

## CHAPTER IV

### TEST RESULTS

#### 1. INTRODUCTION

This chapter of the thesis will be devoted to the presentation of the results of the evaluation procedure outlined in chapter III. The following tools were subject to testing: Multiterm *iX* by Trados, Déjà vu X by Atril, SDLX 2004 by SDL International. The selection of the tools was determined by two factors, the first being that the above applications are currently the most popular ones on the Polish translation market<sup>21</sup>. The other decisive factor was the availability of the tools for evaluation. All the applications subject to testing were obtained free of charge, as evaluation versions. The author should also like to emphasize that none of the programs were favored, and that all efforts were made to keep the evaluation objective.

The results will be presented in the form of a chart containing the checklist questions and the results for each application. As has already been mentioned, the result sheet will contain data from a number of sources. The data that could not be verified empirically and derive either from documentation or from the producers are indicated with an asterisk. The result sheet will be followed by comments and clarifications.

#### 2. THE RESULT SHEET

Tool	MultiTerm	Déjà Vu	SDLX
Version	6.2.0.267	7.0.232	2004 Build 14
<b>Technical description</b>			
<b>1.1. Hardware requirements</b>			
1.1.1. Hardware platform required/recommended	PC	PC	PC

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<sup>21</sup> Opinion poll conducted by Feder in 2002 on <http://www.proz.com>, an Internet portal for translators (Feder: 2002).

1.1.2. Required microprocessor type*	Intel or compatible/Pentium/Pentium Pro/Pentium II 166MHz	Pentium III, 600 MHz (minimum: Pentium II, 300 MHz)	Pentium III 800 MHz (minimum 300 MHz)
1.1.3. RAM min.*	32 MB	128 MB	64 MB
1.1.4. RAM recommended*	128 MB	256 MB	256 MB
1.1.5. HD space min. required*	60 MB + additional space for storing local termbases	Data unavailable	50 MB
1.1.6. HD space recommended*	Data unavailable	Data unavailable	Data unavailable
1.1.7. Graphics standard required*	Data unavailable	Data unavailable	SVGA monitor; 800x600 monitor resolution
1.1.8. Required/advocated peripheral devices: printer, mouse, trackball, touch pad, monitor, CD-ROM, discs drives, modem, network card?	required: monitor, mouse or trackball, keyboard, CD-ROM	required: monitor, mouse or trackball; keyboard, CD-ROM	required: monitor, mouse or trackball, keyboard, CD-ROM
<b>1.2. Software requirements</b>			
1.2.1. Operating system*	Windows 98, Windows Me, Windows NT (with Service Pack 6 or later) Windows 2000, Windows XP	Microsoft Windows 98, Me, NT4 (SP6), 2000, XP Home/Professional	Microsoft Windows 95, 98, Me, 2000, XP, NT 4.0
1.2.2. Multi-user/network enabled	the version under evaluation is a single-user version, however the application exists also in a multi-user and network versions	the version under evaluation is a free-lance translator version (single-user version); however the application also exists in multi-user and network versions	the version under evaluation is a free-lance translator version; the application also exists in multi-user versions
1.2.3. Mechanisms enabling multi-tasking/quasi-multitasking?	no	no	no
1.2.4. Other software required to run the advanced functions of the tool	yes; Microsoft Internet Explorer 5.5. or higher/ Microsoft .NET Framework (provided with the software)	yes; Microsoft Word (Word 6.0, 95 (7.0), 97 (8.0), 2000 (9.0), and XP (2002 or 10.0) MS PowerPoint (in order to translate PPT files); MS Excel (in order to translate XLS files);	yes; Microsoft Internet Explorer 5.0 or higher
<b>2. Compatibility</b>			

2.1. Are different versions compatible?*	significant differences between versions: Multiterm Workstation 6.2. and Multiterm 5.5.; MultiTerm 5.0.; MultiTerm '95 Plus; and earlier; while the differences are minor and databases created in MultiTerm 6.0 are compatible with the new version	significant differences between DV3 and DVX	there are significant differences between different versions of SDLX mainly between the earliest and the latest
2.2. If not, what to do to use old DBs?*	convert the MTW (created in MultiTerm 5.x versions) to XML format using the MultiTerm Convert (a wizard application belonging to Multiterm <i>iX</i> Workstation	convert the DV 2.x and DV 3.x termbases using the 'Convert terminology database' function in 'Tools'	workarounds for particular versions are given by the on-line support centers
2.3. Can profiles/ settings/ filters be exchanged?	filter/termbase definition/ terminology data/ input model/ layout/import definition/export definition	database templates can be saved and reused; but not import/export definitions	no
2.4. How to extend to the new version? Upgrades? New versions?*	new version to extend from MultiTerm 5.x to Multiterm Xi (cannot be upgraded)	DV3 cannot be upgraded to DVX a new version must be bought	upgrades
<b>3. User interface</b>			
<b>3.1. Installation routine</b>			
What is the installation routine? Wizard/install shield?	wizard; required installation of .NET Framework files	installation wizard	install shield
<b>3.2. Type of user interface</b>			
3.2.1. What is the type of user interface? Menu-driven? GUI?	GUI	GUI	GUI
3.2.2. How many primitive actions need to be taken to open interface?	4: select start-menu, select programs, select Trados, click Multiterm icon	4: select start-menu, select programs, select Déjà Vu X, click Déjà Vu X icon	4: select start-menu, select programs, select SDLX, click SDLX icon
<b>3.3. Interface languages</b>			
3.3.1. What dialog languages are available?	German, English, French, Spanish	English, Dutch, French, Spanish, Russian	English

3.3.2. When is dialog language selected?	during installation	during installation	N/A
3.3.3. How does one switch the languages?	select View, select User Interface Language from the menu, choose the language from the drop-down menu in the dialogue box, accept	select Tools, select User Interface Language from the menu, choose the language from the drop-down list in the dialogue box, accept	N/A
<b>3.4. Product documentation, training and user help</b>			
3.4.1. What forms of help are available to the user?	help files in menu-bar, on-line Trados support center, on-line help for all MultiTerm applications, MultiTerm User Guide, MultiTerm Administrator's Guide, tutorials for most applications, wizards	manual/tutorial/on-line service/wizards/help files	tutorial, on-line support, wizards, help files
3.4.2. In what languages are they available?	manual available in English	manual available in English/French/Dutch/Spanish/Russian	tutorial available in English
3.4.3. Is proper documentation provided? User manual/demos/workbooks/tutorials/sample files/DBs/online help/wizards, etc?	yes; user manual, demo, tutorial, wizards, on-line help, sample termbase,	user manual/ getting started manual/ tutorial/ trial version/ on-line help/ sample files	user manual (short and very specific), tutorial, wizards - documentation does not give general information (subdivided into specific functions)
3.4.4. Are they provided in a language understood by the user?	yes (English)	yes (English)	yes (English)
3.4.5. Does the documentation also cover troubleshooting?	no	no	no
3.4.6. Is the information on the internal workings of the system made available?	no (only schematic illustration of different components and their interrelations)	no	no

3.4.7. Are there any other forms of obtaining technical support and consultancy? (User groups/newsletters? mailing lists/training?)	user mailing list, training sessions	user mailing list/ newsgroup/ training sessions	user mailing list/ newsgroup/ SDLX newsletter/ trainings organized by manufacturer/call service
<b>3.5. User interface elements</b>			
3.5.1. How is the communication implemented?			
3.5.1.1. Typed commands	no	SQL commands	no
3.5.1.2. Function keys	yes	yes	yes
3.5.1.3. Traditional menus	yes	yes	yes
3.5.1.4. Pull-down/pop-up menus	yes	yes	yes
3.5.1.5. Dialog boxes	yes	yes	yes
3.5.1.6. Icons	yes	yes	yes
3.5.1.7. Clickable buttons	yes	yes	yes
3.5.1.8. Is mouse/trackball required?	yes	yes	yes
3.5.1.9. Are there keyboard shortcuts (hotkeys) available?	yes	yes	yes
3.5.1.10. Is it possible to manipulate taskbars/menus/toolbars/buttons/ -hide, move, resize, floating vs. docked?	yes; floating, docked, resizing, moving hiding, etc.	yes, floating, docked, resizing, moving, hiding	yes, floating, docked, resizing, moving, hiding
<b>3.6. On screen display user definable</b>			
3.6.1. Is the display user-definable?	yes; all panes can be resized, hidden, moved	yes; all panes can be resized, hidden, rearranged	yes; all panes can be resized, hidden, moved
3.6.2. WYSIWYG?	yes (documents displayed in the WP-like way)	no (translation grid – documents displayed in a spreadsheet-like form)	no (translation grid – documents displayed in a spreadsheet-like form)
3.6.3. Are there any default display layouts that suit the needs of various users including special groups of users (e.g. translators, terminologists, writers, editors)?	yes (one default)	yes (a number of record templates characteristic of different termbanks)	default
3.6.4. Are settings visible to the user?	yes	yes	yes

