

Introduction to Lexicographical Research: Bilingual German-English Resources

Introduction

This sequence looks at German-English bilingual lexicographical resources in paper and digital form. It begins with some words on how they should be used and then proceeds to consider representative examples. In addition, students will be provided with an annotated bibliography of the most useful printed and digital reference works. Although the main focus will be on local resources, this sequence will also refer to resources which can be accessed online via the ZHAW's library page.

Using Bilingual Resources

The principal aim of **bilingual dictionaries** is to establish interlingual equivalence at the lexical level – that is, to translate words and expressions in one language with words or expressions of more or less the same meaning in another. They are not *primarily* concerned with defining or explaining terms, nor with presenting collocational examples.

This can be their weakness. It is a measure of a good bilingual dictionary that, where direct equivalence between source and target languages or cultures does not exist, explanations and/or definitions are offered, and examples given.

Increasingly, modern editions of the best bilingual resources in German and English have begun to include pragmatic indicators and contexts of usage, collocational examples, definitions – especially where no direct equivalent to the source-language term exists in the target language – and even quite extensive encyclopedic background information on a term, phenomenon or institution. Content such as this is a measure of the quality of these resources: the more such supplementary information, usage examples, and so on is provided, the more useful and reliable the resource is.

All that has been said in the sequence about English monolingual dictionaries and other resources applies equally to bilingual and multilingual ones. Considerable work has gone into compiling these tools; it would be a pity not to use all the information they contain. So once more, an important step is to know your reference works, especially those you regularly use: familiarise yourselves first with the way entries are assembled, with what the abbreviations mean, with any additional information in margins, and so forth. In addition to matching words and phrases across languages, many general bilingual dictionaries have extensive and very practical appendices covering grammar, language use, forms of address, letter writing, weights and measures, etc. in both languages.

Be that as it may, it should be clear that the language professional must also turn to monolingual resources to find out more whenever the dictionary:

- presents a variety of possible equivalents for the source-language word or expression, none or only some of which are adequately contextualised;
- fails to give sufficient information on usage (i.e. field of use, formality, etc.);
- supplies no or only limited cotextual or contextual examples;
- supplements a target-language equivalent with an explanation, suggesting that the equivalent offered is no more than vague and general;
- gives a paraphrase, explanation and/or definition of the source-language term instead of a direct target-language equivalent, suggesting that no such equivalent exists.

General and **specialised bilingual dictionaries** are the key resource for every translator. It is with the help of these aids that the translator is able to effect an accurate transfer of meaning from a source language and text into a target language and text. Yet these dictionaries are only one item in a chain of research tools, and should never be relied on alone. They should therefore be used in close conjunction with monolingual resources in the source and target language: firstly, to ensure that the source-text message has been correctly understood; and secondly, to make certain that the message has been transferred in a way that makes it both comprehensible and acceptable to the intended target audience. A translator should always be prepared to check back in monolingual reference works where bilingual resources cause even the slightest doubt or uncertainty.

General German-English Resources

The authoritative English-German / German-English bilingual dictionary is *Langenscheidts Enzyklopädisches Wörterbuch der englischen und deutschen Sprache; Der Große Muret-Sanders*. 4 vols. Berlin, Munich, Vienna and Zurich: Langenscheidt, 1997-2002. It appears in two parts – English-German and German-English – each consisting of two volumes. Printed copies are available in the ZHAW library, while a more concise version of the dictionary on CD-ROM – *Muret-Sanders e-Großwörterbuch Englisch 4.0 Englisch-Deutsch / Deutsch-Englisch* – can also be accessed via the ZHAW intranet library page either directly in NEBIS or by selecting the appropriate lists and links on the "Nachschlagewerke Online" page (<https://intra.zhaw.ch/Nachschlagewerke-Online.52.0.html>), as seen below:

Nachschlagewerke Online

Wörterbücher / Enzyklopädien

Einsprachig

- Deutsch
- Englisch
- Französisch
- Italienisch
- Spanisch

Mehrsprachig (nach Zielsprache)

- Deutsch
- Englisch
- Französisch
- Italienisch
- Spanisch

Fachspezifisch

- Wirtschaft & Recht
- Medizin
- Technik & Architektur
- Sprache & Kultur
- Biologie, Chemie & Physik
- Allgemeines / Interdisziplinäres

