPublications	Radovan Garabík: Slovak National Corpus tools and resources. In: Proceedings of the 5th Workshop on Intelligent and Knowledge oriented Technologies (WIKT 2010). Eds. Laclavík, M., Hluchý, L., November 2010, Bratislava
urlDocumentation	-
resourceType	lexicalConceptualResource
resourceSubtype	wordnet
mediaType	text
noLanguages	4
multilingualityType	
languageId	slk; pol; deu;lit
size	12 500
sizeUnit	synset
annotationType	

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resourceTitle	Slovak -English Parallel Corpus
resourceName	sk-en
urlDownload	-
dateCreation	ongoing work
projectPartner	LSIL
IPRholder.organizationSh	LSIL/various
ortName	
contact.Person.surname	Garabík
contact.Person.givenNam e	Radovan
contact.Person.email	radovan.garabik@kassiopeia.juls.savba.sk
availability	available (pseudocorpus)
license	other
resourceLocation	LSIL
distributionMedium	internetBrowsing
restrictionsOfUse	academic-nonCommercialUse
licenseSignatory.Person.position	director
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspec ific	machine translation
actualUse.actualUse	NLP
actualUse.useNLPspecifi c	machine translation
description	The corpus contains original English fiction texts and their Slovak translations, with automatically aligned sentences.
relevantPublications	-
urlDocumentation	-
resourceType	corpus
resourceSubtype	parallel corpus
mediaType	text
noLanguages	2
multilingualityType	parallel
languageId	slk; eng
size	1 500 000
sizeUnit	sentence
annotationType	segmentation; lemmatization; PosTagging; MSD; alignment

resourceTitle	Slovak –Czech Parallel Corpus
resourceName	sk-cs
urlDownload	
dateCreation	ongoing work
projectPartner	LSIL
IPRholder.organizationS	LSIL/various
hortName	

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contact.Person.surname	Garabík
contact.Person.givenNa	Radovan
me	
contact.Person.email	radovan.garabik@kassiopeia.juls.savba.sk
availability	available (pseudocorpus)
license	other
resourceLocation	LSIL
distributionMedium	internetBrowsing
restrictionsOfUse	academic-nonCommercialUse
licenseSignatory.Person. position	director
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspecific	machine translation
actualUse.actualUse	human use; NLP
actualUse.useNLPspecifi c	machine translation
description	The corpus contains mostly fiction translated between Slovak and Czech (in both direction), with small amount of non-fiction texts and some translations from third language into both Czech and Slovak. The texts are automatically sentence-aligned, with some amount of texts aligned manually.
relevantPublications	-
urlDocumentation	-
resourceType	corpus
resourceSubtype	parallel corpus
mediaType	text
noLanguages	2
multilingualityType	parallel
languageId	slk; ces
size	700 000
sizeUnit	sentence
annotationType	segmentation; lemmatization; PosTagging; MSD; alignment

resourceTitle	Slovak Web Corpus
resourceName	sk-web
urlDownload	-
dateCreation	ongoing work
projectPartner	LSIL
IPRholder.organizationS hortName	LSIL/various
contact.Person.surname	Garabík
contact.Person.givenNam	Radovan
e	
contact.Person.email	radovan.garabik@kassiopeia.juls.savba.sk
availability	available (pseudocorpus)
license	other

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resourceLocation	LSIL
distributionMedium	internetBrowsing
restrictionsOfUse	academic-nonCommercialUse
licenseSignatory.Person.position	director
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspec ific	various
actualUse.actualUse	human use; NLP
actualUse.useNLPspecifi c	various
description	Web corpus contains texts downloaded from the .sk domain. The texts are automatically lemmatized and morphologically tagged.
relevantPublications	-
urlDocumentation	-
resourceType	corpus
resourceSubtype	corpus
mediaType	text
noLanguages	1
multilingualityType	-
languageId	slk
size	90000000
sizeUnit	token
annotationType	segmentation; lemmatization; PosTagging; MSD

resourceTitle	Slovak Legal Texts Corpus
resourceName	legal
urlDownload	-
dateCreation	2011
projectPartner	LSIL
IPRholder.organizationS	LSIL; MS SR
hortName	
contact.Person.surname	Garabík
contact.Person.givenNam	Radovan
e	
contact.Person.email	radovan.garabik@kassiopeia.juls.savba.sk
availability	available (pseudocorpus)
license	other
resourceLocation	LSIL
distributionMedium	internetBrowsing
restrictionsOfUse	-
licenseSignatory.Person. position	director
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspec ific	various