#### 4. Terminological aspects

##### 4.1. Data management

4.1.1. What are languages supported by the tool?*	Afrikaans, Albanian, Arabic, Armenian, Azeri Basque, Belarusian, Bulgarian, Catalan, Chinese, Croatian, Czech, Danish, Dutch, English, Estonian, Faeroese, Farsi, Finnish, French, Gaelic, Galician, German, Greek, Hebrew, Hungarian, Icelandic, Indonesian, Italian, Japanese, Kazakh, Korean, Kyrgyz, Latvian, Lithuanian, Macedonian, Malay, Maltese, Maori, Mongolian, Norwegian, Polish, Portuguese, Rhaeto-Romance, Romanian, Russian, Sámi, Serbian, Slovak, Slovenian, Sorbian, Sotho, Spanish, Swahili, Swedish, Tagalog, Tatar, Thai, Tsonga, Turkish, Ukrainian, Urdu, Uzbek, Vietnamese, Welsh, Xhosa, Zulu, (67 altogether)	all languages supported by Windows: Afrikaans, Albanian, Amharic, Azeri, Basque, Belarusian, Bulgarian, Catalan, Cherokee, Croatian, Czech, Danish, Dutch, Edo, English, Estonian, FYRO Macedonian, Faeroese, Filipino, Finnish, French, Frisian, Fulfulde, Gaelic, Galician, German, Greek, Guarani, Hausa, Hawaiian, Hungarian, Ibibio, Icelandic, Igbo, Indonesian, Inuktitut, Italian, Kanuri, Kazakh, Kyrgyz, Latin, Latvian, Lithuanian, Malay, Maltese, Mongolian, Norwegian, Oromo, Papiamento, Polish, Portuguese, Rhaeto-Romantic, Romanian, Russian, Sámi, Serbian, Slovak, Slovenian, Somali, Sorbian, Spanish, Sutu, Swahili, Swedish, Tajik, Tamazight, Tatar, Tigrinya, Tsonga, Tswana, Turkish, Turkmen, Ukrainian, Uzbek, Venda, Welsh, Xhosa, Yi, Yoruba, Zulu (80 altogether)	Afrikaans, Albanian, Arabic, Aymara, Azeri, Basque, Byelorussian, Bulgarian, Catalan, Chewa, Chinese, Croatian, Czech, Danish, Dutch, English, Estonian, Faeroese, Farsi, Finnish, French, German, Greek, Guarani, Gujarati, Hindi, Hebrew, Hungarian, Icelandic, Indonesian, Italian, Japanese, Javanese, Kashmiri, Kazakh, Kirghiz, Kurdish, Korean, Latvian, Lithuanian, Macedonian, Malagasy, Malay, Moldavian, Mongolian, Norwegian, Pashto, Polish, Portuguese, Quechua, Romanian, Rwanda, Rundi, Russian, Sámi, Serbian, Slovak, Slovenian, Somali, Spanish, Sudanese, Swahili, Swedish, Tagalog, Tajik, Tatar, Turkmen, Thai, Turkish, Uighur, Ukrainian, Urdu, Uzbek, Vietnamese, Yiddish, Welsh. (76 altogether)
4.1.2. Are all languages available as both source and target language?*	yes	yes	yes
4.1.3. Are language varieties supported by the tool?*	yes; Arabic (Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait,	yes; Azeri (Cyrillic, Latin), Croatian (Bosnia-	yes; Arabic (Algeria, Bahrain, Egypt, Iraq, Jordan, Kuwait,

	<p>Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, UAE, Yemen); Azeri (Cyrillic, Latin); Chinese (Hong Kong, PRC, Singapore, Taiwan); Dutch (Belgium, Netherlands); English (Australia, Belize, Canada, Caribbean, Ireland, Jamaica, New Zealand, South Africa, Trinidad, United Kingdom, United States); French (Belgium, Canada, France, Luxembourg, Switzerland); Gaelic (Ireland, Scotland); German (Austria, Germany, Liechtenstein, Luxembourg, Switzerland); Italian (Italy, Switzerland); Korean (Johab, Korea); Malay (Brunei Darussalam, Malaysia); Norwegian (Bokmal, Nynorsk); Portuguese (Brazil, Portugal); Romanian (Moldavia, Romania); Russian (Moldova, Russia); Serbian (Cyrillic, Latin); Spanish (Argentina, Bolivia, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Modern Sort, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Spain, Uruguay, Venezuela); Swedish (Finland,</p>	<p>Herzegovina), Dutch (Belgium), English (Australia, Belize, Canada, Caribbean, Hong Kong S. A. R., India, Indonesia, Ireland, Jamaica, Malaysia, New Zealand, Philippines, Singapore, South Africa, Trinidad And Tobago, United Kingdom, United States, Zimbabwe), French (Belgium, Cameroon, Canada, Congo (DRC), Cote d'Ivoire, Haiti, Luxembourg, Mali, Monaco, Morocco, North Africa, Reunion, Senegal, Switzerland, West Indies), Gaelic (Ireland, Scotland), German (Austria, Liechtenstein, Luxembourg, Switzerland), Italian (Switzerland), Malay (Brunei Darussalam), Norwegian (Bokmal, Nynorsk), Portuguese (Brazil), Romanian (Moldova), Russian (Moldova), Serbian (Cyrillic, Latin), Spanish (Argentina, Bolivia, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Latin America, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, United States, Uruguay, Venezuela), Swedish (Finland), Tamazight (Latin), Tigrinya (Eritrea, Ethiopia),</p>	<p>Lebanon, Libya, Morocco, Oman, Qatar, Saudi Arabia, Syria, Tunisia, UAE, Yemen); Azeri (Cyrillic, Latin); Chinese (Hong Kong, Macau, PRC, Singapore, Taiwan); Dutch (Belgium, Netherlands); English (Australia, Belize, Britain, Canada, Caribbean, Ireland, Jamaica, New Zealand, Philippines, South Africa, Trinidad, United States, Zimbabwe); French (Belgium, Canada, France, Monaco, Luxembourg, Switzerland); German (Austria, Germany, Liechtenstein, Luxembourg, Switzerland); Italian (Italy, Switzerland); Javanese (Roman); Macedonian (FYROM); Malay (Brunei, Darussalam, Malaysia); Mongolian (Cyrillic); Norwegian (Bokmal, Nynorsk); Portuguese (Brazil, Portugal); Romanian (Moldova, Russia); Sámi (Lappish); Serbian (Cyrillic, Latin); Spanish (Argentina, Bolivia, Chile, Colombia, Costa Rica, Dominican Republic, Ecuador, El Salvador, Guatemala, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Puerto Rico, Spain, Uruguay, Venezuela),</p>
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	Sweden); Uzbek (Cyrillic, Latin)	Uzbek (Cyrillic, Latin),	Latin America, International, Modern); Sudanese (Roman); Swedish (Finland, Sweden); Uzbek(Cyrillic, Latin)
4.1.4. Are bi-directional and DBCS languages supported both as SL and TL?*	yes	yes	yes
4.1.5. Is the underlying data model of the database: "flat" relational/object-oriented/semantic network?*	relational	relational	relational
4.1.6. What types of data can be inserted into an entry? (textual, graphic, multimedia)	textual, numeric, multimedia, graphic	textual	textual
4.1.7. What file types are supported by the tool?*	multimedia formats: BMP, JPG, GIF, ICO, WMF, PNG, WMF; RTF, HTML, XML, PCX, TIF, PS, DXF, EPS, FPX, IMG, PCD, WPG, TGA, MP3, AVI (after conversion also MTW, TXT, CSV, XLS)	MS Word; RTF, MS PowerPoint, MS Excel; OpenOffice.org (SXW, SXC, SCI); StarOffice; MS Access; FrameMaker; PageMaker; QuarkXPress; InDesign; Interleaf/Quicksilver; Plain Text, Help Content .cnt; HTML (scripts and ASP); SGML/XML; Java Properties; RC; C, C++, Java source files, GNU gettext files; IBM TranslationManager; Trados Word/RTF; Trados TagEditor; TMX,	TXT, C, CPP, H, FRM, BAS, CTL, CLS, TAG (files exported from Quark using CopyFlow), TXT, CSV, REZ (delimited files), HTM, HTML, (java properties) PROPERTIES, MIF (FrameMaker Interchange Format), RC (Program Resource File), RTF, SRC, SGM, SGML, DTD, TXT (plain text), XML, ASP, JSP (server side scripting), DOC, PPT, XLS, clipboard translation for unsupported file types
4.1.8. What is the maximum number of local data collections/databases?*	unlimited (dependent on HD space available)	unlimited (dependent on HD space available)	unlimited (dependent on HD space available)
4.1.9. Can more than one collection be consulted at a time?	yes	yes (single termbase and the project-specific lexicon)	yes



