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THE TERMINOLOGY OF THE ACCOUNTS RECEIVABLE MODULE OF
QVANTEK BUSINESS SOLUTIONS' TMS SYSTEM

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| <p>Tiivistelmä – Abstract</p> <p>The aim of this study was to produce a glossary that covers the most important terms occurring in an accounting and customer management system developed by Qvantel Business Solutions. The terminology used in this system had not received due attention during the development phases; the terminology used was not systematic and duplicate terms were found. With the help of the glossary produced alongside this thesis the system can be developed to be more user-friendly in the future.</p> <p>In the beginning of the terminology project it was necessary to get acquainted with the special field of telecommunications and accounting, respectively, since the Tele Management System (TMS) contains terminology from both of these fields. Another important stage of the project was to familiarize with the theory of terminology. Due to the fact that the terminology project was an actual commission to a customer, the traditional theory of terminology was chosen as the theoretical guideline; this enabled the project to be done swiftly according to the customer's wishes. One of the key features in the theoretical part of this study is the difference between a language for general purposes (LGP) and a language for special purposes (LSP). The importance of this division was also reflected in the actual terminology project; one of the biggest difficulties during the project was the differentiation between words that belong to general language versus words that belong to special language.</p> <p>The company's wish was to receive a normative glossary regarding the terms in the TMS system. However, as the project proceeded it soon became evident that it would be impossible to produce a purely normative glossary in the time frame available for the project. A purely normative glossary would have also needed some more profound expertise assistance during the project. The 68 term bilingual glossary produced alongside this thesis is not purely descriptive either, but a mix of these two.</p> <p>The terminology work began by collecting a pre-term list from the material provided by the company. In the beginning this pre-term list contained over 120 possible terms, but was then narrowed down to the range of 50 to 80 actual terms to be included in the glossary. The number of terms to be included varied during the process.</p> <p>After this the terms were grouped according to their meaning in the TMS system. This was the raw division that would later form into concept systems. The concept systems were each formed around one term that had a significant meaning in the TMS. In a practical in-house glossary such as this one, the most important part are the actual terminological entries, whereas the concept systems carry a secondary value. They could not be completely left out though, since they are a vital part in producing the definitions for the concepts.</p> <p>The concept systems are formulated according to the different relationships that the concepts have. The three different relationships are generic, partitive and associative relation. All these are graphically presented with different symbols, so they can be differentiated in the concept systems. The relations between the concepts of the TMS system were fairly complex and thus also the concept systems ended up being mixed concept systems, many of them containing all three types of conceptual relations.</p> <p>The key element in a definition is the concepts relation to its neighboring concepts. This is why the definitions can only be formulated after the concept systems.</p> <p>An essential part of any terminological study is a consultation round, where the customer would evaluate the result. Since the terminology project lacked this phase, the conclusive part of this study presents an evaluation of the usability of this glossary. Since the cooperation with the company did not last till the end of this project, the conclusive remarks can only be seen as an evaluation.</p> <p>At the very least this glossary can be seen as a ground work and guideline for the possible future terminology projects in the company.</p> | | | | |
| <p>Avainsanat – Keywords Terminology, glossary, telecommunication, accounting, accounts receivable</p> | | | | |

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1. INTRODUCTION

The world is constantly changing and new special fields are emerging. The need for terminology work is continuously growing as new technological applications come to market and companies have an increasing need to localize their software to be able to broaden their services and function internationally. In order to avoid misunderstandings and mistakes it is important to include linguists in the terminology projects to keep the terminology consistent and easy to comprehend. With the help of a glossary made specifically for a certain field, the terminology is easy to keep more consistent.

The purpose of this study was to produce an extensive bilingual (English-Finnish) glossary of the terms in the accounts receivable module of the Tele Management System (later in this study referred to as TMS), which is one of the telecommunication service solutions of Qvantel Business Solutions. TMS system is a comprehensive customer care and billing solution for telecommunication service providers. This system has in recent years been developed by different people in the company and the terminology has not received the needed attention, and has thus become incoherent, which again has made the system difficult to use. The purpose of this terminology work was to create a clear guideline of the appropriate terms for the future developers and also to help the system to become more user-friendly. The company has commissioned some terminology work also before this project; however, this specific area of the TMS system has not been covered previously. The commission also contained a wish to harmonize the terminology with a glossary produced by TM Forum.

The glossary produced in this study is neither clearly descriptive nor clearly normative. The company's wish was to have a normative, guiding glossary for their use. As the work proceeded, it soon became clear that in the time frame and special field resources available for this project, it was going to be impossible to produce a purely normative glossary.

This terminology project served at the same time as a real commission for the company, which led this work to be done by following the principles of the general theory of terminology. This enabled the project to be done swiftly as time is considered. Some

more recent studies in the field of terminology have questioned issues in the traditional theory of terminology, but for this project the traditional guidelines served as a suitable base.

The theoretical framework for this study is based on the principles of the traditional theory of terminology. The glossary produced for the company Qvantel Business Solutions serves as the empirical body of this study. One of the most problematic areas in this study was the issue of differentiating the words that belong to general language from words that belong to special language. Keeping in mind that the instructions from the company were to produce a glossary that contains also the simple terms so the usability of the glossary could be kept as broad as possible, in most of these cases I made the choice to include, in terms of LGP – LSP difference, even the more unclear words as terms in the glossary. In my perspective more harm would have been done by excluding some of the more incomplex terms and thus narrowing down the user group of the glossary.

As the terminological material turned out to be more complicated than expected, most of the examples in the theoretical part of the study are not selected from the material of the glossary produced along this study; instead, for them to be as illustrative as possible, the examples are kept simple and clear.

The present study has been divided into six chapters. The structure will be the following: In chapter two, the theory of terminology is presented in detail. After the theoretical foundation has been presented, some of the special features of a thesis of this nature are reviewed in chapter three. After that, chapter four introduces the subject matter of the terminology work. The actual terminology work starting from the preparatory phase is presented in chapter five, and the systems of concepts are presented and analysed in chapter six. The last chapter provides some conclusive remarks on this study, as well as some ideas for further studies in the field. The actual glossary is found in the end of the study as a separate appendix.

2. THE THEORY OF TERMINOLOGY

The traditional theory of terminology was chosen as the theoretical background for this study mainly for practical reasons. Since the terminology work that serves as the subject of this study was at the same time a real commission for Qvantel Business Solutions, it was a reasonable choice to keep the theoretical background clear and straightforward so the commission itself could be completed fairly fast.

In the following chapters the differences of language for general purposes and language for special purposes and their relationship to terminology will be introduced. Then, the elements of terminology are reviewed, as well as the historical background of the discipline (the general theory of terminology by Eugen Wüster). After the overall features of terminology as a science have been introduced, some more specific types of terminology work, i.e. normative and descriptive terminology work, are explained. The basic concepts of terminology are clarified in more detail towards the end of chapter 2.

2.1 Language for general purposes and language for special purposes

Standard language is something that all the members of a language community know. Its use of familiar words and tradition makes it widely known. We read it in the newspapers and hear it on the television and the radio. However, when we enter a special field, a profession or a hobby for example, we encounter language forms that are not generally known. The structure of the language might look the same, but the vocabulary and concepts seem unfamiliar (Haarala 1981:9).

Picht and Draskau (1985:3) have defined the difference between LSP, language for special purposes and LGP, language for general purposes: “LSP is a formalized and codified variety of language, used for special purposes and in a legitimate context --- with the function of communicating information of a specialist nature at any level“. It contains many such terms that are not familiar to a layman. However, sometimes also

people that are not familiar with a certain special field still have the need to understand the language; therefore economy, preciseness and unambiguity are important qualities of LSP. These qualities help to keep the special language easier to understand to a layman. The purpose of a special field language is to make communication in the special field effortless and exact. Hoffmann (1976, in Picht and Draskau 1985:3) states that LGP always serves as the source and foundation for different LSPs. In other words, LSP uses familiar words from LGP, but gives them a different meaning through a new context. “LGP has an autonomous existence, whereas the existence of LSP is LGP dependent” (Picht and Draskau 1985:3). For example the word *mouse* in LGP refers to a small rodent, but in LSP it refers to an inanimate object that is used with computers.

The level of specialization in a special language is not always fixed. Instead, it varies according to the level of abstraction of the special field itself, the topics within that field and also by the background knowledge and expertise the persons involved obtain (Picht and Draskau 1985:3).

Special languages are often conceived of as being complicated and difficult to understand. However, also special languages should aim to follow the general linguistic norms, in order for it to not become incomprehensible to specialists of neighbouring subject fields, authorities or the public. A special language should only differ from the standard language when it is necessary (Sanastotyön käsikirja 1989:12). The clearness and transparency of a special language can be achieved by conscious terminology planning.

Special languages are not static in nature. Instead, they keep changing and especially growing constantly. In special fields such as technology and electronics the vocabulary is growing at a fast pace (Haarala 1981:10). This creates challenges for language planning and terminology.

In the terminology work that serves as the subject of this study one of the biggest difficulties was to find the difference between words belonging to LGP and words belonging to LSP. When the special field of the terminology is not very familiar to the terminologist, the difference might be problematic to resolve.

The two concepts of special languages and terminology might sometimes become easily confused. The following illustration from Picht and Draskau (1985:22) clarifies the relation between LGP, LSP and terminology.

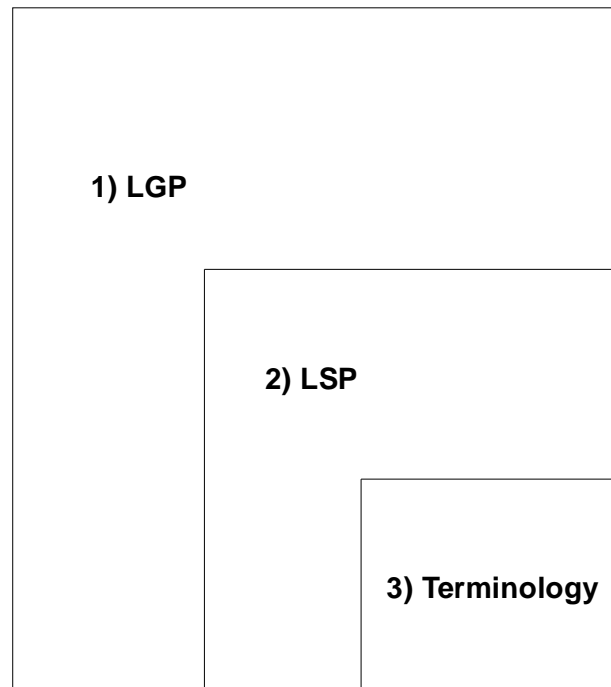


Figure 1. The graphical illustration of the relationship of LGP, LSP and terminology (Picht & Draskau 1985:22).

The largest box in the figure above represents the standard language of a given community as a whole (1) LGP). The second smaller section (2) LSP) represents the special languages, all of which are a part of LGP; LSP can only generate within LGP. They might share some concepts, but LSP also has some concepts that LGP does not have. The smallest section (3) Terminology) represents the concepts and expressions of one special language in particular (Picht & Draskau 1985:22).