Karten / Atlanten

Karten / Atlanten

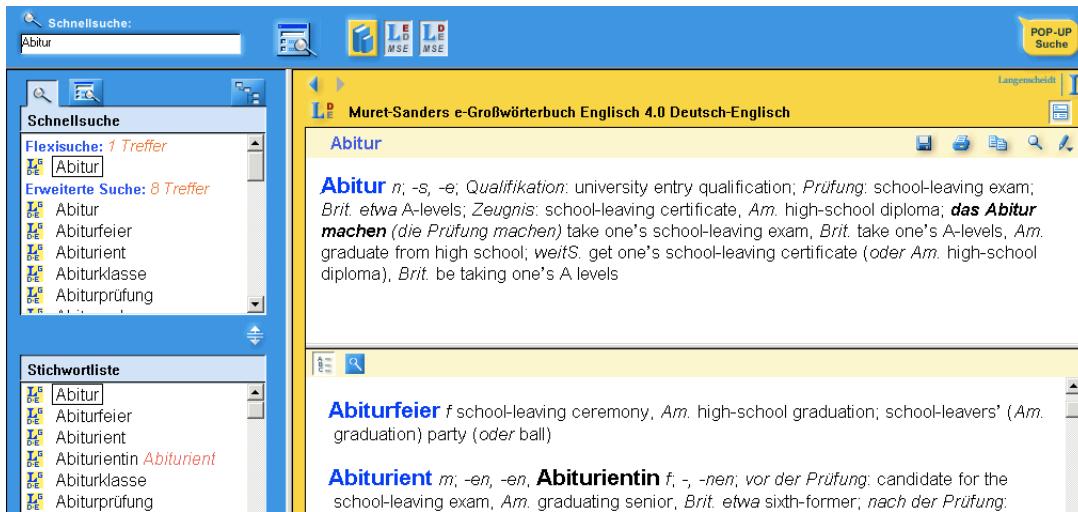
Verzeichnisse

Wirtschaft, Management & Recht

Nachschlagewerke die übers Konsortium zur Verfügung stehen

- A
- B
- C
- D
- E
- F - H - I - K
- O
- R - S - U

The CD-ROM dictionary looks like this:



In addition to *Langenscheidts Enzyklopädisches Wörterbuch der englischen und deutschen Sprache*, there are also a number of single-volume bilingual dictionaries which, although not as comprehensive as the *Muret-Sanders*, are extremely good. Four recent editions that can be highly recommended are:

- The excellent *Langenscheidt Collins Großwörterbuch Englisch. Englisch – Deutsch / Deutsch – Englisch*. Berlin, Munich, Vienna and Zurich: Langenscheidt, 2004 (this dictionary, which is also available on CD-ROM as the *Langenscheidt Collins e-Großwörterbuch Englisch. Englisch – Deutsch / Deutsch – Englisch 4.0*, is the successor of the above-mentioned *Collins PONS Großwörterbuch für Experten und Universität*). Sample pages can be seen in the separate document **Langenscheidt Collins** and multiple copies of the printed version are available in the ZHAW library. The CD-Rom can be accessed via the ZHAW intranet library page either directly in NEBIS or on the "Nachschlagewerke Online" page (see above).
- The *Duden-Oxford Großwörterbuch Englisch: Deutsch-Englisch / Englisch-Deutsch*. Mannheim: Dudenverlag, 2005 (slightly older editions are in the ZHAW library). Sample pages can be viewed in the separate document **Oxford Duden**.
- The *PONS Großwörterbuch für Experten und Universität. Englisch-Deutsch / Deutsch-Englisch*. Stuttgart: Klett, 2002 (in the ZHAW library), and the slightly newer
- *PONS Großwörterbuch Englisch*. Stuttgart: Klett, 2005 (supplied with the full version of the printed dictionary on CD-ROM)

Which one you use will be a matter of personal preference; you are advised to work with all of them for a little while before investing in one or the other.

Below is an entry from the print version of the *PONS Großwörterbuch*:

Abitur <-s, selten -e> nt Abitur (school examination usually taken at the end of the 13th year and approximately equivalent to the British A level/American SAT exam); das/sein ~ ablegen (geh) to sit the/one's Abitur; [das] ~ haben to have [one's] Abitur; [das] ~ machen to do [one's] Abitur

Obviously, this entry goes far beyond a word-for-word translation, so it is again worth consulting the user guide when using such a dictionary. Indeed, a dictionary which does not include information on grammar, morphology, usage or dialect variation, and which does not

provide explanations of culturally-specific terms (like "Abitur") or examples of usage, is not really a dictionary at all: it is a word list, and as such of only limited use.

The *Langenscheidt Collins Großwörterbuch Englisch* may provide even more information, as the following entry from the print edition shows:

(Ger) Federal Constitutional Court; **Bun|des|ver|samm|lung** F (a) (Ger, Aus) Federal Convention (b) (Sw) Federal Assembly



And here is the entry from the digital version of the dictionary on CD-ROM, which can also be accessed via the ZHAW intranet library page directly in NEBIS or on the "Nachschlagewerke Online" page:

Schnellsuche:
Bundesversammlung

Schnellsuche

Flexisuche: 7 Treffer

- BUNDESKANZLER
- BUNDES PRÄSIDENT
- BUNDES RAT
- Bundesversammlung
- BUNDESVERSAMM...
LUNG
- NATIONALRAT
- STÄNDERAT

Stichwortliste

- Bundesversammlung
- BUNDESVERSAMM...
LUNG
- Bundesversammlung ...
- Bundesversicherungs...
amt
- Bundesverwaltungsges...
etz
- Bundeswehr

Collins e-Großwörterbuch Englisch 4.0 Deutsch-Englisch

Bundesversammlung

Bun|des|ver|samm|lung f

a) (Ger, Aus) Federal Convention
b) (Sw) Federal Assembly

BUNDESVERSAMMLUNG
In Germany the **Bundesversammlung** is the body that elects the **Bundespräsident**. Half of the **Bundesversammlung** is made up of members of the **Bundestag** and half of delegates from the **Landtag**.
In Austria the **Bundesversammlung** is the joint body of the **Nationalrat** and **Bundesrat**. Its most important function is the swearing-in of the **Bundespräsident**.
The Swiss **Bundesversammlung** is a two-chamber parliament (**Nationalrat** and **Ständerat**) responsible for legislation. It also elects the **Bundesrat**, the **Bundeskanzler** and, every year, the **Bundespräsident**. The two chambers discuss the various bills independently of one another → **BUNDESKANZLER**, **BUNDES PRÄSIDENT**, **BUNDESTAG**, **NATIONALRAT**, **STÄNDERAT**

What is especially helpful here is, in addition to the standard translations of the term *Bundesversammlung* in the German, Austrian and Swiss context, the explanation of what the institution is and does.