4.1.10. What is the maximum number of data collections that can be consulted at a time?	not mentioned* (the test shows that at least 5 termbases can be searched at a time)	2	not mentioned* (the test showed that at least 5 termbases can be consulted at a time)
4.1.11. Is it possible to define the lookup order?	yes	yes	yes
4.1.12. What is the maximum number of languages per databank?*	not mentioned (the test shows that a database may contain at least 20 languages)	not mentioned (during installation the user is asked to select 5 languages they are going to work with, however it is later possible to set more languages in a termbase)	not mentioned (the test shows that a database may contain at least 20 languages)
4.1.13. Can a mono-bilingual subset be extracted from a multi-lingual database?	yes (by filtered export)	yes	yes (by export)
4.1.14. Does the tool perform sorting according to the language?	yes	yes	yes
4.1.15. Can the directions of the database be reversed? Changed?	yes	yes	yes
4.1.16. How many steps are required to do so?	1; click the little arrow between the TL and SL boxes on the taskbar	4; click the source language box to see the drop-down menu; select the new source language from the drop-down menu; click the target language box to see the drop-down menu; select the new target language	6; select TermBase from the menu in the TermBase window, select Setup on the drop-down menu, click Language Manager, select the new source language, move it up the list using the 'Move Up' button, click OK.
4.1.17.a Are the following project management functions supported? Statistical data (DB size, no. of units in a DB, word count, reusability, no. of translated/untranslated words, no. of re-used segments/terms)	DB size; number of entries; other statistical data are supported by Translator's Workbench	no of units in the database; simple and full word count; number of exact and fuzzy matches; duplicated source sentences	no; the statistical analysis can be done by the Analyze module of SDLX
4.1.17.b Quality assurance (project status, terminological	yes; project status;	yes; External View format to proofread the text without	yes; 'Apply termbase' - terminology validation function,

consistency, spelling, proper application of resources)		export; export into original format for proofreading; terminology consistency check in the pre-translation, translation and post-translation phases; batch terminology validation	
4.1.17.c Data security (passwords, access rights, locking, read-only vs. write access, functionality blocking, protected screen areas, data compression and encryption, max. no. of users, etc.)	yes; exclusive access rights, unlimited user rights in all local termbases;	yes; password can be entered; data compression	yes; user names and modification dates are recorded
4.1.17.d File and folder structure (automatic vs. manual, naming and renaming, long filename support, backup files, inclusive export/import of all associated files, etc.)	manual file naming, long filename support,	manual file naming, long filename support,	manual file and folder naming, long filename support
4.1.17.e Messages (consistency check, other)	yes; if a duplicate term is being entered in the termbase the merging of entries is suggested; error messages	yes; error messages	yes; error messages, messages reminding to save a new record before adding a cross-reference, etc.
4.1.18. Are the above functions built into the tool or does it rely on other applications? E.g. WP?	built-in	spellchecking based on MS Word; word count based either on MS Word or other sources	spellchecking based on MS Word, other functions built-in
4.1.19. Can these features be suppressed?	yes	yes	yes
<b>4.2. Entry model and structure</b>			
4.2.1. Is the entry structure free/quasi-free/fixed?	free entry structure/fixed and quasi-free entry structure templates are available	fixed	free
4.2.2. Is it possible to add fields (in the case of quasi-free record structure) or are there any freely definable fields (fixed/quasi free)?	if a template is selected, custom fields can be created or selected from the picklist	no	N/A

4.2.3. Field names and naming conventions	entry level; index level; term level are given in a template, with a number of subfields to choose from	each template has its specific field names and field attributes (see Appendix III for full list)	a standard entry contains an index field for the term in every language, 'synonym' and 'related items' fields; other fields are freely definable
4.2.4. What data categories in fixed/quasi-free record structure?	Note, Context, Source, Status, Definition, Subject	(see Appendix III for full list)	N/A
4.2.5. What data categories are required by the user?	SL term; TL term, definition, context, example, source, customer	SL term; TL term, definition, context, example, source, customer	SL term; TL term, definition, context, example, source, customer
4.2.6. Are there any standard fields offered for free record structure?	yes; index fields (drop-down menu containing languages), descriptive fields (Subject, Note, Source, Status, Definition, Context)	N/A	term', 'synonym', 'related items', 'definition'
4.2.7. What is the maximum field length?*	not mentioned; the test showed that a single field can contain at least 42.500 characters	not mentioned; there are no limits as to the length of a text field, however in case of long fields it is impossible to see the whole content	not mentioned; in case of long text fields, it is impossible to see the whole content
4.2.8. Are there any standard record templates? How many	yes; 1	yes; 13	yes; 1 default
4.2.9. Can they be modified and then saved as different templates?	yes	no	yes
4.2.10. Are there any standard field attributes?	default is text content, however type of data can be specified while creating database definition (e.g. multimedia file)	yes, mostly picklists (e.g. part of speech), text fields	yes; mostly text, it is possible to create picklists of values
4.2.11. Are certain categories filled in automatically?	yes; Created by; Created on; Modified by; Modified on; Entry number	yes; user, creation date and time	yes; Created by, Created on, Modified by, Modified on
4.2.12. Are there any fields for which entry is mandatory?	term	lemma	term
4.2.13. Is the total number of fields limited?	no	yes	no

4.2.14. What is the minimum number of fields to create a valid record?	1	1	1
4.2.15. How many steps are needed to create the simplest entry containing only TL and SL equivalents?	7; select add from the Entry menu; click the term field in SL section; enter the SL term; press Tab to move to the TL term field; enter the TL term; click the grey area of the edited entry once to leave all the edited fields; right-click and select Save or press F10	5; click Add function in the termbase pane; enter the SL term; click the Translation function to move to the TL section; enter the TL term in the box; click Add; click Close	5; click 'Add concept' button on the toolbar; click the SL term field, type in the term, use Tab to move to the TL term field, type in the target term, click the 'Save concept' button on the toolbar
4.2.16. Are there words/word classes/characters which cannot constitute a valid record?	no	no	no
4.2.17. Is it possible to change field definition (name/length/position in the record)?	Field definition cannot be changed while editing a single entry; it can only be altered by modifying database definition. The contents of any field can be modified many times. Position of a field in a record can be changed by deleting and entering again in a different place if no fixed input model was selected.	no	yes; it is possible to add a new language while working on an existing termbase
4.2.18. Can data be grouped within the entry?	yes	yes (only according to the templates available)	yes
4.2.19. Is categorization automatic/manual?	manual	automatic (the user had to use the templates)	manual (categories must be created when the database is being created)
4.2.20. Is intentional repetition of some data categories possible?	yes	no	yes
4.2.21. Is it possible to restrict/specify the type of data to be entered into a given field; e.g. numeric vs. alphanumeric	yes; while defining the database properties may be specified for each field including: text, number, Boolean, multimedia, date,	no	no

	picklist created by the user		
4.2.22. To what fields do these limitations apply?	all fields	N/A	N/A
4.2.23. Is it possible to create cross-references among records?	yes	yes	yes
4.2.24. Are these created automatically or manually?	manually	manually	special fields - automatically, within text fields - manually
4.2.25. Are the cross references created by special fields or within any field?	within text fields only	special fields	special fields; within text fields
4.2.26. Is it possible to create links to external resources?	no	no	no
4.2.27. Is the DB/record structure mono-bi or multilingual?	monolingual, bilingual, multilingual	monolingual, bilingual, multilingual	monolingual, bilingual, multilingual
4.2.28. Is the DB/record structure term or concept oriented?	concept oriented	term-oriented	concept-oriented
4.2.29. What is the maximum number of languages a record can hold?*	no limit mentioned; the test showed that a record may contain at least 20 languages	no limit mentioned; the test showed that a record may contain at least 20 languages	no limit mentioned; the test showed that a record may contain at least 20 languages
4.2.30. Is it possible to customize the display to show only two, three, etc. languages of the total no. of languages covered by the database?	yes; the display can be modified in the following ways: "flags layout" (national flag for every language, languages, terms, and other descriptive fields); "full layout" (entry number, created by, created on, modified by, modified on, languages, terms); "languages only" (entry number, national flag, languages, terms and other descriptive fields); "MultiTerm	yes; the display usually shows only two languages and the languages displayed can be changed	yes; the display can be modified to show only certain data categories