The special field of the glossary produced in the present study combines features from mainly two different fields: accounting and telecommunications. These special fields are reviewed more closely later in chapter 3.1.

2.2 What is terminology

Haarala (1981:12) points out that in order for the special language to be economical, precise and unambiguous, it needs conscious planning and attention. This is why we need terminology. It studies concepts, their relations, concept systems, definitions, terms and the criteria for their selection. The vocabulary in some fields is growing so fast that in order to keep the communication unambiguous, organized terminology work is crucial. Terminology work aims to keep the vocabulary of a certain special field consistent by giving suggestions of the acceptable and preferable terms.

Sager (1990:2) defines terminology as “--- the study of and the field of activity concerned with the collection, description, processing and presentation of terms, i.e. lexical items belonging to specialised areas of usage of one or more languages”. His definition of terminology includes the concept of terminological activity, i.e. collection, description, processing and presentation of terms. What differentiates terminology from its close neighbouring science *lexicography*, he continues, is that the data collected is of a different nature, the people involved in the process are of different backgrounds and also the methods used are slightly unlike.

The English word *terminology* can be used to refer to a set of words in a special field, as it can also be used to refer to the science of the structure, formation and development of concepts and terms (The Terminology of Terminology 2006:30). To keep these two ways of using the word separate and clear, the word *terminology* in this study refers to the science, and the term *glossary* is used for the compiled set of words of a special field. Sanastotyön käsikirja (1989:121) defines glossary as being a normative dictionary dealing with one special language in particular, containing both the terms and the definitions of the concepts. For more discussion about the difference of normative and descriptive terminology work, see chapter 2.4 ahead.

2.3 The general theory of terminology

As mentioned in Sanastotyön käsikirja (1989:22), the traditional theory, also called the general theory, of terminology by Eugen Wüster is considered to be the first academic research in terminology. Wüster's work "Die Internationale Sprachnormung in der Technik, besonders in der Elektrotechnik", published in 1931, is still considered to be one of the main works in the field of terminology. Inspired by Wüster, terminology started to gain academic interest more widely both nationally in Germany as well as internationally.

Felber (1984:97) refers to Wüster's theory as GTT (General Theory of Terminology), and continues that it was developed from practice for practical purposes. It serves as a scientific guideline for terminology work and enables the use of terminological principles and methods, which again should allow for unified and efficient terminology work to be done nationally and internationally.

The fact that Eugen Wüster was not actually a professional linguist, but instead an engineer, emphasizes the fact that terminology really is an inter- and transdisciplinary field, as also Felber (1984:99) states: "--- the GTT is on the one hand an interdisciplinary field of linguistics, logics, ontology, information science and of the individual special fields such as biology, engineering, physics, etc; on the other hand any field of knowledge and any profession needs the GTT for the development of its own terminologies". All sciences need terminology to be able to function (Sager 1990:2). All this underlines the co-operative nature of any terminology project; there is a need for not only a specialist in linguistics, but also always a specialist in the special field at hand.

While the traditional theory serves as an apt basis for the type of terminology work presented in this study, some more recent researches have recognized its limitations (Kageura 2002:20). Terminology research has extended its scope and the availability of automatic processing of terms in texts has also contributed to the development of studies dealing with aspects of terms that have been ignored in the traditional theory (Kageura 2002:20-21). For more recent and critical studies in the field of

terminology, see for example Sager 1990, Cabré 2000, Temmerman 2000 and Kageura 2002.

2.4 Descriptive and normative terminology work

A terminology work can be classified as being either normative or descriptive. Normative terminology work, as the etymology of the term implicates, aims at giving norms, harmonizing and standardizing the vocabulary of a certain special field, and it can also give instructions of a proper and desirable way of using the terms. Descriptive terminology work, on the other hand, collects and describes the vocabulary used in a special field, whether they are acceptable or desirable or not (Vehmas-Lehto 2005:102). Most general language dictionaries are descriptive; they describe the language and the use of words as they are, with all the different nuances (Sanastotyön käsikirja 1989:121). In practice a terminology work might not be purely one or the other, this is the case at least in many smaller scale terminology projects, which projects done by students generally are.

Even though it is often thought that descriptive and normative are concepts that exclude each other, in the field of terminology it is not true. Any normative terminology work is usually based on a descriptive work. Picht and Draskau (1985:174) state that the problematic question is more likely that “--- is it possible and even desirable to pursue descriptive work so that it leads to a standard?” The reason to avoid extensive normative terminology works is in many cases financial, since a normative terminology work usually demands extensive expertise assistance.

Standardizing is always normative. The standardization of a special field terminology aims at unifying concepts as well as systems of concepts, defining concepts, reducing homonymy, eliminating synonymy and, when needed, creating new terms according to the terminological principles (Picht & Draskau 1985:15). Standardization is always involved only with special languages; standardization of general language is impossible (Picht & Draskau 1985:17). However, in terminology, standardization is a familiar and accepted phenomenon. Picht and Draskau (1985:17) accentuate the fact that standardization does not mean the special language becoming fossilized in any

way; even standards are revised and updated on a regular basis. Language planning on the other hand can occur both in LGP and LSP. It could be referred to as a mild form of standardization, but the separating factor is that when a language (LSP) is in need of planning it does not yet have the necessary terminology for certain, often new, special field (Picht & Draskau 1985:17). These languages might have to rely on using for example English when they have to communicate in scientific and technical subjects. The objective of language planning is to ensure professional communication in the mother tongue (Picht & Draskau 1985:18).

The glossary produced along with this study is basically descriptive in nature. In the beginning it was the wish of the client (Qvantel Business Solutions) to produce a normative glossary for their use. As the terminology work proceeded, it soon became clear that it would be almost impossible to produce a standard-like, normative glossary in the time frame available. Also the lack of other resources, such as extensive special field assistance, was one of the reasons that led the work to be mainly descriptive, with only some cases where a normative suggestion of a more preferable term has been made.

Picht and Draskau (1985:174) mention that when talking about standardization, it is often assumed that it is only done by official standardization bodies, such as ISO (International Organization for Standardization), on an international and national level. However, in reality processes aiming at standardizing results take place on a much lower level, for example in many companies, “--- with the aim of making the internal communication processes smoother and more efficient” (Picht & Draskau 1985:174). This is also the case in the terminology project presented in this study. The company aims at saving valuable time (that might be consumed in for example searching the meaning of a concept that has been referred to with two different terms) by making the terminology used more coherent and clear.

2.5 The basic concepts of terminology

The basic concepts of terminology are object, concept, term and definition. In the following sub-chapters these concepts and their relationship to one another are explained.

2.5.1 Object and concept

Sanastotyön käsikirja (1989:24) defines objects as being either concrete, such as items, people or animals, or abstract, such as qualities, actions or processes. We are surrounded by millions of objects, and it is typical of human thought processes to try to organize and classify these objects. In our minds we organize these objects into entities of thought. In terminology, these entities of thought are called concepts. Concepts are elements of thinking and they only exist in our minds. To be able to use the concepts in our everyday life, we need to have linguistic labels for them. These are called terms, the names of the concepts. The relation between object, concept and term can be illustrated with the Ogden and Richards's semiotic triangle (Sanastotyön käsikirja 1989:24), as seen in Figure 2 below. It models the way the linguistic symbols are related to the objects they represent. The horizontal broken line connecting the object and term indicates that they cannot be considered as directly connected to each other, but instead the concept acts as the connective factor between them; they are only connected through the concept.

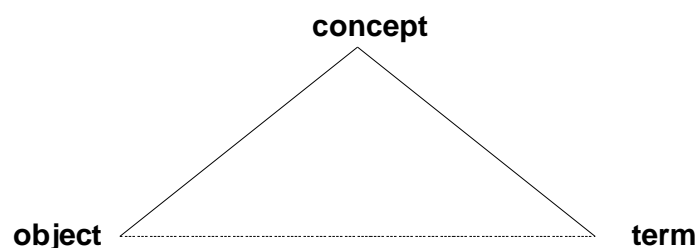


Figure 2. The Ogden and Richards's triangle (Sanastotyön käsikirja 1989:24).

Suonuuti (1997:10) has expanded this triangle seen above with the concept of *definition*, which is added in the base of the triangle, between *object* and *term*. Again, we can see how concept acts as the connective between object, term and in this case, also definition.

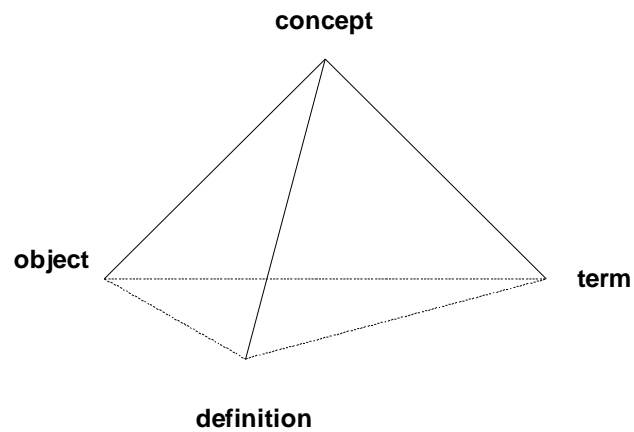


Figure 3. Suonuuti's graphic illustration of the relationship between object, concept, tem and definition (Suonuuti 1997:10).

The process of a concept being formed or the point at which it comes into being is not known exactly. However, we can analyse the concept and discover its characteristics. Characteristics are of great importance in this analysis since every time a new object is discovered or created, also a new concept is being born. The type and configuration of this new concept requires examination with the help of its characteristics. "The sum of characteristics is equal to the sum of our knowledge about a concept" (Picht & Draskau 1985:40). Characteristics are presented in more detail later in chapter 2.5.5.

2.5.2 Individual concepts and general concepts

We constitute concepts on the basis of the information we have on the object. As Suonuuti (1997:9) categorizes, a concept that is connected only to a single object, is called an individual concept, for example *the Titanic*. An individual concept is distinguished from all other concepts by the virtue of its individuality; it has a characteristic that makes it differ from the other concepts (Picht & Draskau 1985:38). Individual concepts are connected to a particular time and space, and they can be imagined or real, material or immaterial, such as *the Statue of Liberty* or the *colour* of the walls of the White House. The linguistic signs for individual concepts are often proper nouns, names. Then again, if we refer to several similar objects, properties that are common to them are chosen and included as characteristics for the general concept, for example *a boat*. The linguistic sign for a general concept is a term (Sanastotyön käsikirja 1989:26). An individual concept always contains the concept of a general concept (Picht & Draskau 1985:40).

2.5.3 Intension and extension

The intension of the concept is, according to Suonuuti (1997:10), the set of all the characteristics that constitute it. For example the intension of the concept *boat* includes characteristics such as *floating in water* and *being a vehicle*. This means that the intension of a concept can have meaningful, essential and also redundant characteristics. The extension of the concept on the other hand is the set of all the objects that it covers. For example the extension of *boat* includes objects such as *cruise ship* and *rowing boat*. The bigger the extension of a concept is, the less characteristics it has, and thus the more detailed the characteristics are the smaller is also the group of objects that the characteristics describe, the extension of the concept (Sanastotyön käsikirja 1989:28).