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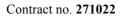




actualUse.actualUse	human use; NLP
actualUse.useNLPspecifi	various
c	
description	Corpus of legal texts contains the current (2011) body of Slovak Republic
	laws. The corpus has been prepared in collaboration with the Ministry of
	Justice of the Slovak Republic.
relevantPublications	-
urlDocumentation	-
resourceType	corpus
resourceSubtype	corpus
mediaType	text
noLanguages	1
multilingualityType	-
languageId	slk
size	146000000
sizeUnit	token
annotationType	segmentation; lemmatization; PosTagging; MSD

resourceTitle	Slovak –Russian Parallel Corpus
resourceName	sk-ru
urlDownload	http://korpus.juls.savba.sk/parus/
dateCreation	2006
projectPartner	LSIL
IPRholder.organizationS hortName	LSIL/various
contact.Person.surname	Garabík
contact.Person.givenNam e	Radovan
contact.Person.email	radovan.garabik@kassiopeia.juls.savba.sk
availability	available (pseudocorpus)
license	other
resourceLocation	LSIL
distributionMedium	internetBrowsing
restrictionsOfUse	academic-nonCommercialUse
licenseSignatory.Person. position	director
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspec ific	-
actualUse.actualUse	human use; NLP
actualUse.useNLPspecifi c	
description	The corpus contains original Russian fiction texts and their Slovak
	translations, with automatically aligned sentences.

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relevantPublications	Garabík, Radovan, Захаров, Виктор Павлович: Параллельный русско-
	словацкий корпус. In: Труды международной конференции Корпусная
	лингвистика. Санкт-Петербург: Издательство СПетербургского
	университета 2006, р. 81 – 87.
urlDocumentation	http://korpus.juls.savba.sk/parus/
resourceType	corpus
resourceSubtype	parallel corpus
mediaType	text
noLanguages	2
multilingualityType	parallel
languageId	slk; rus
size	100 000
sizeUnit	sentence
annotationType	segmentation; lemmatization; PosTagging; MSD; alignment

resourceTitle	Slovak –French Parallel Corpus
resourceName	sk-fr
urlDownload	http://korpus.juls.savba.sk/frask/
dateCreation	2007
projectPartner	LSIL
IPRholder.organizationS	LSIL/various
hortName	
contact.Person.surname	Garabík
contact.Person.givenNa me	Radovan
contact.Person.email	radovan.garabik@kassiopeia.juls.savba.sk
availability	available (pseudocorpus)
license	other
resourceLocation	LSIL
distributionMedium	internetBrowsing
restrictionsOfUse	academic-nonCommercialUse
licenseSignatory.Person.	director
foreseenUse.foreseenUse	human use; NLP applications
foreseenUse.useNLPspec ific	-
actualUse.actualUse	human use; NLP
actualUse.useNLPspecifi c	-
description	The corpus contains original French fiction texts and their Slovak translations, with automatically aligned sentences.
	VASILIŠINOVÁ, Dorota, GARABÍK, Radovan: Parallel French-Slovak Corpus. In: Computer Treatment of Slavic and East European Languages. Proceedings of the conference Slovko 2007. Eds. J. Levická, R. Garabík. Brno: Tribun 2007.
urlDocumentation	http://korpus.juls.savba.sk/frask/

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resourceType	corpus
resourceSubtype	parallel corpus
mediaType	text
noLanguages	2
multilingualityType	parallel
languageId	slk; fra
size	21 000
sizeUnit	sentence
annotationType	segmentation; lemmatization; PosTagging; MSD; alignment

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