	Classic" (entry number and languages in grey, SL term in brown, TL term in blue color); "Source/Target" (entry number, SL in green, TL in blue color, national flags and terms colored like the corresponding languages)		
4.2.31. Is it possible to define constant values for certain fields to be applied uniformly throughout the entire database?	yes; users can create picklists and assign the values included in the picklists to certain fields while creating a database definition	yes; e.g. client, subject (effected by selecting from picklists)	yes; by creating picklists during termbase definition
4.2.32. Is there a limit to the record size (no. of fields, their length, size of record in KB, no. of pages?*	no	no	no
4.2.33. Are there any different record types?	no	no	no
4.2.34. What is the total no. of records per database?	unlimited (dependent on HD space available)	unlimited (dependent on HD space available)	unlimited (dependent on HD space available)
4.2.35. Does the tool support the following administrative data categories: a) project name; b) subset name; c) language pair and direction; d) language variant; e) translator/terminologist; f) project manager/system administrator; g) creation date; h) change/ update date; i) match level; j) match source; k) translation status; l) subject domain; m) client; h) associated resources; o) copyright information; p) usage counter; q) DB usability/validity restrictions; r) other remarks?	project name, language pair, language direction, language variant, terminologist, creation date, modification date, match source, status, subject domain, client (and other categories created by the user)	project name, language pair, language direction, language variant, creation date, user, update/modification date; subject, domain, client, term frequency (other categories created by the user)	created by, created on, modified by, modified on, language variant, client (other categories created by the user)

<b>5. Retrieval of information</b>			
<b>5.1. Access to information</b>			
5.1.1. Which of the search options are offered by the tool?			
5.1.1.a Exact match	yes	yes	yes
5.1.1.b Partial match	no	yes	yes
5.1.1.c Truncation (left/right/center)	yes (right)	yes (right)	yes (right)
5.1.1.d Wild card	yes (question mark represents a single character, asterisk may signify a number of characters)	yes (asterisk stands for zero or more characters; question mark for one character, # for one digit, [a-m] one character in the specified range, [!a-m] one character outside the specified range; wildcard search is available only at the end of the search string)	no
5.1.1.e Free text search	no	no	no
5.1.1.f Fuzzy search	yes	yes	yes
5.1.1.g Via record/translation unit number	yes	no	no
5.1.1.h KWIC	no	no (concordance)	yes (concordance)
5.1.1.i Boolean operator	no	no	yes
5.1.1.j Relational operator	no	no	no
5.1.1.k Morphological	no	no	no
5.1.1.l By synonym/cross-reference/internal - external link	yes	yes	yes
5.1.1.m Proximity	no	no	no
5.1.1.n Meaning	no	no	no
5.1.1.o Subject area	yes	yes	yes
5.1.1.p Global	no	yes	yes
5.1.1.q Restricted (filtered)	yes	yes	yes
5.1.1.r Segments containing a term or phrase	no	no	no
5.1.1.s Capital vs. Small letter	yes	yes	yes
5.1.1.t Punctuation and spacing variation	yes	yes	yes

5.1.1.u Mark-up/formatting features	no	no	no
5.1.1.v. Search history	yes	no	yes
5.1.1.w. Search log	yes	no (not necessary because of the Lexicon)	yes
5.1.1.x Browsing (alphabetical, chronological, conceptual, etc.)	alphabetical, chronological	alphabetical and chronological browsing	chronological
5.1.1.y Access via any data category (TMS)	no	no	no
5.1.1.z Query language (e.g. SQL)	no	yes (SQL)	no
<b>5.1.2. Other search criteria.</b>			
5.1.2.1. Can search criteria be combined by Boolean or relational operators?	yes (fuzzy search must be activated in order to combine wildcard and truncation search)	no	yes; Boolean operators AND and OR
5.1.2.2. Is global search and replace possible?	no	yes	yes
5.1.2.3. Does search and replace work equally well for both languages?	N/A	yes	yes
<b>5.2. System's response</b>			
5.2.1. What is the response if the search criteria are not met? a) Hitlist of near matches; b) 'not found' message; c) logging term not found; d) history of search?	logging term not found after the Log Term function is activated; hitlist of near matches if Fuzzy Search is activated	no message appears in the TDB window, the hitlist contains a list of near matches; in the project window, 'no matches were found' message appears on the status bar;	message stating 'there are no terms that match the search criteria' appears in a dialogue box; if a QA check is conducted on a number of project files, a log file is created recording the check
5.2.2. If hitlist contains fuzzy matches, is that fact indicated in any way?	yes; hitlist of fuzzy matches displayed only if Fuzzy Match function is activated.	yes; the message 'no matches were found' on the project window status bar indicates that the hitlist does not contain the exact match	no; the nearest match is given
5.2.3. Is the tool able to recognize a misspelled term?	yes: the ratio of misspelled terms recognized is 10:12 (Fuzzy Search activated)	yes; the ratio of misspelled terms recognized is 4:12 (regular search)	no; the ratio of misspelled terms recognized is 0:12 (regular search)



5.2.4. How does the tool respond to a compound term when not found in the database?	the hitlist contains the component terms e.g. client; server for "client-server application"	(if the 'assemble' function is activated) the tool assembles proposed translations on the basis of the lexicon, translation memory and the terminology database	a message stating 'there are no terms that match the search criteria' appears in a dialogue box.
5.2.5. Does the tool return canonical forms for inflected words?	yes (if Fuzzy Match is activated)	yes	no
5.2.6. Does the tool recognize spelling variants?	yes (if Fuzzy Match is activated)	yes	no
5.2.7. Does the tool recognize differences in compound spelling?	yes	yes	no
5.2.8. Does the tool recognize the part of speech of a term?	no	no	no
<b>5.3. Security of information</b>			
5.3. Can access rights to the database be defined?	no	yes	no
<b>6. Input of information</b>			
<b>6.1. Editing</b>			
6.1.1. Is it possible to format the characters? Paragraphs?	no	yes	yes
6.1.2. Is it possible to edit entries through a) copy, b) paste; c) drag and drop; d) search and replace; e) delete; f) redo; g) undo; h) insert; i) changing the layout?	copy/paste; drag and drop; delete; insert	copy/paste; insert; remove; search and replace, drag and drop	copy/paste; cut; search and replace, undo, delete
6.1.3. Can the already existing data be modified as well?	yes; manually; it is not possible to change the layout of the existing entries through changing the database definition	yes; manually, it is not possible to change the layout of the existing entries, or the template of the already defined database	yes; manually; it is possible to add new languages after the termbase has been defined
6.1.4. Does the tool enable the user to perform editing tasks using search and replace options?	no	yes	yes
<b>6.2. Terminology extraction</b>			