2.5.4 Word and term

A term is the linguistic symbol for a concept. It is essential when we want to use the concept for communicative purposes (Sanastotyön käsikirja 1989:70). In other words, a term gives the possibility of realizing the concept linguistically (Picht & Draskau 1985:93). Picht and Draskau (ibid.) continue by presenting one model for describing the relationship between the content (concept) and the linguistic realization or expression (term). In this model a word has two aspects:

1. content (the semantic value)
2. expression (the communicable linguistic form)

Here, in studying the essence of terminology, we refer to the second aspect of this division, the expression.

According to Haarala (1981:15), a term is seen as a part of a language for special purposes and its use is established in the special field. A term can only be understood in one way, whereas words of general language can be understood in many ways, depending on the context, for example. As Haarala (1981:15) mentions, in a special language it is the definition that defines the meaning of the word, not the context. The last requirement for a term is that it should be generally accepted in the special field, thus slang words are excluded.

Felber (1984:167) points out that concepts cannot be perceived by the senses. They only exist in our minds as thoughts, which is why we need linguistic symbols in order to be able to use them outside our thoughts. He continues that “in communication the three most important types of linguistic symbols are

- 1) the word
- 2) the term and
- 3) the thesaurus word.” (Felber 1984:167)

Especially the difference between the word and the term is crucial when it comes to terminology work. Felber (1984:167) states that the word is a linguistic symbol, which can have a multiplicity of non-defined meanings and of many shades of meanings and it can be used for the designation of objects. He (1984:168) continues that the term, however, is a linguistic symbol which is assigned to one or more concepts, which are defined from neighbouring concepts. A term can be a word or a word group, or it can also be a letter or a graphic symbol, an abbreviation, an acronym, etc. The connection between a concept and a term is made intentionally, whereas the word and its content form a unit that is formed mainly unconsciously. Felber (ibid.) describes a thesaurus word as a word which is used as “a descriptor or non-descriptor for information retrieval”. He defines a descriptor as being a thesaurus word that has a fixed meaning which is dependent on the information system concerned. In other words, the meaning of a descriptor word might differ depending on whether it is used as a part of the general language or a special language. A non-descriptor word, on the other hand, is a thesaurus word that has “the same meaning as is usual in communication within the subject field concerned” (Felber 1984:168,169).

In describing the ideal term, Picht and Draskau (1985:114) introduce the motivation of a term, which, in their opinion, should be self-evident; “the term should be logical and to a high degree self-explanatory”. Further qualifications for an ideal term are listed below (Picht & Draskau 1985:115). Accordingly, an ideal term should,

- be systematic,
- be in line with the syntactic rules of the language,
- be potentially productive of derivations,
- avoid pleonasm,
- not contain redundant elements,
- be as short as possible while still remaining clear,
- preferably not have synonymous, homonymous or polysemous terms,
- preferably not present orthographical or morphological variations.

Finally, Picht and Draskau (1985:116) remind that while the above mentioned rules and norms for an ideal term carry substantial practical value, they are not all applicable at once or in all possible combinations. When creating, analysing or evaluating a term, a

realistic decision can be reached by always taking the circumstances and various factors (such as the user) of an individual term into consideration (Picht & Draskau 1985:117).

The aim of terminology work is usually to find one and only one equivalent term for one concept, and vice versa. When one concept has two or more terms that it can be referred with, it is called synonymy (Haarala 1981:39). In general language synonymy can be considered richness, but in special languages it should be avoided. Homonymy is a reversed case of synonymy; two or more concepts share one term (Haarala 1981:40). Polysemy occurs when two or more concepts share a term, and the concepts are also closely related (Haarala 1981:40). Neither homonymy nor polysemy are problematic relative to terminology, since the concepts usually belong to different special languages, and misconceptions can be eliminated by the definitions of the terms (Haarala 1981:41). In the terminological material presented in this study, synonymy was a problem in some instances and the aim was to try to eliminate it.

2.5.5 Characteristics

Characteristics are the properties of the object that can be perceived or measured, or that are generally accepted as being part of the object. With the help of these characteristics, concepts can be analysed, described and distinguished from one another. Every single concept has usually a great number of characteristics, and many of them are so common (see *essential* and *inessential* characteristics further in this chapter) that they are not really suitable for indentifying a concept; they do not provide detailed enough information about the concept. Characteristics are in themselves concepts as well. Characteristics can be used to describe, delimit and distinguish concepts and they can be used to compare the similarities and differences between certain concepts, especially in multilingual terminology work (Sanastotyön käsikirja 1989:26, Suonuuti 1997:10).

As mentioned in Sanastotyön käsikirja (1989:27), characteristics can be classified in various ways, for example according to the qualities they refer to, or how simple or complicated they are. However, the following division to inner and outer characteristics has proven to be most useful when describing concrete concepts. Inner characteristics can for example be material (wood, metal, plastic), shape (round, square, flat), colour

(red, black, blue), size (mass, volume, length) or state (liquid, gas, solid). Outer characteristics are used to compare the objects and they are divided into three categories: relative characteristics (location, time, reason), functional characteristics (purpose, way of using, qualities) and characteristics of origin (producer, seller, way of production) (Sanastotyön käsikirja 1989:27).

When analysing abstract concepts, such as feelings, it is not always possible to use the above mentioned categorization of characteristics. Instead, one has to use the criterion that is more natural for the concepts of the specific field at hand. This is often the case in such fields as law and economics, where the concepts analysed are more abstract (Sanastotyön käsikirja 1989:28).

Picht and Draskau (1985:47) present another, more practice-oriented category of characteristics that distinguishes between characteristics that are used for ordering and characteristics that are insignificant. However, this classification is not unchanging, because a characteristic can change between categories as the point of view changes. For example, whereas a rose farmer may classify roses according to their colour, a botanist might as well classify the same roses according to the shape of the flower. Still, both of these classifications are based on an ordering characteristic (Picht & Draskau 1985:48).

Characteristics can also be divided into essential and inessential characteristics. Sager (1990:24) defines essential characteristics as being sufficient and necessary in the process of identifying an object. Inessential characteristics, on the other hand, are observable in the individual object (such as colour and material), but not essential in distinguishing the object from another one (Sager 1990:24). However, characteristics that in some context might be classified as inessential, may in some other scheme of concept creation become essential. For example when describing the concept of *table*, very detailed characteristics of height and size would be inessential, but for characterizing the concepts of *side-table*, *coffee-table* and *dining table* in a furniture catalogue, these characteristics would be necessary, and thus essential (Sager 1990:24).

Haarala (1981:21) reminds that characteristics have an important practical value in a terminology work. With the help of characteristics it is possible to formulate definitions

(for more information see the following paragraph 2.5.6) for the concepts and they also play an important role in constructing the concept systems. The analysis of the characteristics of a concept serves a significant role in formulating the term.

Felber (1984:118) brings up an interesting fact about the arbitrary selection of the type of characteristic in formulating concept systems. All concepts have definite place in a certain concept system; however, this definite place might be different if another type of characteristic would have been chosen as the ordering (classificatory) element for the division of concepts. He continues by stating that from a practical point of view, these different concept systems might be justified. An illuminating example of this can be found in the material of this study. From a practical point of view, choosing the structure of the invoicing system TMS as the basis of ordering the terms in the concept systems would have made the glossary more user-friendly and clear to be used for example while looking at the actual system (TMS) on the screen. The same basis for ordering the concept systems was used in the smaller scale glossary I compiled earlier for the same company. At the company they found it very practicable and wished for a similar type of solution in the present glossary. However, using the aforementioned ordering in the glossary presented in this study would have led to the terms overlapping in the concept systems to such a great extent, that it turned out to be a more reasonable choice to order the concept systems according to the subject field. Ordering the concept system on the basis of the subject field is not uncommon at all in terminology work, and thus by no means an unfavourable choice.

2.5.6 Definition

In order to be able to describe a concept, we need a definition. Picht and Draskau (1985:49) point out that there have been several attempts to classify and define the concept of definition according to various justifications such as the school of thought, its point of departure and its goals. In the end, all these share one common feature: “they all seek to make statements about an extra-linguistic entity by use of linguistic means (words, terms, signs)” (Picht & Draskau 1985:49). According to Haarala (1981:43), the definition is a linguistic description of the concept that defines the boundaries of a concept by describing its intension and extension and its relations to other concepts. He

continues that the definition also creates a norm for the proper usage of the concept and binds together the concept and its name (the term). Felber (1984:160) adds that a definition also determines the position of a single concept in a system of other related concepts. According to Felber (ibid.), the concept of explanation can be seen as an alternative for definition. He states that if in some case it is for some reason impossible to give a definition to a concept, at least an explanation should be given. What differentiates an explanation from a definition is that an explanation is a description of a concept that does not consider its position in a system of concepts (Felber 1984:160).

There are a variety of ways to classify different types of definitions. For the purpose of a practical terminology project I found the following ISO/R 1087 classification presented by Picht and Draskau (1985:51) to be adequate. They introduce three types of definitions: intensional, extensional and contextual definition.

According to Felber (1984:160) an intensional definition, or, a definition by intension, is formulated by specifying the characteristics of the concept that is to be defined. In other words, the definition is a description of the intension of the concept (see chapter 2.5.5). Restricting characteristics play a key role in this type of definition. An intensional definition first mentions “the nearest genus that has either been defined already or can be expected to be generally known --- “ (Felber 1984:160). After that, the genus (the superordinate concept) is limited to the appropriate extension by linking it to one characteristic or more, which then make a distinction between the concept that is being defined and other concepts of the same level of abstraction (ibid.). These types of characteristics are restricting characteristics (also called delimiting characteristics). Felber (1984:161) continues by giving a mathematic type of pattern for producing an intensional definition:

“Intensional definition: term = genus + restricting characteristic(s)”

Below an example (Example 1.) is given by filling the pattern of an intensional definition with a definition from the material of the glossary made for Qvantel Business Solutions.

direct debit authorization = an authorization + allowing somebody else to take an amount of money from an account on a particular date

Example 1. The term *direct debit authorization* as an example of an intensional definition.

In example (1.) the intensional definition contains two delimiting characteristics, yet only one can be enough to mark the difference between the concept defined and the other concepts of the same level of abstraction. Felber (1984:163) adds that the most common mistake made in formulating an intensional definition is omitting the restricting characteristics. This can be exemplified by modifying example (1.) of *direct debit authorization*; defining it as *a type of authorization* would be giving an incomplete definition, since the definition does not contain any restricting characteristics that would distinguish this authorization from other types of authorizations. According to Felber (1984:163), “an incomplete definition by intension can easily be recognized by the fact that the two sides of the equation cannot be interchanged”.