Finally, a special category of general bilingual dictionary worth mentioning is the **pictorial dictionary**, like the *Duden-Oxford Bildwörterbuch Deutsch und Englisch*. Strictly speaking, the ground covered by such a work is usually fairly broad, so it must be classified as a general dictionary. However, the sheer detail into which a pictorial dictionary goes when describing natural and man-made objects and phenomena makes it a handy resource. The disadvantage is, again, that the user is frequently given no more than interlingual equivalences with no explanations or collocative examples. Such dictionaries thus only offer real practical help when used together with (specialised) monolingual works.

Specialised German-English Resources

The *Muret-Sanders*, *Langenscheidt Collins Großwörterbuch*, *PONS Großwörterbuch* and *Duden-Oxford Großwörterbuch* are all examples of the numerous general bilingual dictionaries available to language professionals. Yet many assignments demand a degree of specialised terminology that goes beyond the scope of such dictionaries. In this case the translator must turn to specialist bilingual dictionaries and glossaries.

There are as many of these as there are fields of specialisation. The leading dictionaries in the major fields are listed in the annotated bibliography provided in the **appendix** under "**German-English Bilingual Bibliography**". Here, we shall content ourselves with looking at just two or three examples.

Below is a series of entries from one of the very best English-German / German-English dictionaries, Wilhelm Schäfer's *Wirtschaftswörterbuch*. The example below is from volume 2, which covers German-English:

Verschuldung	<i>f</i>
(Fin)	indebtedness
–	level of debt
(Fin)	contraction of debt
Verschuldung	<i>f</i> der öffentlichen Hand (FiW) pub-
lic debt	
Verschuldungsbereitschaft	<i>f</i> (Fin) propensity to take
up credits	
Verschuldungsgrad	<i>m</i>
(Fin)	debt-equity ratio
(Fin, US)	leverage
(Fin, GB)	gearing
Verschuldungsgrenze	<i>f</i>
(Fin)	debt . . . limitations/limit
–	borrowing ceiling
(ie,	<i>ceiling placed on the amount of borrowings by</i>
individuals, corporations, or public authorities)	
(Fin)	borrowing allocation (<i>ie, festgelegt vom Vor-</i>
stand)	

In these entries we again see the classic elements of a good dictionary. There are abbreviated references to the specific field of use (Fin = Business Finance/Banking; FiW = Public Finance), to British (GB) or American usage (US), and explanations of certain terms (introduced by ie). Sometimes there is even a bilingual explanation:

Eigenkapitalquote	<i>f</i>
(Fin)	equity ratio
–	capital-to-assets ratio
–	capital ratio
(ie,	<i>Verhältnis Eigenkapital zur Bilanzsumme =</i>
	<i>ratio of equity to total assets; hat sich in der In-</i>
	<i>dustrie bei 30 % stabilisiert</i>)

The same type of entry, with an equally good additional range of references, is found on the CD-ROM *Langenscheidt Routledge e-Fachwörterbuch Wirtschaft, Handel und Finanzen Englisch: Englisch-Deutsch / Deutsch-Englisch*. The corresponding entries for "Verschuldung" can be seen below:

The screenshot shows the interface of the e-Fachwörterbuch. On the left, there is a sidebar with a search bar containing 'Verschuldung', a 'Schnellsuche' section, and a 'Stichwortliste' containing various terms related to debt. The main content area displays the search results for 'Verschuldung'. It includes the following entries:

- Verschuldung** f (Fin) indebtedness, level of debt
- Verschuldung der öffentlichen Hand** (WiWi) public debt
- Verschuldung des Bundes** (WiWi) indebtedness of the federal government
- Verschuldung pro Kopf** (WiWi) per capita debt (*der Bevölkerung*)
- Verschuldungsgrad** m 1. (Bank) (AE) leverage ratio; 2. (Fin) debit ratio, debt ratio, debt equity ratio, (BE) gearing, (AE) leverage; 3. (RW) (AE) leverage ratio, debt equity ratio (*Quotient aus Fremdkapital und Eigenkapital*); 4. (Admin) debt equity ratio (*Quotient aus Fremdkapital und Eigenkapital*)
- Verschuldungsgrenze** f (Gen) borrowing allocation, borrowing ceiling

and for "Eigenkapitalquote":

The screenshot shows the interface of the e-Fachwörterbuch. On the left, there is a sidebar with a search bar containing 'Eigenkapital', a 'Schnellsuche' section, and a 'Stichwortliste' containing various terms related to capital. The main content area displays the search results for 'Eigenkapitalquote'. It includes the following entries:

- Eigenkapitalquote** f (Fin) capital ratio, capital-to-assets ratio, equity ratio (*Verhältnis von Eigenkapital zu Gesamtkapital, ratio of equity to total assets*)
- Eigenkapitalrendite** f (EKR) (Fin, WiWi) return on equity, ROE, equity return, return on net assets, return on net assets employed (*Synonym: Eigenkapital/rentabilität*)

The obvious advantages of capacity, search speed are ease of use are the major reasons for working with digital dictionaries such as the one above, as we have already noted in the case of monolingual resources.