6.2.1. Does the tool support the function of terminology extraction?	no	yes, by the Lexicon function	no
6.2.2. If not, does the manufacturer offer another tool/module which does?	yes; Term Extract*	N/A	yes, SDL PhraseFinder*
6.2.3. What are the languages available for terminology extraction?	N/A*	all languages of the project	N/A*
6.2.4. Does the tool extract single terms/compound terms/phraseology?	N/A*	lexicon function creates a list of virtually all words and phrases used in the source text which is available for later edition (batch delete, removal, manual addition)	N/A*
6.2.5. What formats are supported for extraction? SGML/RTF?	N/A*	all source formats supported by the tool	N/A*
6.2.6. Is it possible to extract terminology from a bilingual/multilingual corpus?	N/A*	yes - after alignment it is possible to create the bilingual lexicon and feed it into terminology database	N/A*
6.2.7. If so, does the tool perform alignment?	N/A*	yes	N/A*
<b>6.3. Validation/control</b>			
6.3.1. Is it possible to define the rules for import?	yes	yes	yes
6.3.2. Does the tool offer a control of data input?	yes; the users may decide whether the existing entries are to be overwritten by the imported duplicate entries, merged with them, or whether the new data is to be entered separately	no	yes; the user can mark the fields to be omitted while importing external databases; the decision can be made as to whether the existing entries are to be overwritten by the imported duplicate entries, or entered separately
6.3.3. Does the tool perform spellchecking?	no	yes	no

6.3.4. Does the tool alert about duplicate entries during import/manual input/automatic input of terminological data?	manual input - yes;	no	no
6.3.5. Does the tool signal omission of obligatory data categories?	yes	yes	yes
<b>7. Exchange of information</b>			
<b>7.1. Printing</b>			
7.1.1. Does the tool support printing directly?	yes	no	no
7.1.2. Is there a list of printers supported?*	no	N/A	N/A
7.1.3. Is it possible to select only certain data for printing?	yes (print this entry)	yes (by selecting only certain data for export)	yes (by selecting only certain data for export)
7.1.4. Is it possible to define view of data for printing?	no	yes	yes
<b>7.2. Import/export</b>			
7.2.1. Is import/export of data possible?	yes	yes	yes
7.2.2. Is it possible to define selection criteria for export/import?	yes	yes	yes
7.2.3. Is it possible to define views for export/import?	yes	yes	yes
7.2.4. Does the tool support any of the major exchange standards?	XML	XML, IIF*; TBX*; SGML*; HTML*	XML; SMGL*
7.2.5. Are there any other exchange formats supported by a given tool? E.g. does the tool support native formats of other tools of the same type?	XLS, TXT (tab delimited), CSV (comma separated values)	TXT, RTF, Trados Workbench.txt, CSV, tab delimited	delimited files (TXT, CSV), DV files, Trados Multiterm format
<b>8. Interaction of other applications</b>			
<b>8.1. Word processing programs</b>			
8.1.1. Can database be accessed from a word processor?	yes	no	no

8.1.2. Is the WP window visible when accessing the database?	yes	N/A	N/A
8.1.3. Is it possible to copy from the database into WP?	yes	no	yes
8.1.4. Is it possible to copy from the WP into the database?	yes	yes	yes
8.1.5. Is the copying direct or through a buffer?	direct	direct	direct
8.1.6. Does the tool recognize terms automatically?	no	no	no
8.1.7. Does the tool replace terms automatically?	no	no	no
8.1.8. Can new entries be added while working with WP?	yes	yes	yes
8.1.9. Are there any minimal/rapid entry options available?	yes	no	no
8.1.10. Can the existing entries be modified?	no	yes	yes
8.1.11. When combined with WP is the lookup automatic, manual or both?	manual	manual	manual
8.1.12. In the case of manual terminology lookup how does one access a TMS?	select termbase after opening the MS Word document - the termbase remains open all the time; mark the search string; click the 'Search Termbase' button on the toolbar; the hitlist is displayed in a pop-up window	open the termbase in DV and leave it running in the background; select and copy the search string into the database search box; the search is conducted automatically	open the termbase in SDLX and leave it running in the background; select and copy the search string; click the 'find' icon in the SDLX TermBase window; paste the search string in the search box; click OK.
8.1.13. Is the terminology transfer automatic or manual or both?	manual	manual	manual

8.1.14. If manual, how is it effected?	select the right entry from the hitlist; click 'Insert Entry' button on the pop-up window (the target term is inserted into the text)/click 'Copy target term to clipboard' button and paste the term into the text	perform search in the database; copy the target term, paste it in the TL text	perform search in the database; copy the target term, paste it in the TL text
8.1.15. Is it possible to see the whole record or only an abbreviated form?	abbreviated form, full entry	full entry	abbreviated form; full entry;
8.1.16. How does one access the full display of a record?	select the right term from the hitlist; click the 'Display entry' button	switch to the termbase window	switch to the termbase window
8.1.17. Is it possible to analyze an SL text to extract found, unfound and forbidden terms?	no	no (analysis features are available for files imported to the program)	no (analysis features are available for files imported to the program)
8.1.18. Is this analysis performed against one dictionary, set of dictionaries, all dictionaries?	N/A	N/A	N/A
8.1.19. Can a user define that?	N/A	N/A	N/A
8.1.20. If more than one database is used are search results displayed in the same or separate windows?	N/A	the same	separate
8.1.21. Is it possible to mark/save/insert the whole segment containing a given term?	yes	N/A	yes
8.1.22. Can the same database be opened in several windows?	no	yes	yes
8.1.23. Is it possible to create a log file recording all unsuccessful terminological queries for subsequent addition to a dictionary?	no (this operation cannot be conducted from within WP window, however it is possible)	no	no (this operation cannot be conducted while using an unimported WP file)
<b>8.2. Translation memory</b>			

8.2.1. Can the database be accessed from a translation memory module?	yes	yes	yes
8.2.2. Does the tool recognize terms automatically?	yes	yes	yes (if 'apply termbase' function is selected)
8.2.3. Does the tool replace terms automatically?	no	yes	yes (if 'apply termbase' function is selected)
8.2.4. Can new entries be added while working in TM mode?	yes	yes	yes
8.2.5. How is it effected?	select the term you want to enter, click the 'Add Entry' icon on the toolbar, enter the translation of the term, save the record	mark the term in the SL grid and the translation in the TL grid; click the 'Add pair to terminology database' icon on the toolbar	mark the term in the SL grid and the translation in the TL grid; click the 'Add pair to terminology database' icon on the toolbar
8.2.6. Can the existing entries be modified?	no	yes	yes
8.2.7. Can a term be added directly from a TM window?	no	yes	yes
8.2.8. Are there any minimal/rapid entry options available?	yes ('Add Entry' adds only the term and its translation and involves typing in the translation)	yes (Add pair to terminology database)	yes (Add term)
8.2.9. Is it possible to add a list of terms or just one term at a time?	one term at a time	one term pair at a time	one term at a time
8.2.10. Is it possible to analyze an SL text to extract found, unfound and forbidden terms?	yes, 'automatic term recognition' function marks all SL terms found in the termbase	yes (Pre-translate)	yes (Analyze)
8.2.11. Is the analysis performed against one dictionary/set of dictionaries/all dictionaries?	the analysis is performed against one termbase	pre-translation is performed against the lexicon, translation memory and terminology database	against a set of dictionaries and translation memory databases
8.2.12. Can a user define that?	yes	yes	yes
8.2.13. If more than one database is used are search results displayed in the same or several windows?	N/A	the same	the same