Felber (1984:163) describes the definition by extension as consisting of an enumeration of all species of the same level of abstraction, or, in the case of individual objects, all of them that belong to the concept that is being defined. Picht and Draskau (1985:53) introduce three types of ways to state the extension of a concept:

1. All the individual objects within the concept are named. For example, when defining the concept of *The United Kingdom*, the definition by extension of this type would be: *comprising England, Scotland, Wales, Northern Ireland*. A definition of this type might be exhaustive since it requires an enumeration of all the objects belonging to the concept. Also the smallest change in the extension of a concept makes the definition invalid and in need of revision.
2. All subordinate terms of a generic term on the same level of abstraction are named. For example, “By *designation* are understood in this standard: terms, ideograms, numbers and notations.” This type of definition is more resistant to change, since it stays valid until a new concept emerges (not only object).

3. The definition states the rule by which an enumeration, or a determination of extension is accomplished. For example, “Prime numbers are characterized by being divisible only by one and by themselves.” This type of definition comes close to the intensional definition, since it could easily be changed into the form of one.

Felber (1984:163) mentions that many times a definition by extension is easier to understand than a definition by intension. Picht and Draskau (1985:53) agree, and state that an extensional definition is also frequently shorter and more explicit. Both Felber (ibid.) and Picht and Draskau (ibid.) suggest that a definition by intension can be completed through the elements of a definition by extension.

As its name suggests, a contextual definition is a definition by context, where the definable term is presented in a whole or a partial sentence (Picht & Draskau 1985:54). They give as an example a contextual definition of the concept *aircraft*: “*He went from Europe to America in 24 hours, using an... (aircraft).*” As the essential purpose of a definition is to “make definite statements and obviate the need for speculation or guessing” (Picht & Draskau 1985:54), it can fairly safely be stated that this type of a definition only offers a vague description of the concept and does not meet the formal requirements. Sanastotyön käsikirja (1989:45) proposes that a contextual definition can be utilized in clarifying the concept in a textual example.

Suonuuti (1997:18) points out that, from the viewpoint of practical terminology work, definitions should be as brief as possible and contain only the essential information about the term. If some additional information is needed, it should be placed in a note below the actual definition. A good definition is clearly written, linguistically impeccable and follows the principles of both the standard language as well as the special field at hand (Sanastotyön käsikirja 1989:41), and it should not contain any unnecessary words (Haarala 1981:47). Furthermore, in order for the definition to fill its requirements, attention should be paid to the target group of the glossary of which the definition is a part. That is why a definition should only contain standard language words that are familiar to all users, terms that the users are previously acquainted with or special terms that are defined elsewhere in the particular glossary (Sanastotyön käsikirja 1989:41). Sanastotyön käsikirja (1989:56) also gives some other useful

requirements for the structure of a definition. A definition should be designed in a way that allows the definition to be used as a substitute for the term in a textual context without any significant alterations. Thus, a definition should

- always begin with a small case letter
- not repeat the term in the beginning of the definition, nor have any introductory words such as: *is, this means, a type of* etc.
- not begin with an article, even in languages that naturally contain them
- be in singular form, unless the concept itself is naturally plural (Sanastotyön käsikirja 1989:56).

Sometimes it is useful to add some information or examples in addition to the actual definition. Examples, references, lists (in intensional definitions) and additional inessential features should always be added separately after the actual definition (Sanastotyön käsikirja 1989:56). As can be seen from the example given when introducing the definition by intension, the most common definition type used in the terminology work presented in this study was the intensional definition.

The most common defective definitions are, according to Sanastotyön käsikirja (1989:57), circular definitions, incomplete definitions as well as too broad and too restrictive definitions. A definition becomes circular when a concept is being defined with the help of its own term, or when several concepts are defined using themselves in the description (Sanastotyön käsikirja 1989:57). For example, if the term *credit control* were defined **controlling of the credit*, the definition would only be exploiting the term itself in the definition. The correct way to define *credit control* would be *policies and procedures aimed at controlling the granting of credit*. An incomplete definition lacks the essential characteristics partially or altogether (Sanastotyön käsikirja 1989:62). For example, in an incomplete extensional definition, the definition would only list some of the sub-concepts or -objects, when it should mention them all (ibid.). An example of an incomplete definition of the previously mentioned term *credit control* would be **one way of controlling the granting of credit*. When a definition is too broad, it only mentions some of the characteristics (Sanastotyön käsikirja 1989:63). This can easily be fixed by adding some delimiting characteristics. Sanastotyön käsikirja (ibid.) points out

that delimitations mentioned in the notification separate from the actual definition are not acceptable. A definition becomes too narrow when it contains too many characteristics and thus narrows down its extension too much (Sanastotyön käsikirja 1989:64). For example, the term *dictionary* could be defined as a *book dealing with the equivalence of words of two languages*. This definition narrows the concept too much. A better way to define it would be *outlined collection presenting information about the words of two or more languages* (Sanastotyön käsikirja 1989:64). Other faulty definitions are negative definition, where a concept is defined through a negation (appropriate only when lacking a characteristic is an essential part of the concept), and redundant definition, where in addition to the term itself, some of the characteristics of the concept that describes the term are being repeated (Sanastotyön käsikirja 1989:66).

Sanastotyön käsikirja (1989:64) also mentions a special case of too narrow a definition, where a concept is being defined bearing in mind only its meaning in one particular special field. They (ibid.) suggest it is faulty to use this type of definition in a glossary that is describing general scientific terms. However, it is permissible to apply this type of definition in special cases by adding a notification such as *in this standard* or *in this glossary* (Sanastotyön käsikirja 1989:65). An illustrative example (Example 2.) of this can be found in the glossary produced for Qvantel Business Solutions.

balance

equality or difference between the totals of the credit and debit sides of an account
in this glossary, also: *the balance of a prepaid customer*

Example 2. The terminological entry of term *balance* illustrating the possibility of adding a notification below the definition.

Here, the definition first describes the general meaning of the term and then also clarifies its other meaning in this particular glossary. The second meaning is clearly marked in the beginning of the definition by stating “in this glossary, also”.

2.5.7 Conceptual relations, concept systems and their graphic representation

Concepts are not an independent phenomenon, instead, they are always related to each other in some ways. They form concept systems that are, depending on the subject, sometimes complicated and sometimes more simple (Suonuuti 1997:11). Felber (1984:120) claims that “a subject field or a subsection of a field is only mentally accessible, if the conceptual field is structured”. By ‘structured conceptual field’ he is referring to the concept system. In other words, concept systems are a graphic way of manifesting the relationship of an individual concept to other concepts. Suonuuti (1997:11) suggests that before the definitions can be drafted, the concepts need to be arranged into concept systems. This allows us to see the super- and subordinate concepts, which again are used in formulating the definitions. The relations among the concepts are used to classify the different concept systems. Suonuuti (1997:11) introduces three different types of conceptual relations, which are relevant for practical terminology work: generic, partitive and associative relations.

The generic concept system is based on the generic relation between the concepts. Picht and Draskau (1985:66) introduce generic relations between concepts by using the name “logical relation”, which is a very descriptive term. They (ibid.) present that logical relations are also known as generic relations or relations of similarity, since these relations are based on the likeness between the concepts. Suonuuti (1997:11) states that the generic relation exists when “two concepts share an identical set of characteristics but one, the subordinate concept, has at least one additional, delimiting characteristic”. For example, if *boat* is the superordinate concept, then *rowing boat* is the subordinate concept and *having oars* is the delimiting characteristic. In other words, the extension of the broader, more general concept *boat* is bigger, because it covers all types of boats, also the ones without oars (Haarala 1981:21,22). Haarala (1981:22) continues that it is common for the subordinate concept to have coordinate concepts that share the same superordinate concept. The generic concept system usually consists of several levels, since the subordinate concepts can again serve as a superordinate concept for another level. A concept can be subdivided according to different criteria and thus form different concept systems. Suonuuti (1997:12) gives an example of the subdivision of

trees that can have at least three different criteria for subdivision: anatomy (coniferous tree, broadleaf tree), species requirements (light-demanding tree, tolerant tree) and abscission (deciduous tree, evergreen tree). These types of concept systems can be presented as parallel and independent of each other, or, it is also possible to create a polydimensional concept system, where the criteria for the subdivision can be indicated along the lines that represent different subdivisions (Suonuuti 1997:12,13). Generic concept systems are graphically presented as tree diagrams (see figure below), where the concepts are connected to one another by using a simple line.

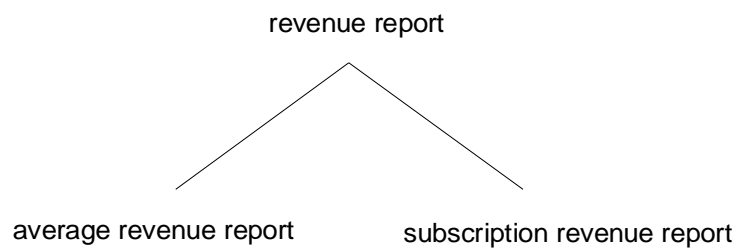


Figure 4. The graphic illustration of a generic concept system.

A partitive relation is based on the relation between the whole and its parts (Haarala 1981:24). The whole is referred to as the comprehensive concept, whereas the part is called the partitive concept (The Terminology of Terminology 2006:12,13). For example if *boat* is the comprehensive concept, its partitive concepts would be *hull*, *deck* and *keel*, i.e. its parts. Also partitive concept systems can consist of several levels since one partitive concept can again serve as a comprehensive concept to other concepts and thus be multidimensional (Haarala 1981:24). Picht and Draskau (1985:80) remind that it is advisable to bear in mind the focus and target group of the terminology work when selecting the criteria for the subdivision of the concept; it is not practical to continue the process of division “until it reaches the components of the atom”. Partitive concept systems are graphically presented as rake diagrams (see the figure below), where, instead of a simple slanted line used when presenting the generic relation, a simple line is used vertically and horizontally to show the different levels of the concept relation.

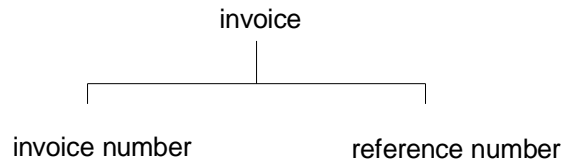


Figure 5. The graphic illustration of a partitive concept system.

An associative relation can base on many different, non-hierarchical, relations, such as:

- cause/effect (spring/trees coming into leaf)
- producer/product (magpie/a magpie's nest)
- activity/actor (nesting/bird)
- activity/location (shopping/store)
- object/location (painting/wall)
- object/activity (boat/sailing)
- tool/function (pen/writing)
- material/product (milk/cheese) (Suonuuti 1997:15).

In an associative concept system, all the concepts may have a different relation to each other. In concept systems, associative relations are graphically presented with arrow lines, as can be seen in figure 6. below.

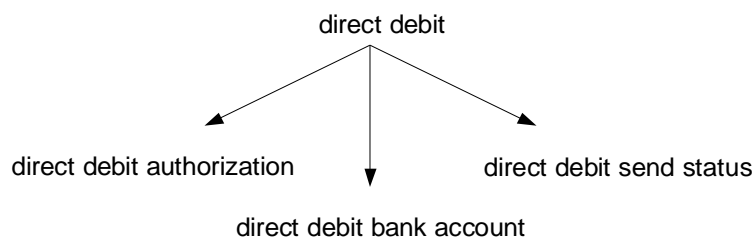


Figure 6. The graphic illustration of an associative concept system.