Indeed, the ZHAW intranet library page links not only to general bilingual dictionaries in electronic form but also to a large and growing range of specialised bilingual resources, accessed either directly in NEBIS or via the "Nachschlagewerke Online" page – just click on the relevant subject-specific link.

The screenshot shows the 'Nachschlagewerke Online' page. It features several search filters and a list of available resources. The 'Fachspezifisch' filter, which includes categories like 'Wirtschaft & Recht', 'Medizin', 'Technik & Architektur', 'Sprache & Kultur', 'Biologie, Chemie & Physik', and 'Allgemeines / Interdisziplinäres', is highlighted with a red box. Other filters include 'Wörterbücher / Enzyklopädien' (with sub-options for 'Einsprachig' and 'Mehrsprachig (nach Zielsprache)'), 'Karten / Atlanten', 'Verzeichnisse', 'Wirtschaft, Management & Recht', and a list of resources grouped by letter (A, B, C, D, E, F - H - I - K, O, R - S - U).

Here you will find, besides the *Langenscheidt Routledge e-Fachwörterbuch Wirtschaft, Handel und Finanzen Englisch*, dictionaries for other specialised fields such as technology:

The screenshot shows the search interface for the *Langenscheidt e-Fachwörterbuch Technik und angewandte Wissenschaften Deutsch-Englisch*. The search bar at the top contains 'Verzahnung'. The results list shows 'Flexisuche: 10 Treffer' (Flexible search: 10 hits) with several entries for 'Verzahnung'. The main panel displays the detailed entry for 'Verzahnung' in English, with three definitions listed under different headings: 'Verzahnung f <masch> (in Eingriff stehend) • gearing', 'Verzahnung f <masch> • teeth; tooth system; toothing', and 'Verzahnung f <prod> (von Lackschichten) • keying pract'. A 'POP-UP Suche' button is visible in the top right corner.

The entry above is taken from the fine *Langenscheidt e-Fachwörterbuch Technik und angewandte Wissenschaften Englisch-Deutsch / Deutsch-Englisch*. Another standard specialist dictionary in the technological domain is Ernst's *Wörterbuch der industriellen Technik*. In the print edition, German-English is covered by the first volume. More user-friendly, however, is the version on CD-ROM, which is available on the ZHAW intranet and can be accessed via the ZHAW intranet library page either directly in NEBIS or on the "Nachschlagewerke Online" page (as shown above).

The link opens an interface collecting together several reference works, activated and deactivated with the buttons in the toolbar across the top of the page.

The screenshot shows a linked interface for the term 'Verzahnung'. The top navigation bar includes links for PONS DE-DE, PONS FR-DE, Duden Deutsch Englisch, Duden Englisch Deutsch, Duden Deutsch Franz., Duden Franz. Deutsch, VD Deutsch Spanisch, VD Spanisch Deutsch, Dietrichs Städtelexikon, Becher DE-ES, Becher ES-DE, Dietrichs Lernwörterbuch DE-EN, Dietrichs Lernwörterbuch EN-DE, EICHORN EN-DE, and EICHORN DE-EN. The main panel displays the definition of 'Verzahnung' from the Dietrichs Lernwörterbuch DE-EN, listing four meanings: 'Zahnräder n p / (Masch) / toothed wheel work', 'Verzahnen n / gear cutting, gear tooth forming, gearing [of wheels]', 'Verzahnung f (Bau) / denticulation', and 'Verzahnung f, Verzahnen n, Ineinanderfügen n mit Zähnen (Zimm) / indenting'. Below the main panel, there are buttons for 'verzahnung', 'Search', 'Options', and 'Display Selection', with a note indicating '1 Items found'.

Above is result for *Verzahnung*, and we immediately see that the range and detail of reference go far beyond those of a general dictionary. What is lacking, of course, are example-based collocational and contextual references.

The same linked interface provides access to other German-English dictionaries, namely *Der grosse Eichborn* and Dietl's *Wörterbuch für Recht, Wirtschaft und Politik*, which in these cases specialise in economics, insurance, law and politics:

The screenshot shows a linked interface for the term 'Schadenregulierung'. The top navigation bar includes links for PONS DE-DE, PONS FR-DE, Duden Deutsch Englisch, Duden Englisch Deutsch, Duden Deutsch Franz., Duden Franz. Deutsch, VD Deutsch Spanisch, VD Spanisch Deutsch, Dietrichs Städtelexikon, Becher DE-ES, Becher ES-DE, Dietrichs Lernwörterbuch DE-EN, Dietrichs Lernwörterbuch EN-DE, EICHORN EN-DE, and EICHORN DE-EN. The main panel displays the definition of 'Schadenregulierung' from the Dietrichs Lernwörterbuch DE-EN, stating '(VersR) claims settlement; adjustment of a claim; loss adjustment; (Seever.) average adjustment'. Below the main panel, there are buttons for 'Schadenregulierung', 'Search', 'Options', and 'Display Selection', with a note indicating '1 Items found'.