8.2.14. Is it possible to save/mark/insert the whole segment containing a given term?	yes	yes	yes
8.2.15. Can the same database be opened in several windows?	yes	yes	yes
8.2.16. Is it possible to create a log file recording all unsuccessful terminological queries for subsequent addition to a dictionary?	yes	no	yes (log file can be created to record Terminology QA Check)
<b>8.3. Interaction with other tools</b>			
8.3.1. Can the tool be combined with an MT system?*	no	the Assemble function is an internal EBMT system	yes; the program has an in-built MT system for certain language pairs (PL-EN_US is not included)
8.3.2. Can the tool be combined with term extraction tools?*	yes, MultiTerm Extract	no (DVX has its own term extraction features)	yes; SDL PhraseFinder is the manufacturer's tool for automatic term extraction for machine translation
8.3.3. Can the tool be combined with alignment tools?*	yes (Multiterm termbase can be created from files aligned by the Trados WinAlign tool)	no (DVX has its own alignment features)	no (SDLX has its own alignment features)
8.3.4. Can the tool be combined with concordancers?*	yes (Trados Translator's Workbench has the Concordance functionality)	no (DVX has its own concordance search functionality)	no (SDLX has its own concordance search functionality)
8.3.5. Can the tool be combined with word frequency programs?*	no (Multiterm has its own frequency analysis functionalities)	no (DVX has word frequency analysis features of its own)	no (SDLX has word frequency analysis features of its own)
8.3.6. Can the tool be combined with speech/voice recognition software?*	yes	yes	yes
<b>9. Fonts and character sets</b>			
9.1. What fonts and character sets are available?*	all fonts and character sets supported Unicode and by the user's PC	all fonts and character sets supported by Unicode and the user's PC	all fonts and character sets supported by Unicode and the user's PC
9.2. Does the tool support all the characters and fonts needed by a given	yes	yes	yes

user?			
9.3. Can the special fonts and characters be transferred between various application windows?	yes	yes	yes
9.4. Are these special character sets and fonts supported for other tool functionalities e.g. segmentation, alignment, sorting?	N/A	yes	yes
9.5. What standard encoding systems are supported by the tool?*	Fully Unicode-compliant	Fully Unicode-compliant	Unicode-compliant
<b>10. Maintenance operations</b>			
10.1. Is it necessary to save the database after each update?	no	no (the changes are saved automatically when closing the application)	no (the changes are saved automatically; when manual saving is necessary e.g. in case of creating cross-references between different records, the application prompts the user to do so)
10.2. Is it necessary to update the database index after each update?	no	no	no
10.3. Is it possible to compress the files using the tool?	yes (Reorganize termbase)	yes	no
10.4. Is it possible to repair/recover a corrupted database?	no	yes	no (advanced users recommend MS Access 'repair termbase' function to recover corrupt termbases)
10.5. Are backup files generated automatically?	no	no	no
<b>11. Commercial aspects</b>			
11.1. Who is the manufacturer of the tool?*	Trados	Atril	SDL International



11.2. Who is the distributor of the tool?*	Moravia IT, Sp. z o.o. Autoryzowany dystrybutor produktów firmy TRADOS Szczecin Bajana 8A 71-330 Szczecin trados-pl@moravia-it.com	ATRIL Collado Mediano 26 Las Rozas 28230 Madrid Spain e-mail: <a href="mailto:sales@atril.com">sales@atril.com</a>	SDL Poland ul. Piękna 13 85-303 Bydgoszcz Poland
11.3. What is the price of the single user license?*	€275.00 for Multiterm iX or €695.00 for Multiterm iX included in Trados 6.5 Freelance package	€990.00 for DVX Professional	€1145.00 for SDLX 2004 Professional
11.4. What forms of updating the software are available?*	upgrades, patches, new versions	upgrades, patches, new versions	upgrades, patches, new versions
11.5. Is the tool directly available on the Polish domestic market?*	yes	no	no
11.6. Are technical support services offered directly on the domestic market?*	yes	no	no
11.7. What is the number of registered users of the tool?*	data unavailable	data unavailable	app. 10 000 users
11.8. What is the date of the first release?*	1992	1993	January 1999
11.9. What is the date of the last update?*	February 2004	data unavailable	beginning of 2004
11.10. Are there any renowned users of the tool?*	Audi AG, Bank of Finland, Bundesministerium des Inneren (Germany), Bundessprachenamt (Germany), Canadian Department of National Defense and the Canadian Forces (DND/CF), Compaq, Deutsche Bank, European Union, Hewlett Packard, IBM, Konica, Macromedia, Microsoft, Siemens Building Technologies AG, Siemens	data unavailable	Reuters, Visa International, Bosh, Bayer, Roche, Sony Ericsson, Echostar International Corporation, Volvo Aerospace, Daimler Chrysler, BMW, General Motors, Kawasaki, Kodak, Oracle, Fujitsu, Air Canada (users of SDL International products)

	Transportation Systems, Xerox Corporation		
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### 3. COMMENTS

3.4.1. The full documentation of SDLX 2004 has not been published yet<sup>22</sup>. So far, only the getting started manual and general overview are made available on the SDL International webpage.

3.4.5. In the case of all three programs, the documentation does not cover troubleshooting. There are however user mailing lists and newsgroups which are mainly devoted to solving technical problems and sharing ideas on how to maximize the benefits of the tools.

3.6.2. In DVX it is possible to export at any moment the content of the translation grid to preview the TL text before the final export. Thus, the benefit of a translation grid is not dwarfed by the fact that the user cannot preview the translation in the original format until it is finished.

4.2.8. There are no limitations as to the number of databases that can be created, except for the size of the hard disc space. There are, however, some limitations concerning the size of the DVX databases. The size of a single database file should not exceed 2GB.

4.3.17. Both in the case of SDLX and Multiterm, most statistical analysis is provided by the translation memory module instead of the termbase module.

6.2.1. DVX has a functionality called 'Lexicon' which serves as a project-specific terminology extraction tool. The Lexicon has this advantage that logging unfound terms is not necessary, as all the terms and phrases appearing in the SL text are extracted into the lexicon. After translation and batch deletion of all other words the lexicon can be easily imported to the termbase.

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<sup>22</sup> At the time of writing – July 2004.

6.2.4. It is possible to set a word limit for the phrases that are to be extracted into the lexicon, e.g. the user may decide that the maximum number of words in a phrase is four.

6.2.7. Alignment in SDLX is available for creating translation memories not for terminology extraction.

8.1.1. In the case of Déjà vu and SDLX the termbase can be run in the background while working with a word processing program.

8.1.9. Minimal entry options in Déjà vu and SDLX are available for the files imported into the programs and cannot be used for WPs.

8.2. The combination of terminology management modules with translation memory modules is the intended and advocated working environment of all the programs subject to the present evaluation procedure. The information retrieval in this working mode is much more efficient than when the terminology management modules are run as stand-alone tools. It is not even necessary to build translation memories in order to fully appreciate the efficiency of the functionalities that are only present in the workbench environment. For instance, the combination of Trados Multiterm with Translator's Workbench enables the user to perform automatic term recognition. In this working mode, it is also possible to insert the 100% terminology matches into the TL text with a single mouse-click or hotkey. Similar benefits are observed in Déjà vu and SDLX. In both applications it is possible to insert all the exact terminology matches into the TL cells of the translation grids automatically. Another important advantage is that the exact matches can be automatically propagated throughout the whole SL text. As transpires from the result sheet, the integration of TDB with TM into a single working environment enables the search of multiple data collections both in DVX and SDLX. Thus, the advantages of the integrated translation environment are hard to overestimate.

#### **4. CONCLUSIONS**

The testing procedure applied to the tools selected for evaluation complements the unique insight into terminology management tools provided in the thesis. The checklist compiled for the purpose of this thesis gives an opportunity to objectively compare the tools

against a broad range of criteria. Since the readers are provided with an unbiased picture of the terminology management tools under investigation the author does not hesitate to state that the primary goal of the present thesis has been achieved.

## CONCLUSION

Efficient terminology management is indispensable in today's translation business. Moreover, terminology management and other issues related to MAHT are also significant in translation theory. Therefore, the author devoted this thesis to carrying out a detailed study of terminology management tools, investigating their theoretical, as well as practical aspects.

The author hopes that the comprehensive picture provided through the theoretical introduction and supported with the empirical examination of the tools in question, will give rise to greater discussion of MAHT in the Polish translation society, and increase the awareness of the possibilities these tools bring.

Using word processing applications (designed for writers) or DTP software (for editors and publishers) instead of specialist CAT programs can be viewed as 'using knives to tighten screws' (Nogueira 2002). Even though the author does not turn the blind eye to the limitations of the software discussed, she fully supports this view. While taking advantage of the functionalities increasing their productivity, translators should always be cautious and remember that 'the imperatives of communication and stylistic quality lead translators to work outside the artificial boundaries created by the period marking the end of a sentence'<sup>23</sup> (Bédard 2000), that human translators must maintain the dominant role in a CAT-supported translation process (Neubert 1991:57), and finally, that 'translators have to do their best to overcome the built-in limitations of the software' (Bédard 2000).

The sample evaluation carried out against the criteria compiled from a number of sources prepared by experts in NLP software evaluation, terminology management, and other CAT specialists, was an attempt at implementing the testing methodologies that are so strongly advocated by the expert bodies and organizations e.g. ISO (Arbouy 2002), Infoterm and TermNet (Galinski 2002).