In practice, concept systems are often combinations of these relation types and thus they are called mixed concept systems (Picht & Draskau 1985:85). In this study the relations between the terms are only rarely straightforward and therefore the concept systems are mostly based on associative relations between the concepts, but since there are also

some partitive relations, the concept systems are classified as mixed (see an example of a mixed concept system below in figure 7.). By exploiting the mixed concept system, it considerably increases the flexibility of the system, and allows for many more different types of concepts to be included in the same system, as Picht and Draskau (1985:85) state.

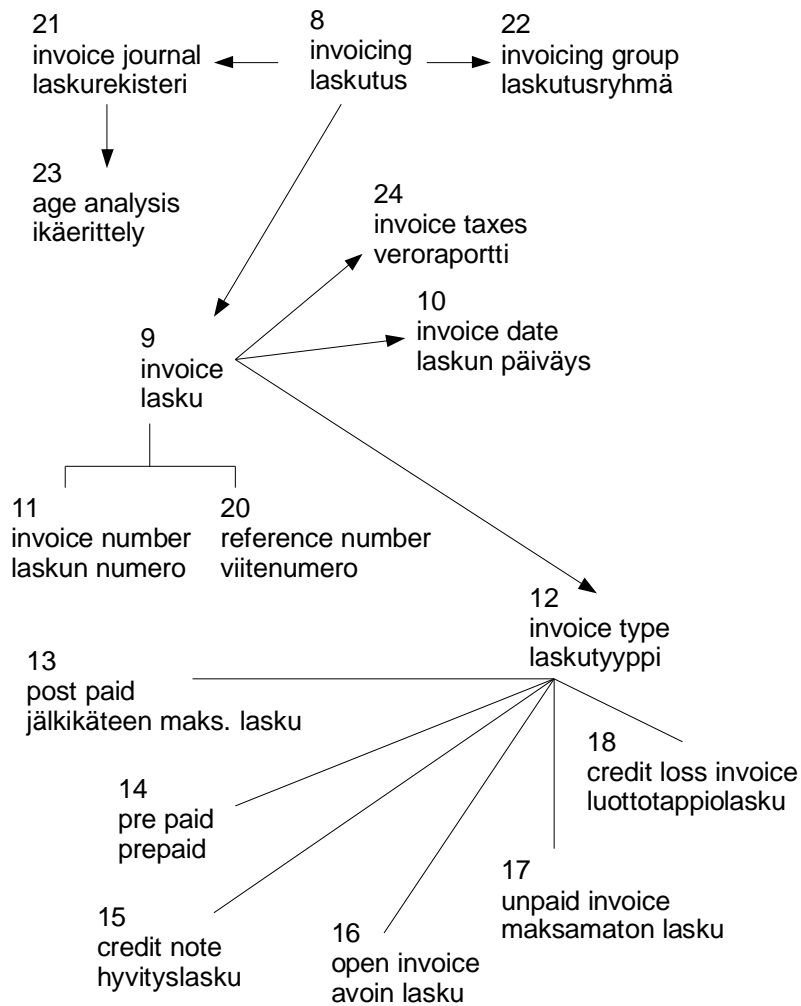


Figure 7. An example of a mixed concept system.

Figure 7. illustrates a mixed concept system that combines all three types of conceptual relations; generic, partitive and associative. All these relations have been presented using different graphic manner, according to the aforementioned models.

In practical terminology work concept systems are always language dependent and may also vary according to the viewpoint of the terminological analysis. See discussion on ordering of the concept systems of the glossary presented in this study in chapter 5.2.

2.5.8 Terminography

Terminography refers to the graphic manner of representation of the terminological information (Sanastotyön käsikirja 1989:160). Kudashev (2007:165) presents a slightly more detailed description of terminography that is based on the ISO standards: “Terminography can be described as a methodology of compiling normative terminological glossaries with special domain experts as their primary target group”. Terminography should not be confused with lexicography, which refers to the compilation of general language dictionaries; terminography always refers to the assemblage of special language information (Picht & Draskau 1985:118). For more discussion of the overlapping of terminography and lexicography, see e.g. Kudashev (2007).

The basic unit in terminography is the terminological entry. It contains the information of only one concept at a time. According to Suonuuti (1997:30), a terminological entry should contain at least the number of the entry, the term and the definition of the concept. In this study the terminological entries are in the form that is presented below in figure 8. The entry contains first the number of the entry, then the term in English and Finnish and then the definition. The possible note is located below the definition. If there is a source for the definition, it is presented last in square brackets.

1

account

fi tili

written record of money that is owed to a business and of money that has been paid by it

kirjallinen rahatallenne, joka kertoo yritykselle olevat velat ja sen maksut

[Oxford Advanced Learner’s Dictionary, 2005]

Figure 8. An example of a terminological entry.

3. THE COMMISSION AND THE SUBJECT MATTER OF THE TERMINOLOGY WORK

The principal subject matter of this terminology work is accounting; more precisely, a section of accounting called accounts receivable. As mentioned earlier, the special field in this terminology project combines elements from two fields, accounting and telecommunications. This is due to the fact that the customer care and invoicing solution TMS is targeted in the use of telecommunication service providers. Thus the system also contains terms from the field of telecommunication. The system that this terminology work is based on is explained in more detail in chapter 3.1.

Delimiting the subject field of a terminology project is an essential phase in planning the work. Picht and Draskau (1985:165) remind that even though this phase might seem to be an obvious one, the delimitation should be carefully and thoroughly considered already before the actual terminological work begins. This way the unnecessary readjustments of the subject field can possibly be avoided later in the process. They (ibid.) continue that often the special subject field selected for the terminological elaboration is far too extensive; the real dimensions of a certain subject field usually come apparent only after a closer investigation.

In the case of the terminology work presented in this study, the subject field was actually already delimited by the client in the description of the commission. The company wished for a glossary of the accounts receivable section of an invoicing and customer care system that they provide for companies operating in the field of telecommunication. After a preliminary inspection of the subject field at hand it seemed to be of an adequate size for a terminology project that could be presented in a master's thesis. Of course it was not a requirement for the commission to be of appropriate size for a thesis; it could have well been presented in one only partially if the size would have exceeded the needs of a thesis. The main criterion was that the subject field was large enough to produce a sufficient amount of terms for a study of this level. In a genuine commission such as this it is of course a secondary fact

whether or not the case is fit to be presented in a thesis; the priority is to complete the commission according to the client's wishes.

3.1 Accounting

Since the main subject matter in this terminology work is accounting, some basics on it are explained in this chapter. The main purpose of accounting is to find out financial outcomes of a company and it can be done manually on paper or electronically (Anttonen & Hakonen 2010:12). Due to the massive growth and development of the information technology, electronic accounting has become more and more common (Granlund & Malmi 2004:13). The system that Qvantel Business Solutions is offering for accounting purposes is an example of an electric accounting system.

Accounts receivable is one section of accounting. For example the following tasks can be performed in accounts receivable:

- maintaining of customer, product and supplier information
- invoicing
- registering of purchase invoices into the system
- allocating purchase and sales orders into invoices
- allocating the incoming payments into invoices
- payment of purchase invoices
- payment status follow-up
- composing and follow-up of reminders and penalty interest invoices (Anttonen & Hakonen 2010:102).

Fuertes-Olivera and Nielsen (2011:157) present that “although English is the lingua franca in accounting, international accounting standards exist on a par with their translations into other languages.” However, their study of online dictionaries demonstrates that the dictionaries are incapable of following the dynamic development of accounting terminology, for example, many of the online accounting

dictionaries are only electronic versions of the printed ones and not updated regularly. Fuertes-Olivera and Nielsen (2011:158) continue by stating that the field of accounting has experienced substantial changes in the last two decades; new terms have been introduced and old terms adapted to the new reality, or they have become obsolete. During all this, the terminology, its translations into other languages and the technology of lexicographic tools have not received their due regard. The results of Fuertes-Olivera and Nielsen's (2011:175) analysis are interesting in relation to the present study. They (ibid.) suggest an updateable internet dictionary that would help the experts, semi-experts as well as interested laypersons to solve problems in understanding, producing or translating accounting texts. Even though their study is made on a much larger scale compared to handling one single company's terminology handling, their results create ideas of how this type of electronic dictionary could be exploited also on a single company level. Whether there would be financial or other kinds of resources to execute this type of a dictionary is another story.

3.2 Qvantel Business Solutions and Tele Management System

Qvantel Business Solutions is a Finnish telecommunications product and service company that provides business support solutions and software consulting services to telecommunication and electronic invoicing. They operate internationally and their goal is to make business and software development processes more efficient. The company provides software development services and operational support to independent software vendors and embedded product developers. Qvantel's customers include Academica, Basware, TeliaSonera Group, Elisa Group, Finnet, TDC Group, Thingmagic and Yoigo.

The Tele Management System, shortly TMS, is a customer care and invoicing solution system that can be used as a stand-alone-solution or as an embedded component. TMS can be customized to meet the customer's needs and is thus divided into modules, which is illustrated in figure 9. below. The glossary presented in this study was collected from the module of accounts receivable.

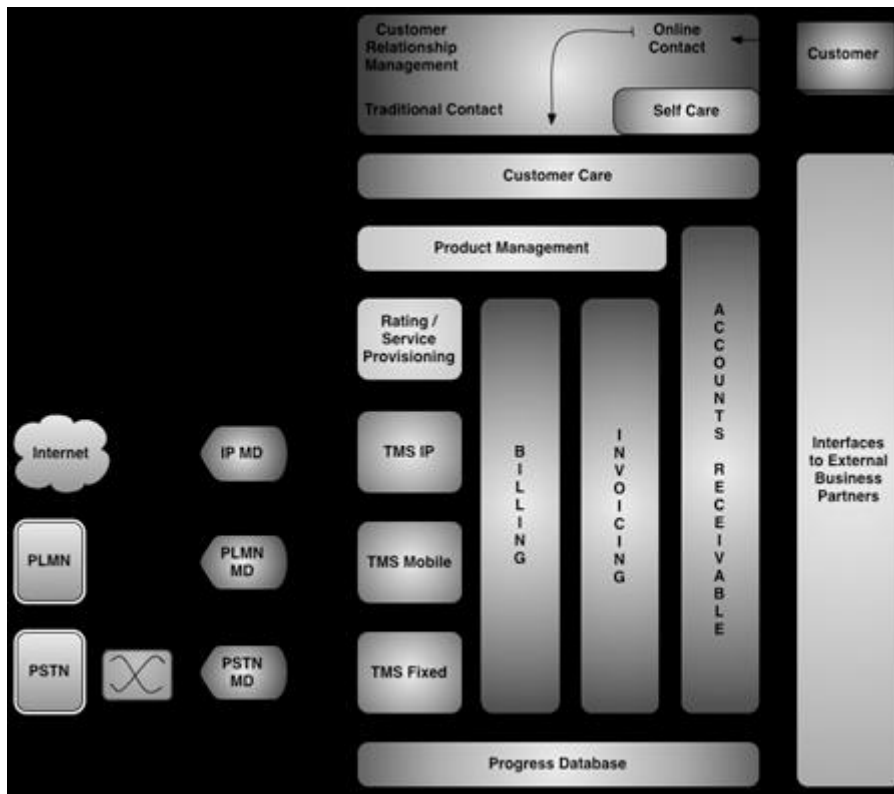


Figure 9. An illustration of the modular structure of the Tele Management System.