Many, though by no means all, of the electronic resources presented in this sequence are published by Langenscheidt (<http://www.langenscheidt.de/>). A rival set of products, concentrating on more general language use, is the PONS Lexiface range: <http://www.pons.de/>. But whatever digital bilingual resource you use, you should always remember that the same general rules apply as those for printed dictionaries: only use bilingual dictionaries in conjunction with monolingual reference works in the source and target languages, and always check back in monolingual sources where there is the slightest doubt or lack of clarity.

Summary

The purpose of this sequence has been to draw attention to selected bilingual printed and digital resources for the German-English translation version. You have gained

- an overview of the major types of bilingual resource for language professionals
- awareness of how to use these together with monolingual resources
- basic insights into their strengths and weaknesses

This sequence has not been designed to be exhaustive; the wide and fast-growing range of products on the market makes this impossible. Instead, it has focused on a few representative examples in order to indicate the major features of such resources, and to encourage you to explore them further in the course of your own research.

As already mentioned, a select, annotated bibliography of bilingual German-English resources can be found in the **appendix** under "**German-English Bilingual Bibliography**".

AN ANNOTATED BIBLIOGRAPHY OF BASIC GERMAN-ENGLISH / ENGLISH-GERMAN PRINTED AND DIGITAL REFERENCE WORKS

This bibliography is designed to list some basic German-English / English-German resources in print and on digital media – principally CD-ROM and DVD – which student translators who are commencing their studies on the ZHAW's Bachelor Programme in Language and Communication will find useful. The intention is not to compile an exhaustive bibliography listing all possible resources but to provide an introductory selection of works.

While every effort has been made to keep this bibliography up to date, certain titles may have been withdrawn from publication or newer editions released without the knowledge of the author. Students should always consult the latest edition available unless they have good reason to use an earlier one (e.g. for historical terminology and references).

BILINGUAL GERMAN-ENGLISH / ENGLISH- GERMAN TITLES

The works below have been recommended by translators teaching at ZHAW.

GERMAN-ENGLISH / ENGLISH-GERMAN: GENERAL DICTIONARIES

Duden-Oxford Bildwörterbuch Deutsch und Englisch. 2nd ed. Mannheim, Leipzig, Vienna, Zurich: Dudenverlag, 1994.

A very good pictorial dictionary. Illustrated sources, such as encyclopædias and pictorial dictionaries, are very useful to translators in the technical, scientific and medical fields.

Duden-Oxford Großwörterbuch Englisch: Deutsch-Englisch/Englisch-Deutsch. 3rd ed. Mannheim: Dudenverlag, 2005.

Up-to-date single-volume dictionary highly recommended by many translators and students. Also available on CD-ROM.

Langenscheidt Collins e-Grosswörterbuch Englisch Englisch – Deutsch / Deutsch – Englisch. Berlin, Munich, Vienna and Zurich: Langenscheidt, 2004. CD-ROM

Fine electronic dictionary with 350,000 terms and over 530,000 translations. See next entry for the print edition.

Langenscheidt Collins Grosswörterbuch Englisch. Englisch - Deutsch / Deutsch – Englisch.
Berlin, Munich, Vienna and Zurich: Langenscheidt, 2004.

The print edition of the electronic dictionary listed above. 350,000 terms and over 530,000 translations. A very good, user-friendly, up-to-date single-volume dictionary. Also available on CD-ROM (see above).

Langenscheidts Enzyklopädisches Wörterbuch der englischen und deutschen Sprache; Der Große Muret-Sanders. 4 vols. Berlin, Munich, Vienna and Zurich: Langenscheidt, 1997-2002.
The most comprehensive German-English dictionary. Though somewhat expensive, it is an indispensable reference work for translators. It comes in two parts – English-German and German-English – each consisting of two volumes.

PONS Großwörterbuch für Experten und Universität. Englisch-Deutsch/Deutsch-Englisch. Rev. ed. Stuttgart: Klett, 2002.

An affordable and very reliable single-volume dictionary for handy reference. The new edition is up-to-date, containing many of the more modern idioms. Many of the entries contain collocational examples. User-friendly layout

PONS Lexiface Professional Englisch Englisch-Deutsch / Deutsch-Englisch CD-ROM
Over 300,000 terms. A rival product of the *Langenscheidt Collins e-Grosswörterbuch* listed above.

GERMAN-ENGLISH / ENGLISH-GERMAN: ECONOMICS, POLITICS, LAW

Arthur Andersen Wirtschaftsprüfungsgesellschaft Steuerberatungsgesellschaft mbH, ed.
Fachwörterbuch Rechnungslegung Steuern Bankwesen EDV. Stuttgart: Schäfer-Poeschel Verlag, 1996.

Includes very useful appendices containing model accounts for German, UK and US companies, together with standard wordings for auditors' reports (which appear in annual reports).