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<sup>23</sup> This statement refers to the inflexible segmentation rules of translation memory applications, which by default create segments delimited by periods.

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## APPENDIX I

### SAMPLE TERMBASES

Termbase 1. Terminology extracted from: *The induction of somatic embryogenesis in spruce: Picea omorika* (Pancić) Purk., *P. pungens* ‘Glauca’ Beisnn., *P. breweriana* S. Watson i *P. abies* (L.) Karst. (Hazubska&Bojarczuk: 2003)

Polish	English
auksyna	auxin
cytokinina	cytokinin
drzewa iglaste (szpilkowe)	coniferous trees (conifers)
eksplantat	explant
embriogeneza somatyczna	somatic embryogenesis
embrion	embryo
hormony roślinne	plant hormones
igliwie	needles
kwas abscysynowy (ABA)	abscisic acid (ABA)
liścień	cotyledon
nasiona	seeds
pąk przybyszowy	adventitious bud
pęd	shoot
regulatory wzrostu	growth regulators
rozmnażanie wegetatywne	vegetative propagation
sadzonka	cutting
siewka	seedling
szyszka	cone
świerk	spruce
tkanka	tissue

Termbase 2. Terminology extracted from: BS EN ISO 14889:2003 *Ophthalmic optics – Spectacle lenses – Fundamental requirements for uncut finished lenses.*

Polish	English
aparatura testowa	test device
kompatybilność fizjologiczna	physiological compatibility
moc dioptryjna	dioptric power
normy powołane	normative references
odkształcenie soczewki	lens deformation
odporność mechaniczna	mechanical strength
optyka	optics
optyka oftalmiczna	ophthalmic optics
powłoka anti-refleksyjna	anti-reflexive coating
pręt testowy	test rod
pryzmat	prism
soczewki nieokrojone	uncut finished lenses

soczewki okularowe	specatcle lenses
soczewki progresywne	progressive power lenses
soczewki wieloogniskowe	multifocal lenses
spalanie	continued combustion
tłumienie barw	visual attenuation
transmitancja	transmittance
użytkownik	wearer
zapalność	inflammability
złamanie soczewki	lens fracture

Termbase 3. Terminology extracted from: *Oil yields and characteristics*.

[http://journeytoforever.org/biodiesel\\_yield.html#iodine](http://journeytoforever.org/biodiesel_yield.html#iodine) date accessed: February 2, 2004

<b>Polish</b>	<b>English</b>
alternatywna instalacja paliwowa	alternative fuel installation
aparatura wtryskowa	injection apparatus
automatyczne załączenie	automatic switching
całkowicie odnawialne paliwo	fully renewable fuel
CNG (sprężony gaz ziemny)	compressed natural gas (CNG)
common-rail	common-rail
cząsteczka	molecule
dostosowywanie pojazdów	car modifications/ adjustment
drobne zanieczyszczenia	tiny impurities
filtr ON	diesel fuel filter
filtr paliwa alternatywnego	alernative fuel filter
filtr workowy	sack/bag filter
glicerol	glycerol
kwasy tłuszczowe	fatty acids
liczba kwasowa	acid value
linia paliwowa (paliwa alternatywnego)	alternative fuel line
linia paliwowa on	diesel fuel line
linia powrotna paliwa	return fuel line
łój	tallow
nadtlenek	peroxide
nasycony	saturated
niemiecka norma na paliwowy olej rzepakowy	German standard for fuel rapeseed oil
olej roślinny	vegetable oil
olej roślinny dostępny na rynku	vegetable oil available on the market
olej używany do smażenia	frying oil
oleje posmażalnicze	used frying oil
ON	diesel fuel
oszczędność w kosztach eksploatacji	savings in maintenance costs
paliwo alternatywne	alternative fuel
panierka	egg and bread crumbs coating
parametry pojazdu zasilanego paliwem alternatywnym	parameters of alternative fuel vehicles
podgrzewany elektrozawór	electric valve with a heating unit
podwójne wiązania	double bonds

pompa rotacyjna	rotary pump
pompa rzędowa	in-line pump
pompa wtryskowa	injection pump
pompowtryskiwacz	injection unit
pozbawione wody	without water
pozbawione zanieczyszczeń	without impurities
pozyskiwanie paliwa	getting the fuel
rozruch auta	start-up/ priming
siarka	sulfur
silnik wysokoprężny	diesel engine
smalec	lard
spadek zadymienia spalin	drop in the fumigation of exhaust gases
system dwuzbiornikowy	double-tank system
temperatura atmosferyczna	ambient temperature
temperatura pokojowa	room temperature
tlen	oxygen
tłuszcz zwierzący	animal fat
trigliceryd	triglyceride
VW Transporter	VW Transporter
zasilanie płynnymi olejami roślinnymi	powered with liquid vegetable oils
zasilany olejem rzepakowym	fueled with rapeseed oil
zawór odpowietrzający	purge valve
zbiornik paliwa alternatywnego	alternative fuel tank
zbiorniki paliwa	fuel tanks

Termbase 4. Terminology extracted from: *Optometric therapeutic competency standards 2000*. <http://www.optometrists.asn.au/gui/files/ceo836300.pdf> date accessed: February 2, 2004

<b>Polish</b>	<b>English</b>
obuoczny	binocular
interwały kątowe	angular intervals
jednoczny	monocular
linie podprogowe	subliminal lines
maksymalna korekcja jednego z południków	maximum correction of either meridian
moc cylindryczna	cylindrical power
moc sferyczna	spheric power
nieruchoma tarcza zegarowa	fixed clock chart
ogniskowe	foci
ostrość	acuity
oś	axis
południk	meridian
refrakcja	refraction
równowaga obuoczna	binocular balance
siatkówka	retina
status refrakcyjny	refractive status
tarcza obrotowa	rotary grid
tarcza promienista	sunburst dial

tarcze astygmatyczne	astigmatic charts
widzenie kolorów	color vision
wyrównanie	equalization
zamglenie widzenia	fogging

Termbase 5. Terminology contained in the Multiterm sample database (the sample termbase contained English and German terms, the author provided Polish terminology)

<b>Polish</b>	<b>English</b>
aktywne strony serwera (ASP)	Active Server Pages
arkusz stylów XSL	XSL stylesheet
COM	COM
glif	glyph
input locale	input locale
klucz sprzętowy	dongle
komponent edycji za pomocą DHTML	dynamic HTML editing component
komputer klienta	client computer
komputer serwera	server computer
locale	locale
Microsoft SQL Server	Microsoft SQL Server
model komponentów obiektowych	component object model
obszar	area
oprogramowanie pośredniczące/średniego poziomu/warstwy pośredniej/oprogramowanie typu middleware	middleware
oprogramowanie serwerowe	server software
przeglądarka	browser
przeglądarka internetowa	web browser
rola	role
rola użytkownika	user role
serwer	server
skrypt	script
strukturalny język zapytań (SQL)	structured query language (SQL)
tekst sformatowany	formatted text
zapytanie	query
znak	character

## APPENDIX II

### TEST SUITE

#### 1. Recognition of misspelled terms:

##### English

1. area - arae (wrong character order)
2. area - atea (wrong character)
3. computer - computre (wrong character order)
4. computer - cimputwr (2 wrong characters)
5. dongle - donfle (1 wrong character)
6. dongle - odngle (wrong character order)

##### Polish

1. obszar – obszra (wrong character order)
2. obszar – ovszar (wrong character)
3. komputer – komputre (wrong character order)
4. komputer – kimputwr (2 wrong characters)
5. serwer – serqer (1 wrong character)
6. serwer – esrwer (wrong character order)

#### 2. Recognition of compound spelling variants:

##### English

1. input locale - input-locale (hyphenation)
2. input locale - input locale (1 wrong character)
3. input locale - inputlocale (spacing removed)
4. input locale - unputlovale (spacing removed, 2 wrong characters)
5. XLS stylesheet – XLS style sheet (space introduced)
6. XLS stylesheet – XSL stylesheet (1 wrong character)

##### Polish

1. soczewki nie okrojone – soczewki nieokrojone (spacing removed)
2. soczewki nie okrojone – soczewki nieokrokone (spacing removed, 2 wrong characters)
3. soczewki nie okrojone – spczewki nie okrojone (1 wrong character)
4. system dwuzbiornikowy – system dwu-zbiornikowy (hyphenation)
5. system dwuzbiornikowy – system dwu zbiornikowy (space introduced)
6. system dwuzbiornikowy – system dwuzbioenikowy (1 wrong character)

#### 3. Recognition of spelling variants:

##### English

1. sulfur - sulphur
2. color vision – colour vision

##### Polish:

N/A

#### 4. Automatic term recognition in sentences:

##### English:

1. Chemically, **vegetable oil** and **animal fats** are **triglycerides**.
2. **Glycerol** is bound with three **fatty acids**.
3. Animal **tallow** is **saturated**.
4. Animal **lard** is also **saturated**.
5. Chains of **fatty acids** are straighter and more pliable.
6. **Saturated fatty acids** harden at lower temperatures.
7. Drying results from the breaking of **double bonds** by the **atmospheric oxygen**.
8. Oil **molecules** are broken by the **atmospheric oxygen** and converted into **peroxides**.