Since this particular terminology work focuses on just one module in the system presented in the figure (9.), the vocabulary used was expected to be very specific and possibly also unique for this company. It was also expected that it might be difficult to find appropriate source material for the definitions. As the work proceeded, these expectations proved to be accurate. Source material for the terms and for the formation of the definitions was relatively hard to find. Basically the only information source for the more difficult terms was the contact person in the company. Without this special field assistance from the company this type of work would have been difficult, if not impossible, to execute by a student.

4. TERMINOLOGY WORK AS A SUBJECT OF A THESIS

In this chapter some thoughts on terminology work as a subject of thesis will be presented. Most of the views are based on an article about the issue, and some subjective comments are made from the viewpoint of the terminology project introduced in this study.

All translators have to become acquainted with LSPs in their work, at least to some extent. Vehmas-Lehto (2005:95) states that it is particularly terms, the informative core, that are the most important part of LSPs. For someone who is not familiar with terminology, it might seem easy to just check the term from a dictionary or from an online term bank. This might be more exhausting than it at first seems; normal bilingual dictionaries rarely give examples on the specific use of the term. Vehmas-Lehto (ibid.) continues that small languages, such as Finnish, rarely have a wide-ranging selection of special field dictionaries. As proven during the terminology project presented here, even as common a field as accounts receivable is not thoroughly covered in any special field dictionary or glossary. This is why it is useful for all translators to familiarize themselves with the theory and methods of terminology, at least the basics. It is not that uncommon to come across a special field one has to do terminological research on. Vehmas-Lehto (2005:96) also points out that by doing terminological or conceptual research one learns to be systematical since formulating concept systems and analysing and formulating definitions will force one to think in a logical way.

The most popular kind of terminological study is the so called glossary study, where the aim usually is to produce a glossary of a small special field (Vehmas-Lehto 2005:98). At times these studies even end up producing a glossary for a real client. In these types of studies the thesis itself acts as a commentary of the glossary produced; it describes the process as a whole, the concepts, the terms and the concept systems and results in a conclusive report of the potential problems, their solutions and other remarks on the material (Vehmas-Lehto 2005:99). When introducing the stages of this type of thesis, she (2005:100) puts the compilation of the client-glossary as the last phase. This seems to be a very sensible choice, since under closer scrutiny (during the writing process of the thesis) one might better notice the mistakes in the glossary. When the end product,

the glossary for the client, is compiled first in the whole thesis process, there easily remains some undiscovered problems in the material. However, sometimes the company's need for the completion of the commission comes first, and thus the glossary has to be produced quickly before the thesis.

Vehmas-Lehto (2005:115) continues that the advantage of this type of thesis is that the problem, or the aim of the study, is very concrete and thus it is fairly easy to keep the work going. It is also highly motivating to feel that by doing a thesis one can also produce something useful, or, as in this study, an actual commission for a company. On the other hand, if the co-operation with the company involved does not function well, or even ceases completely, it might cause motivational problems in the completion of the thesis.

The disadvantage of choosing a terminology work as the subject of a thesis is that it might be challenging to produce a glossary if the subject matter is unfamiliar to the student (Vehmas-Lehto 2005:115). This is why expert assistance has an even greater role in a terminology project done by a student. The most favourable situation would be, if the student could engage him/herself in a terminology project in such a field where he or she already has some level of expert knowledge (Vehmas-Lehto 2005:101). Undertaking a terminological commission from an almost completely unknown special field is a challenge, nevertheless not an impossible task to perform fairly successfully. In this type of situation the student has to carry out some extra work during the preparation phase to be able to get acquainted with the special field.

Sometimes the person formulating the commission for a student might not really be aware of the limits of these types of projects. This is important especially when it comes to the decision of the nature of the terminology work, whether it is going to be descriptive or normative. In the commission I received from Qvantel Business Solutions they wanted me to compile a normative glossary for their use. It became obvious that they did not quite comprehend the scope of the term normative; it is nearly impossible for a student to possess the needed resources to be able to compile a normative glossary (Vehmas-Lehto 2005:102). Nonetheless, the glossary produced by a student is rarely neither purely descriptive, in that case it would only be a listing of the terms without any terminological processing (e.g. formulating concept systems).

As a summarizing observation it can be stated that a thesis of a terminology work is a valuable combination of scientific research and practical, work-oriented, terminology work. Even though Vehmas-Lehto (2005:93) describes one of the great advantages of translator education as being practical and working life oriented, many times the nature of the theses is not highly practice-oriented and it might feel like redundant work for a student. In a project where the end result is a real product it might seem more worth while to complete the thesis.

5. TERMINOLOGY WORK

In this chapter the background and purpose of the present terminology project will be explained in more detail. In preparing the work, one of the most important phases was to define and delimit the audience of the glossary since that has an effect on the other phases of the project. Chapter 5.1 is going to give an overview of the preparatory phase, and the actual terminology processing will be presented after that in chapter 5.2.

5.1 Preparatory phase

Before any terminological work can be successfully executed, the aims and objectives must be clearly determined. The aim of this terminology work was to produce a bilingual (English-Finnish) glossary that would in the future help the people that develop the TMS software to keep the terminology in the system more coherent and systematic. The aim was also to minimize the amount of synonyms the terms might possibly have, so that there would be only one term used to refer to a certain concept. The company had not commissioned any previous works on this area of the TMS system, thus the work presented here is the first elaboration of the terminology of the accounts receivable section. The wish of the company was that the terminology would also be harmonized with an online glossary produced by TM Forum, an industry association focused on enabling information technology for service providers in the communications, media and service markets. As the project proceeded, it turned out that there were only a few terms in common with the aforementioned glossary. However, these terms were harmonized. In the end, only one of these terms ended up in the final version of the glossary.

The next step is to specify the target group, i.e the end users of the glossary. The main target group of terminological glossaries usually are LSP experts (Kudashev 2007, in Niemelä & Lehtinen 2007:163). The main target group of the glossary produced here is the employees of Qvantel Business Solutions, for example system developers, technical writers, solution managers and sales personnel. Even though the main target group of the glossary, the LSP experts, supposedly have a fairly high special field knowledge,

some more simple terms were included in the glossary. This was the wish of the client. Including also the simplest terms in the glossary enabled the user group to be broader and include also people that are not experienced in the field. All in all I believe that this particular glossary could easily be applied by many different user groups.

The potential problem with having a very broad target group is that whereas the definitions of the terms need to be precise and explanatory enough to fulfil the needs of the most inexperienced user of the glossary, the more experienced users might find these definitions to be unnecessarily detailed and in their eyes the glossary might even lose some of its credibility due to the possibly naïve definitions. Although the idea of covering the needs of as many users as possible might be valid in an in-house glossary such as the one at hand, in some cases it might be worth considering narrowing down the target group for a more focused product.

In addition to the obvious factors, such as the target group, there are elements which further influence the working method. These include the broader dimensions of the work: e.g. the financial resources, the time and special field assistance available and the language pair (unusual ones might be challenging). These factors have really nothing to do with terminology, but might still have a major effect on the realization of the work (Picht & Draskau 1985:159). In the case of the project presented in this study, the biggest factor resulting in compromises was the lack of special field assistance. The time frame was fairly flexible, which definitely improved the result. The expertise of the terminologist is also a factor that cannot be ignored. It was well understood by the company that they offered the commission to be done by a student who is not a professional terminologist. Even though this might have an effect on the resulting glossary (which might contain minor errors), I believe the key factor here was the low or even free cost of the glossary produced by a student. A student might possess the requisite linguistic knowledge to accomplish a terminology work, but rarely is an expert in the field at hand. For this reason, as mentioned before, the expertise help has a considerable role in producing a usable glossary. It cannot be disputed that a translator has to obtain a skill to become an expert in almost any field in a short amount of time when practising translating on a professional level, however, the level of expertise needed in completing an extensive terminology work is usually beyond the skills of a translator.

As is implied in the paragraph above, co-operation with a specialist of the field at hand is crucial. Even so, this co-operation might sometimes be difficult to perform. There can be many types of obstacles in the way, such as it might be hard to find the time needed, the communication method (e-mail, telephone etc.) should ensure an easy connection between the co-workers and the level of commitment should be equal. The most drastic obstacle in the process of co-operation is probably one party excluding itself from the project completely. This is what happened in the terminology project presented here (due to organisational changes in the company). Luckily, the actual terminology work had been completed by then; only the evaluation of the finished product was yet to be done. This will be discussed in more detail in the next chapter 5.2.

Delimiting the subject field can sometimes be a challenging task in the beginning of a terminology work because one does not necessarily know the field and how demanding a task its terminological processing might be. In this case, the subject field was limited beforehand by the commission. It was limited to the accounts receivable section of the TMS system. Of course, it had to be verified by exploring the area briefly in the system that the subject field given in the commission would not be too large to be covered in a single project.

The main language of TMS system is English, which makes it also a sensible choice for the primary language of the glossary along with the fact that English is the official language of Qvantel Business Solutions. The glossary itself, however, is bilingual, having both the terms and the definitions in English and Finnish. The preface is in both languages as well.

Since the system has not yet been localized into Finnish, some of the more specific terms lacked an equivalent completely. However, the purpose was to find appropriate equivalents to all the terms. Thus, if a suitable equivalent could not be found from any reliable source, it was coined with the help of an already existing term.

The source material that was used to compile the glossary consisted of customer documents (instructions of how to use the different sections of the TMS system) and access to the actual system. The customer documents were some in paper and some

were found online. I was granted a visitor access to the TMS system. This access proved to be of great help when first getting to know the subject matter and the system, and also later during the process when I needed to clarify how the different terms were related to each other. Furthermore, the access to the system made it possible to see the terms in their 'natural environment'. Seeing the terms in context made it easier to grasp their meaning.

Almost all terminology work in these days is conducted on a computer. It brings great advantages to the processing of the material; the data is easily updateable and reviseable. The terminological data was produced and saved with Microsoft Word, and the concept systems were formulated with Open Office Draw program. During the initial processing of the material (mostly during the pre-term phase) the work was being done manually on paper for practical reasons.

The format of the terminology work was agreed upon the commission to follow the format of the previous work I completed for the company (Paukku 2009). The glossary (as well as the previous one) includes a table of contents, a preface, the concept systems and a list of the terminological entries (their contents have been introduced in detail in chapter 2.5.8), as well as an alphabetised directory for them.