Bernem, Theodor van. *Wirtschaftsenglisch-Wörterbuch: Englisch-Deutsch / Deutsch-Englisch.* 5th ed. Munich and Vienna: Oldenbourg, 1997.

Beseler, Dora von and Barbara Jacobs-Wüstenfeld *Law Dictionary: Fachwörterbuch der anglo-amerikanischen Rechtssprache einschliesslich wirtschaftlicher und politischer Begriff.* *Deutsch-Englisch.* 4th ed. Berlin and New York: Walter de Gruyter, 1991.

An excellent and highly reliable resource. Highly recommended.

Collin, P.H., Sigrid Janssen and Anke Kornmüller. *Pons Fachwörterbuch Recht Englisch-Deutsch Deutsch-Englisch.* Stuttgart and Dresden: Klett, 2005.

A handy and inexpensive legal dictionary explaining many basic legal terms in English. Recommended.

Dietl, Clara-Erika and Egon Lorenz. *Wörterbuch für Recht, Wirtschaft und Politik Englisch-Deutsch / Deutsch-Englisch.* 2 vols. 5th ed. Munich: C.H. Beck, 2005.
The standard English-German / German-English legal dictionary.

Dietl, Clara-Erika. *Wörterbuch für den Wirtschafts- und Handelsverkehr.* 2 vols. 3rd ed. Wiesbaden: Gabler, 1995.

Eichborn, R. von. *Der grosse Eichborn*. 2 vols. 3rd ed. Burscheid: Siebenpunkt Verlag, 2003. Large and rather expensive dictionary containing commercial, financial, (re)insurance and legal terms. Recommended, though be careful about the (re)insurance entries! D-E is covered in one volume.

Hamblock, Dieter and Dieter Wessels. *Grosswörterbuch Wirtschaftsenglisch*. 3rd ed. Düsseldorf: Cornelsen Girardet, 2006. A superb, comprehensive dictionary of economics. Also available in digital form.

Klaus, Hans. *Fachausdrücke im Bankgeschäft/Banking Dictionary*. 7th ed. Bern and Stuttgart: Verlag Paul Haupt, 1990. Inexpensive and reliable banking dictionary. Available in paperback.

Koschnik, Wolfgang J. *Standard Dictionary of Advertising, Mass Media and Marketing: German-English*. Berlin and New York: Walter de Gruyter, 1987.

Langenscheidt Routledge e-Fachwörterbuch Wirtschaft, Handel und Finanzen Englisch-Deutsch / Deutsch-Englisch. CD-ROM Version 4.0
Up-to-date CD-ROM (October 2002) with 110,000 specialist terms.

Le Docte, Edgard. *Rechtswörterbuch in vier Sprachen F/SP/E/D*. Zurich: Schulthess Polygraphischer Verlag, 1995 (reprint of 1987 edition).

Romain, Alfred. *Wörterbuch der Rechts- und Wirtschaftssprache. Englisch-Deutsch / Deutsch-Englisch*. 2 vols. Rev. ed. Munich: Beck, 2000-2002.
Another standard bilingual work in the field of law and economics. Very reliable. The Thurgauerstrasse library holds the previous edition.

Schäfer, Michael and Wilhelm Schäfer. *Management and Marketing Dictionary. Deutsch-Englisch*. Munich: Beck, 2004.
Also available on CD-ROM.

Schäfer, Wilhelm. *Hyperbook Wirtschaftsenglisch Deutsch-Englisch 4.0*. Munich: Verlag Franz Vahlen, 2003. CD-ROM

Schäfer, Michael and Wilhelm Schäfer. *Wirtschaftswörterbuch. Englisch-Deutsch / Deutsch-Englisch*. 2 vols. 7th ed. Munich: Verlag Franz Vahlen, 2004.
Simply the best bilingual economics and business dictionary on the market. Highly reliable and excellent value for money. In two volumes.

Stocks, Karl-Heinz. *Wörterbuch für alle Sparten der Versicherung*. 2 vols. 2nd ed. Düsseldorf: Verlag Anneliese Rettinghausen, 1988.
Reasonably priced specialist dictionary for direct insurance, with some reinsurance terminology as well. Reliable entries, though no examples or explanations are provided. Translators should also familiarise themselves with the initially confusing layout before using the dictionary. The D-E section comprises one volume.

Zahn, Hans E. *Wörterbuch für das Bank und Börsenwesen*. 5th ed. Frankfurt am Main: Fritz Knapp Verlag, 2004.
A good dictionary used by many professional translators in the field.

GERMAN-ENGLISH / ENGLISH-GERMAN: MEDICINE, SCIENCE & TECHNOLOGY

Antoni, T. *Dictionary of Drives / Kraftfahrzeugtechnik*. 2nd ed. Weinheim: Wiley-VCH (Parat), 2000.

Includes Chinese entries.

Bezner, H. *Dictionary of Electrical Engineering, Power Engineering and Automation / Fachwörterbuch Industrielle Elektrotechnik, Energie- und Automatisierungstechnik*. Weinheim: Wiley-VCH (Parat), 2003.

Includes Chinese entries.

Brinkmann, K-H. *Wörterbuch Daten- und Kommunikationstechnik / Data Systems and Communications Dictionary*. 4th Wiesbaden: Brandstetter, 2002.