##### Polish:

1. Pod względem składu chemicznego, **olej roślinny** i **tłuszcze zwierzęce** to **triglicerydy**.
2. **Glicerol** jest związany z trzema **kwasami tłuszczowymi**.
3. **Łój** zwierzęcy jest **nasycony**.
4. **Smalec** zwierzęcy jest również **nasycony**.
5. Łańcuchy **kwasów tłuszczowych** są prostsze i bardziej plastyczne.
6. **Nasycone kwasy tłuszczowe** utwardzają się w niższych temperaturach.
7. Wysychanie jest rezultatem przerywania **podwójnych wiązań** przez **tlen atmosferyczny**.
8. **Cząsteczki** oleju są rozrywane przez **tlen atmosferyczny** i przekształcane w **nadtlenki**.

#### 5. Part of speech recognition:

##### English:

1. **Fogging** is one of the techniques applied in examining astigmatic patients.
2. The mirror is **fogging** which means he is still breathing.
3. The development of local **area** networks contributed to the increasing popularity of the tool.
4. The **area** is surrounded by coniferous trees.
5. The **shoot** is the first part of a plant that appears above the earth.
6. Police officers are not allowed to **shoot** without warning.

##### Polish:

N/A

## **APPENDIX III**

### **DÉJÀ VU RECORD TEMPLATES**

#### **Minimal**

relations: translation

#### **Atril Deja Vu**

relations: Translation, Synonym, Antonym

attributes:

Part of Speech: Noun, Verb, Adjective, Adverb, Article, Preposition, Pronoun, Conjunction, Interjection

Gender: Masculine, Feminine, Neutral

Number: Singular, Plural

Subject (picklist)

Client (picklist)

Context

#### **CRITER**

relations: Translation, Abbreviation, Synonym, Variant

attributes:

Subject (picklist)

Definition

Reference

Note

Usage

Serial Number

Example

Source

Context

Domain

Regional

Date

Commission

#### **Eurodicautom**

relations: Translation, Abbreviation, Synonym

attributes:

Subject (picklist)

Definition

Reference

Context

Note

Usage

Regional

Domain

Number: Singular, Plural

Part of Speech: Noun, Verb, Adjective, Adverb, Article, Preposition, Pronoun, Conjunction, Interjection



Gender: Masculine, Feminine, Neutral

**CILF**

relations: Translation

attributes:

Subject Field

Source

Definition

Morphology

**IIF (Interval Interchange Format)**

relations: Translation, Internal Link

attributes:

ID

Project

Subject (picklist)

ConRef

Comment

TermTyp - term, abbreviation, phrase,

TermRef

Grammar - n, cn, v, adj, adv,

Def

DefRef

NoteRef

Context

CtxtRef

Creation Date

**ILOTerm**

relations: Translation, Alternate Form

attributes:

Abbreviation

ILO Class

ISN

Source

Definition

Origin

Notes

Usage

**SilvaTerm**

relations: Translation, Synonym

attributes:

ShortForm

Definition

CrossReference

Note

Source

Hyperlink

IUFRO Unit

## Subject Field

### **TBX**

relations:

Translation,  
Entailed Term,  
False Friend,  
Broader Concept Generic,  
Broader Concept Partitive,  
Superordinate Term Generic,  
Superordinate Term Partitive,  
Subordinate Concept Generic,  
Subordinate Concept Partitive,  
Coordinate Concept Generic,  
Coordinate Concept Partitive,  
Related Concept,  
Related Concept Broader,  
Related Concept Narrower,  
Sequentially Related Concept,  
Temporally Related Concept,  
Spatially Related Concept,  
Associated Concept,  
Thesaurus Descriptor,  
See,  
Homograph,  
Antonym-term,  
Antonym-concept

attributes:

Note

ID

Term Type - Entry Term, Synonym, International Scientific Term, Full Form, Transcribed Form, Symbol, Formula, Equation, Logical Expression, Common Name, Abbreviated Form of Term, Variant, Short Form of Term, Transliterated Term, Part Number, Phraseological Unit, Synonymous Phrase, Standard Text, String, Internationalism,

Part of Speech

Grammatical Gender - Masculine, Feminine, Neuter, Other Gender

Grammatical Number - Singular, Plural, Dual, Mass Noun, Other Number

Animacy - Animate, Inanimate, Other Animacy

Grammatical Valency

Usage Note

Geographical Use

Register - Neutral Register, Technical Register, In-house Register, Bench-level Register,

Slang Register, Vulgar Register,

Frequency - Commonly Used, Unfrequently Used, Rarely Used,

Temporal Qualifier - Archaic Term, Outdated Term, Obsolete Term,

Proprietary Restriction - Trademark, Service Mark, Trade Name,

Term Provenance - Transdisciplinary Borrowing, Translingual Borrowing, Loan Translation,

Neologism,

Etymology

Normative Authorization - Standardized Term, Preferred Term, Admitted Term, Deprecated Term, Superseded Term, Legal Term, Regulated Term,  
Language-planning Qualifier - Recommended Term, Nonstandardized Term, Proposed Term, New Term,  
Administrative Status - Standardized Term, Preferred Term, Admitted Term, Deprecated Term, Superseded Term, Legal Term, Regulated Term,  
Process Status - Unprocessed, Provisionally Processed, Finalized,  
Subject Field  
Classification Code  
Definition  
Explanation  
Sample Sentence  
Example  
Figure  
Audio  
Video  
Table  
Other Binary Data  
Unit  
Range  
Quantity  
Characteristic  
Concept Origin  
Context Type - Defining Context, Explanatory Context, Associative Context, Linguistic Context, Metalinguistic Context, Translated Context,  
Concept Position  
Keyword  
Index Heading  
Responsibility  
Subset Owner  
Usage Count  
Customer Subset  
Project Subset  
Product Subset  
Application Subset  
Environment Subset  
Business Unit Subset  
Security Subset - Public, Confidential  
Context  
Description Type  
Definition Type - Intentional Definition, Extensional Definition, Partitive Definition, Translated Definition,  
Sort Key  
Search Term  
Hotkey  
Element Working Status - Starter Element, Working Element, Consolidated Element, Archive Element, Imported Element, Exported Element,  
External Cross Reference  
Corpus Trace  
Source

Source Identifier  
Source Type - Parallel Text, Background Text  
Originating Person  
Originating Institution  
Originating Database  
Database Type  
Source Language  
Target Language  
Domain Expert

### **TERMITE**

relations: Translation, Synonym

attributes:

Context  
Abbreviation  
Source  
Definition  
Remarks  
Serial Number  
Modified On

### **TIS (Terminology Information System)**

relations: Translation, Abbreviation, Synonym, Antonym, Others

attributes:

Subject  
Definition  
Reference  
Note  
Usage  
Serial Number  
Example  
Source  
Context

### **UNITERM**

relations: Translation, Cross-Ref

attributes:

Note  
Subject  
Geo-Entity  
Organization  
DBName  
Acronym

### **Vintars**

relations: Translation, Synonym, Variant

attributes:

ID  
Definition  
Additional Definition

Short Form  
Acronym  
Note  
Source  
Domain  
Common Name  
Context  
Term Qualifier  
Input Data  
Initialism  
TermProvenance  
Subject  
Source Symbol  
Entry Type  
Normative Authorization  
Input By  
Temporal Qualifier  
Time Restriction