It should not be forgotten that even before the actual terminological preparatory phase, the terminologist has to familiarize oneself with the special field at hand. This was conducted by studying various accounting textbooks and online articles. However, in this case, the subject field to be covered in the terminology work was so specific that during this preliminary study one could only learn the basics behind the more advanced area of a specific system (TMS), which would become more familiar only during the process.

5.2 Terminological elaboration

The terminology work was started by carefully going through the material, at the same time watching for possible pre-terms. This was followed by the compilation of the pre-term list that included all the possible terms. The pre-term list done at this point of the project consisted of several such terms that never ended up in the final glossary. At first the pre-term list contained over 120 terms, but this amount was narrowed down to 68 terms in the final version of the glossary. The pre-term list was examined by the client, but at this point they did not have any preferences of what terms to include or what to not include. In their point of view even all of the terms in the pre-term list could have been included in the glossary. However, for practical reasons, the amount of terms to be more closely analysed had to be delimited. The assumed aim for the appropriate scope of the terms ranged from 50 to 80 terms. This was considered to be a suitable amount within the time frame available. The delimitation of the terms was based on my own evaluation of the importance of the terms. After the list had been narrowed down to an approximate of 80 terms, it was again sent to the client for inspection. They responded it being an adequate take of the terminology in the accounts receivable section. As the work proceeded, some redundant cases arose from the material and the number of terms narrowed down to the final 68. In the pre-term list the terms were in English, but also already had some proposals for Finnish equivalents. The equivalent search could be said to have been an on-going task throughout the work.

After the terms to be included in the glossary were chosen, they were grouped according to their meaning in the system. This was essential for the formulation of concept systems. The decision to group the terms according to their meaning instead of the structure of the actual accounts receivable system in TMS was based on the fact that in the system the terms are repeated often in different sections. This would have led to an unnecessary repetition of terms in the different concept systems. Although, grouping the terms according to the actual system might have been easier and more straightforward for the users of the glossary but, since one way of grouping had to be chosen, I opted for using the grouping that keeps the terminology as clear as possible, since clarity is one of the most important objectives in a terminology work. From a practical point of view, the ordering of the concept systems was an arduous phase in the terminology work. The

terms were organized initially in both ways (according to the structure of the system as well as thematically), and only after that the decision to use the grouping according to the meaning of the terms was made. Especially the rough, provisional structuring of the concept systems was time-consuming, but nonetheless, an important part of the work. The relations between the concepts in the concept systems were not in any way straightforward. In most of the cases the relation is a rather complicated associative relation. The concept systems were accomplished with Open Office Draw –program. The same program was used in the previous terminology work as well, and it proved to be a very practical tool for drawing the concept systems of a small scale terminology work like this. The result of this phase of the work was eight different concept systems, which are introduced fully in chapter 6.

Had this project had more time and special field assistance, the concept systems would have presumably been made separately for both languages. Under a closer scrutiny some substantial differences in the conceptual correspondence could have been found, and this always necessitates two separate concept systems, one for each language. However, in the scope of this terminology work, no major correspondence differences occurred, and consequently the concept systems include the term in both languages.

In a practical, in-house glossary like the one here, the most important part are the actual terminological entries, whereas the concept systems carry a secondary value. However, their existence as a part of the final product (the glossary sent to the company) is valid, since the user might want to look at a particular term surrounded by its neighbouring terms. Furthermore, concept systems are an essential part of a professional terminology work that follows the theoretical guidelines; under no circumstances could they be left out completely, even if not included in the final product.

One of the most common problems that emerged during the terminology processing was the inability to properly apply the knowledge of the terminological textbooks, since most of the examples presented in them seemed to be almost overly ideal to be helpful. Therefore, I came to the conclusion that the textbook rules could not be obeyed slavishly but instead, one had to make some exceptions during the course of the process.

During the Finnish term equivalent search the key elements for the equivalents were shortness, conciseness and transparency. When the terms are used in a graphic environment like the TMS systems software, the shorter terms are preferred. Similar qualities were kept in mind while examining the English terms; there the main task was to eliminate synonymy, such as terms like *payment status – status of payment*.

When formulating the definitions for the terms, the objective was to primarily use reliable sources. However, in some cases it was hard or impossible to find a definition from a reliable source, I formulated them myself on the basis of the material received from Qvantel Business Solutions. When evaluating the sources for the definitions in this work, it has to be considered that it was a fairly arduous task to first of all find any usable and reliable source. The possible references used in formulating the definitions are marked in the terminological entries in square brackets. The amount of different references was relatively small, so no separate reference code list was made.

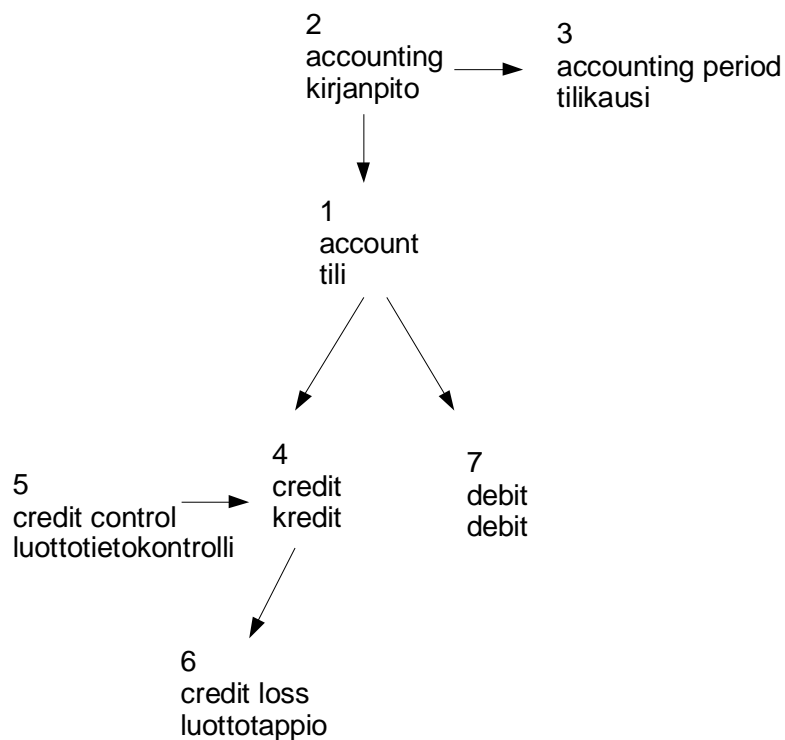
One of the last tasks was to organize the terms of the glossary by running numbers. This helps the user to find the terms both in the list of terminological entries, as well as in the concept systems. During the whole process all of the above described phases were partially overlapping; this is a natural feature of any terminology work.

6. CONCEPT SYSTEMS AND THE TERMINOLOGICAL ELABORATION

In this chapter the eight different concept systems are presented and their special features discussed. It would not be worthwhile to elaborate on the nature of each relation between the concepts meticulously. Instead, some remarks are made on the more interesting cases. The observations about the terms cannot be seen as objective, since this glossary has not been inspected by a specialist. Each term referred in the paragraphs has also the number marked so it is easier to locate the term in the concept system.

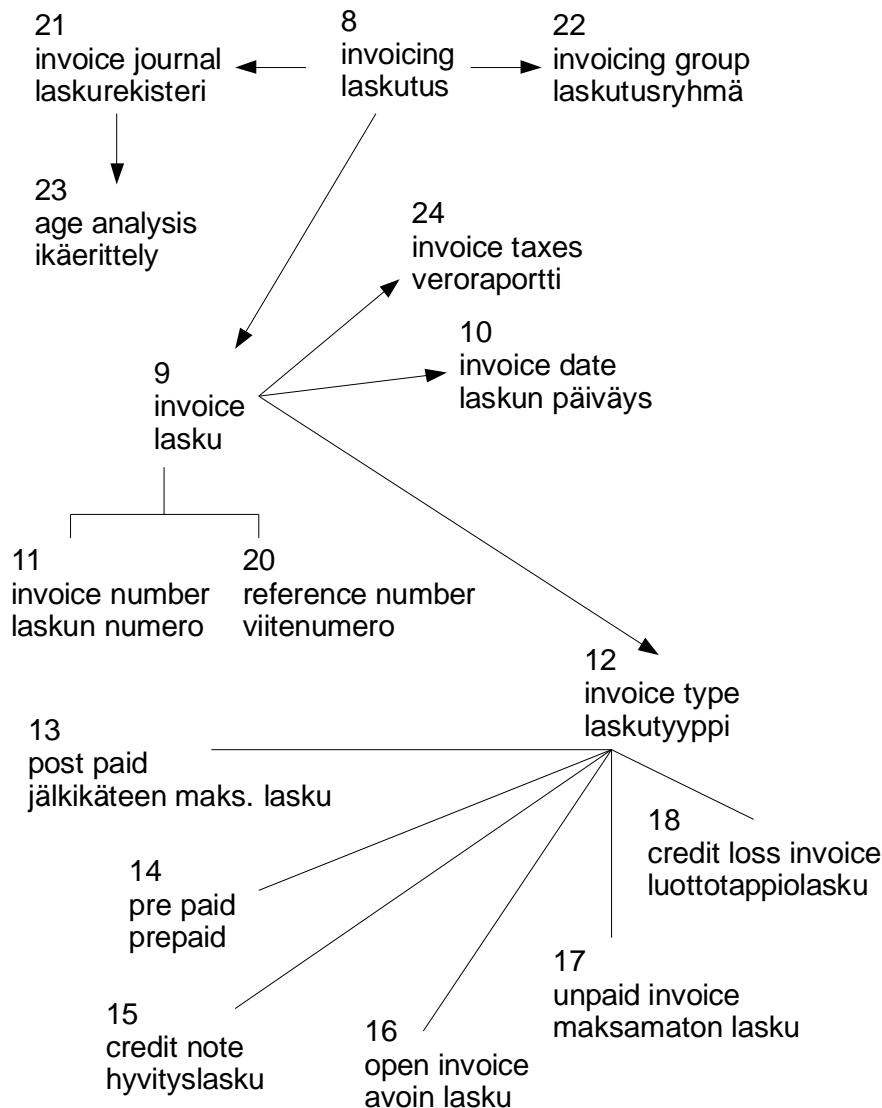
6.1 Concept systems

6.1.1 Accounting



The first concept system forms around the term *account* (1). Here, all of the relations between the concepts are associative, and thus presented graphically with arrows. In the realm of this concept system most of the terms were fairly straightforward and their equivalents in Finnish could be effortlessly found. The only slightly more problematic case was *credit control* (5), which as a term could be a little more transparent. This term did not have an existing equivalent in Finnish. What the term means is that before granting the client credit, their credit background is checked. As the important qualities for terms that appear in a system like this are shortness and conciseness, the term *luottotietokontrolli* (5) seemed to be a reasonable choice. Finnish compound words have a tendency of easily becoming lengthy, yet it still is better to use a compound word than an expression consisting of multiple words, such as *luottotietojen tarkistus*.