This the fourth edition of the famous *Data Systems Dictionary*. You should acquire the most recent edition you can find.

Budig, Peter-Claus. *Fachwörterbuch Elektrotechnik und Elektronik*. Berlin, Munich, Vienna and Zurich: Langenscheidt, 2003.

Bunjes, W. E. *Wörterbuch der Medizin und Pharmazie*. 2 vols. 4th ed. Stuttgart and New York: Georg Thieme Verlag, 1981.

A fine dictionary of medicine and pharmacy which is certainly good value for what it offers. In addition to the conventional dictionary entries, it contains conversion tables and a section on Latin and Greek prefixes. D-E is covered in one volume.

Dorian, A. F. *Elsevier's Encyclopædic Dictionary of Medicine*. 4 vols. Amsterdam, Oxford, New York and Tokyo: Elsevier, 1987-1990.

Elsevier is a world-leading publisher of scientific, technical and medical material, and the above entry is merely one of a huge range of highly specialised dictionaries published by the firm. You can find out more about their dictionaries at the following site:

http://www.elsevier.com/authored_subject_sections/S03/dictionaries/index.htm

Most of Elsevier's dictionaries are very good; and all of them are expensive. Indeed, you should make use of libraries holding these highly specialised dictionaries as often as you can. ZHAW, Zurich's *Zentralbibliothek* and the *ETH* library together have a good selection. Many are published on CD-ROM. Indeed, Elsevier did publish a CD-ROM (the third edition, which came out in 2000, is the latest) containing 85 of its specialised dictionaries with a total of 4.7 million terms.

Ernst, R. *Wörterbuch der industriellen Technik*. Vol 1. 6th ed. Wiesbaden: Brandstetter, 2003. Students should buy the latest edition of this standard work if they wish to purchase this dictionary (the full reference to the fifth edition was not available when this bibliography was drawn up). D-E is covered by the first volume. Also on CD-ROM (2004). The CD-ROM version is available via the ZHAW library page (https://intra.zhaw.ch/zhw_bibliothek.php?nav=bib_nachschatzwerke).

Ferretti, Vittorio. *Wörterbuch der Elektronik, Datentechnik und Telekommunikation. Deutsch-Englisch*. 3rd ed. Berlin & Heidelberg: Springer-Verlag, 2004.

The standard dictionaries used by professionals in the field. Also on CD-ROM.

Gerstner, A. *Dictionary of Logistics, Microelectronics and Data Processing / Wörterbuch der Logistik, Mikroelektronik und Datenverarbeitung*. 2nd ed. Weinheim: Wiley-VCH, 2002.

Gross, H. *Dictionary of Chemistry and Chemical Technology*. 3rd ed. Thun and Frankfurt a. M.: Verlag Harri Deutsch, 1990.

A generally good though expensive dictionary of chemistry.

Junge, H-D. & D. Lukhaup. *Dictionary of Automotive Engineering / Wörterbuch Kraftfahrzeugtechnik*, Weinheim: Wiley-VCH (Parat), 1991.

Langenscheidt e-Fachwörterbuch Elektronik und Elektrotechnik Englisch-Deutsch / Deutsch-Englisch. CD-ROM Version 4.0

Up-to-date CD-ROM with 150,000 specialist terms. A version is available via the ZHAW library page (https://intra.zhaw.ch/zhw_bibliothek.php?nav=bib_nachschatzwerke).

Langenscheidt e-Fachwörterbuch Informationstechnik Englisch-Deutsch / Deutsch-Englisch.

CD-ROM Version 2.0

CD-ROM with 50,000 specialist terms, available the ZHAW library page (https://intra.zhaw.ch/zhw_bibliothek.php?nav=bib_nachschatzwerke).

Langenscheidt e-Fachwörterbuch Maschinen- und Anlagenbau Englisch-Deutsch / Deutsch-Englisch. CD-ROM Version 4.0

CD-ROM with 74,000 terms. A version is available via the ZHAW library page

https://intra.zhaw.ch/zhw_bibliothek.php?nav=bib_nachschatzwerke.

Langenscheidt e-Fachwörterbuch Medizin Englisch-Deutsch / Deutsch-Englisch. CD-ROM Version 4.0

Up-to-date CD-ROM (released November 2002) with 220,000 specialist terms. A version of this dictionary is also available online via the ZHAW library page:

https://intra.zhaw.ch/zhw_bibliothek.php?nav=bib_nachschatzwerke

Langenscheidt e-Fachwörterbuch Technik und angewandte Wissenschaften Englisch-Deutsch / Deutsch-Englisch. CD-ROM Version 4.0

Up-to-date CD-ROM with 500,000 specialist terms. This dictionary is also available online via the ZHAW library page:

https://intra.zhaw.ch/zhw_bibliothek.php?nav=bib_nachschatzwerke

Langenscheidt e-Fachwörterbuch Umwelttechnik Englisch-Deutsch / Deutsch-Englisch. CD-ROM Version 2.0

CD-ROM with 50,000 specialist terms, available via the ZHAW library page (https://intra.zhaw.ch/zhw_bibliothek.php?nav=bib_nachschatzwerke).

Langenscheidt Fachwörterbuch Physik Deutsch-Englisch. Munich, Vienna and Zurich: Langenscheidt, 2005.

This dictionary is also available online via the ZHAW library page:

https://intra.zhaw.ch/zhw_bibliothek.php?nav=bib_nachschatzwerke

Langenscheidt Fachwörterbuch Technik und angewandte Wissenschaften Englisch-Deutsch / Deutsch-Englisch. 2 vols. Munich, Vienna and Zurich: Langenscheidt, 2004.

The print version of the above. This dictionary is also available online via the ZHAW library page: https://intra.zhaw.ch/zhw_bibliothek.php?nav=bib_nachschatzwerke

Langenscheidt Online-Fachwörterbuch Biologie, Biotechnologie, Ökologie Englisch-Deutsch / Deutsch-Englisch.

An online dictionary with 200,000 terms covering all areas of biology, biotechnology and ecology. It is available online via the ZHAW library page:

https://intra.zhaw.ch/zhw_bibliothek.php?nav=bib_nachschatzwerke

Lukhaup, D. *Dictionary of Environmental Protection English-German German-English / Wörterbuch Umweltschutz*. Weinheim: VCH (Parat), 1992.

Falbe, Jürgen, & Manfred Regitz (ed). *Römpf Lexikon Chemie*. 10th ed. Stuttgart: Thieme, 1996.

An excellent multi-volume encyclopædia of chemistry in German, but with many key terms translated into English. The print edition will not be renewed. This and other Römpf encyclopædias are now published together on a CD-ROM (see under *Römpf* below).

Ohrbach, K.-H. *Dictionary of Ecology English-German German-English / Wörterbuch Ökologie*. 2nd ed. Weinheim: Wiley-VCH (Parat), 2000.

Pons Fachwörterbuch Datenverarbeitung Englisch-Deutsch / Deutsch-Englisch. Stuttgart: Klett, 1997.

A useful dictionary presenting and explaining a wide range of computer terminology in English. An index of German terms guides the user to the appropriate English translation. Highly recommended, as are all the *Pons Fachwörterbuch* series (see the next two entries below, which are included only as examples).

Pons Fachwörterbuch Medizin Englisch-Deutsch / Deutsch-Englisch. Stuttgart and Dresden: Klett, 2000.

Pons Fachwörterbuch Umwelt Englisch-Deutsch / Deutsch-Englisch. Stuttgart and Dresden: Klett, 2002.

Pschyrembel Klinisches Wörterbuch. 260th ed. Berlin: Gruyter, 2004.

The standard German reference work in its field, but useful for the translator because many English equivalents are included. Also available on CD-ROM and online on the ZHAW intranet.

Radde, Karl-Heinz. *Langenscheidts Fachwörterbuch Kompakt Informationstechnik Englisch-Deutsch / Deutsch-Englisch*. Munich, Vienna and Zurich: Langenscheidt.

Römpf CD 2006. Stuttgart: Thieme, 2006.

Collection on one CD-ROM of all Römpf encyclopædias covering biotechnology, chemistry, food chemistry, natural materials and the environment. Also available as an online resource.

Seidel, Egon. *Fachwörterbuch Umweltschutztechnik. Englisch-Deutsch-Französisch-Russisch*. Berlin and Paris: Hatier, 1991.

Siemens A&D Translation Services (ed). *Dictionary of Electrical Engineering, Power Engineering and Automation / Wörterbuch Industrielle Elektrotechnik, Energie- und Automatisierungstechnik*. CD-ROM. Weinheim: Wiley-VCH, 2004.

Technische Universität Dresden. *Langenscheidts e-Fachwörterbuch Chemie und chemische Technik. Englisch-Deutsch / Deutsch-Englisch*. CD-ROM.

Technische Universität Dresden. *Langenscheidts Fachwörterbuch Chemie und chemische Technik. Englisch-Deutsch / Deutsch-Englisch*. 2 vols. Munich, Vienna and Zurich: Langenscheidt.

The print version of the above. A compact version of this dictionary is available online via the ZHAW library page: https://intra.zhaw.ch/zhw_bibliothek.php?nav=bib_nachschatgewerke

Technische Universität Dresden. *Langenscheidts Fachwörterbuch Kompakt Ökologie. Englisch-Deutsch / Deutsch-Englisch*. Munich, Vienna and Zurich: Langenscheidt.

Tilmann, H. *Dictionary of Radio and Television Terms / Fachwörterbuch Hörfunk und Fernsehen*. 5th ed. Weinheim: Wiley-VCH, 2000.

Tilmann, H. *Dictionary of Radio and Television Terms / Fachwörterbuch Hörfunk und Fernsehen*. CD-ROM Version 4.
CD-ROM version of the above.

Unseld, D. W. *Medizinisches Wörterbuch der deutschen und englischen Sprache. Englisch-Deutsch / Deutsch-Englisch*. 11th ed. Stuttgart: WVG, 1996.

Veillon, E., & Nobel, Albert. *Medizinisches Wörterbuch*. 6th ed. Berne: Hans Huber, 1989
(reprint of 1977 edition).

Wenske, Gerhard. *Wörterbuch Chemie*. 2 vols. Weinheim: VCH (Parat), 1994.
An excellent reference work for all areas of chemistry.