6.1.2 Invoicing

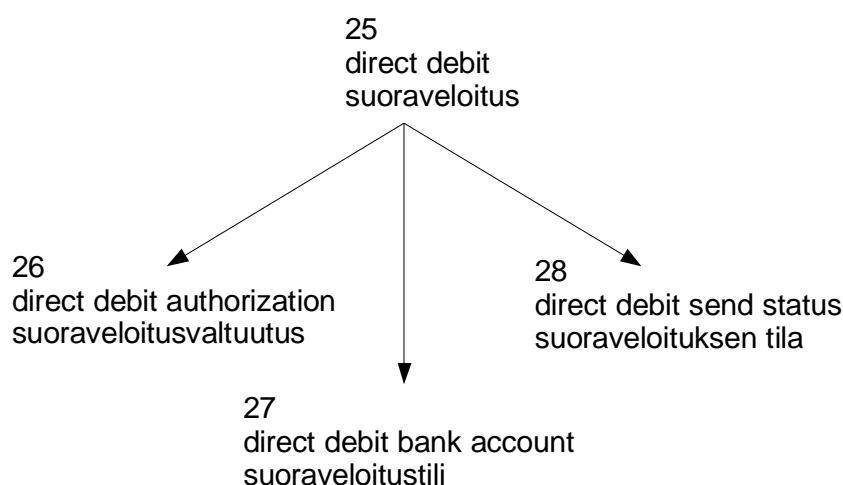


The concept system of the main term *invoice* (9) contains two slightly more challenging cases. In the invoice page of the system there is a possibility to view a report of the taxes in the invoices (*invoice taxes* (24)) and there was no existing term for this concept in Finnish. The term *veroraportti* (24) was coined by combining aspects from the English term and the concept itself. Compared to its English counterpart, *veroraportti* (24) could be seen as a clearer term for this concept. As this example shows, the English terms in the system cannot be regarded as thoroughly considered, since some of them do not fulfil the requirements of a good term (systematicity, clarity etc.). For example, the

above mentioned English term would be more informative if it would contain the word *report*, as it after all is included in the concept of *invoice taxes* (24). The case of *age analysis* (23) was a troublesome one. This term did not have an existing Finnish equivalent either; one had to be coined. Because the concept means “a report that is sorted according to the age of the invoice”, the stem of the Finnish term was *erittely*, but involving the age in the term was a challenge. The result, *ikäerittely* (23), as a term mostly fulfils the requirement of transparency. Otherwise it cannot be seen as a very successful term proposal. This is a good example of a term that most likely would have been revised had the glossary been inspected by the client. Another term requiring some revision is *post paid – jälkikäteen maksettava lasku* (13). The Finnish term cannot be considered as a very successful coinage, because it is so long and consists of three separate words. Whereas the term *prepaid* (14) has established its place in the Finnish language, the term *postpaid* in Finnish would sound peculiar, thus the attempt to coin a more authentic Finnish term.

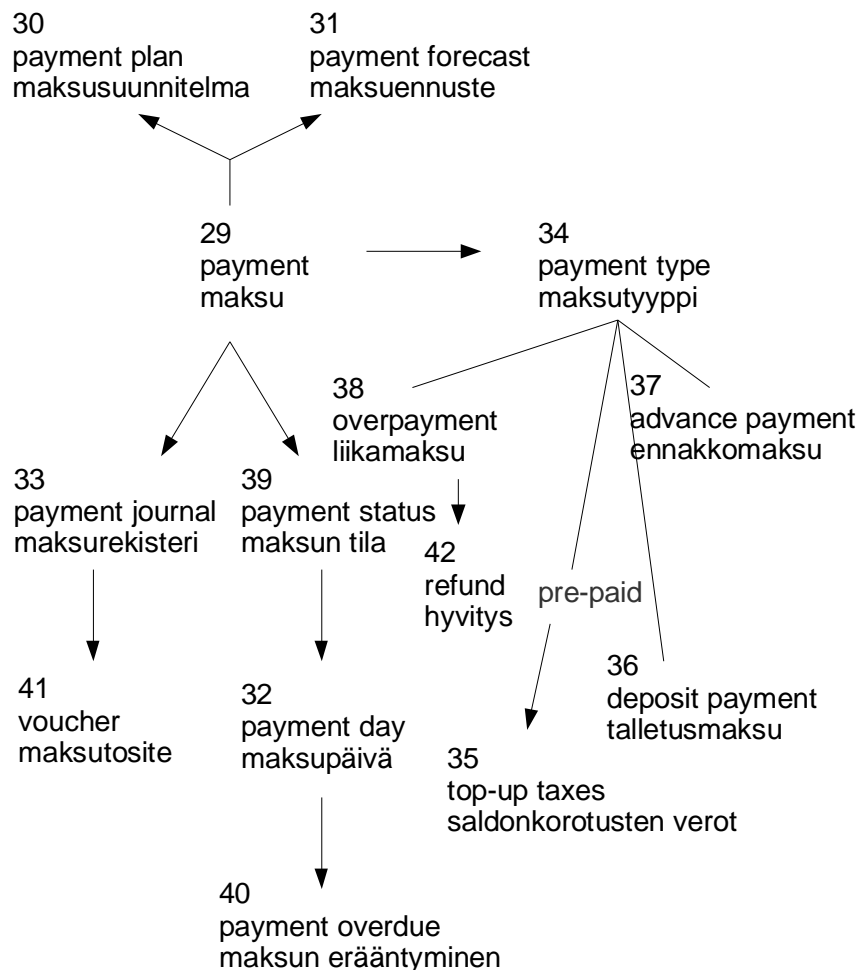
This concept system is an excellent example of a mixed concept system (see chapter 2.5.7). It combines all the three types of conceptual relations (generic, partitive and associative) in one system.

6.1.3 Direct debit



The concept system of *direct debit* (25) consists of four terms. These were all fairly successful terms both in English and Finnish, with the exception of the English term *direct debit send status* (28), which can be argued not to be grammatically and stylistically perfect. It never became completely clear what the *send status* in this term refers to, but the meaning of the concept was verified from the client as being the current status of a certain customer's direct debit. The Finnish term did not exist, so *suoraveloituksen tila* (28) was coined.

6.1.4 Payments

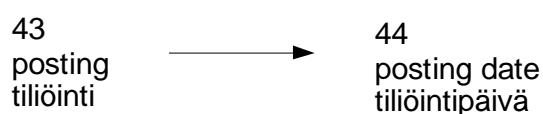


The above, rather complicated, concept system focuses on the related concepts of *payment* (29). It combines both associative and generic conceptual relations. In this

concept system there is an example of a quasi-term (*pre-paid* in grey between terms 34 and 35), which does not have its actual place in this concept system, but is there regardless for clarification. The clarification is needed, since the connection between the term *payment type* (34) and *top-up taxes* (35) is not comprehensible without it. *Top-up taxes* are the taxes a customer pays (included in the top-up, naturally) when loading a top-up (a certain amount of money) on his/her pre-paid mobile prescription. The term *pre-paid* signifies a narrower concept of *payment type*, and is thus the missing link between the concepts of *payment type* and *top-up taxes*.

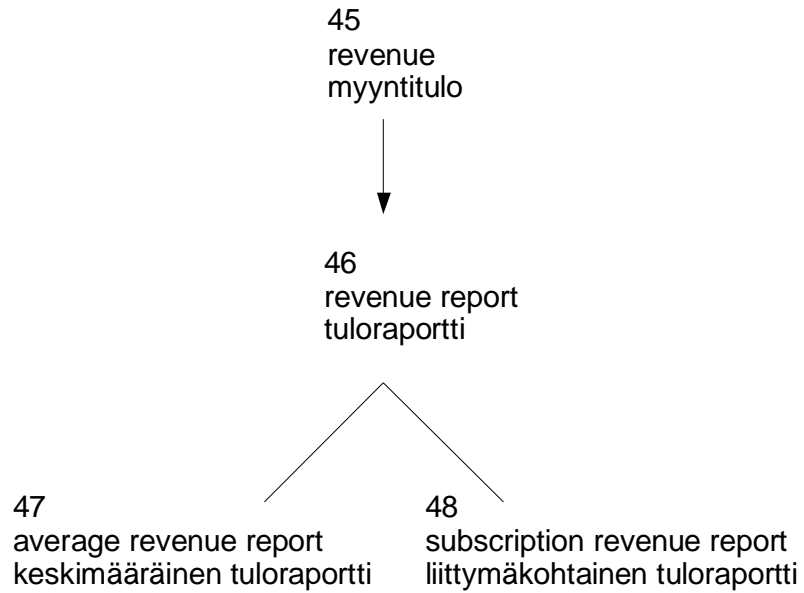
The terms in this concept system could be seen as fairly successful both in English and in Finnish; they are all informative and clear.

6.1.5 Posting



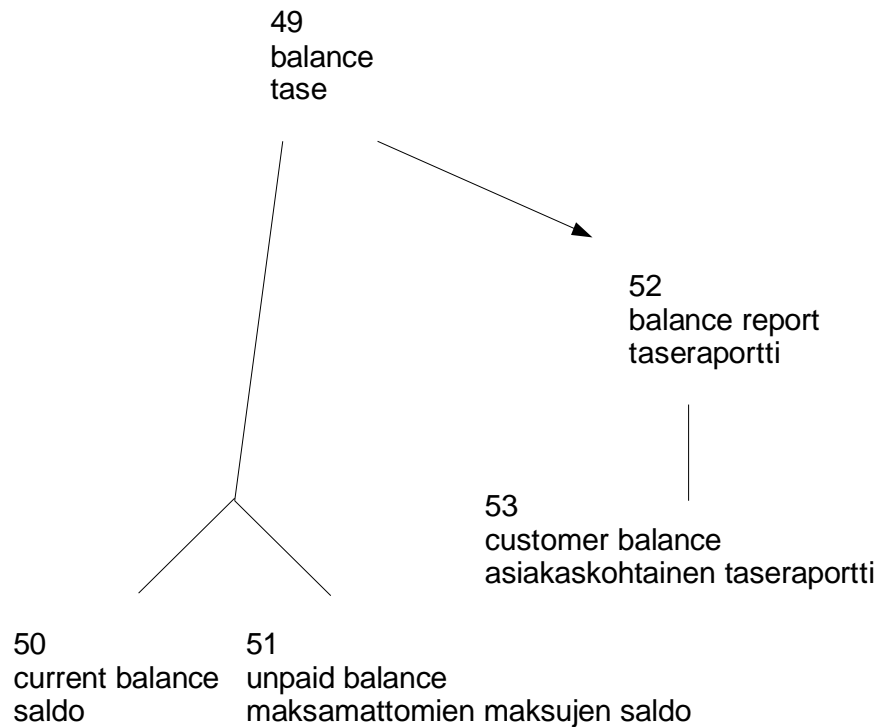
The concept system of *posting* (43) contains only two concepts, which is actually the minimum amount of a concept system. If one would make an attempt in trying to describe the nature of the associative conceptual relationship (see chapter 2.5.7) at hand here, the concept of *posting* could be categorized as the activity, and the concept of *posting date* (44) as occasion. The terms itself here were straightforward and the Finnish equivalents could be found in the material provided by the client.

6.1.6 Revenues



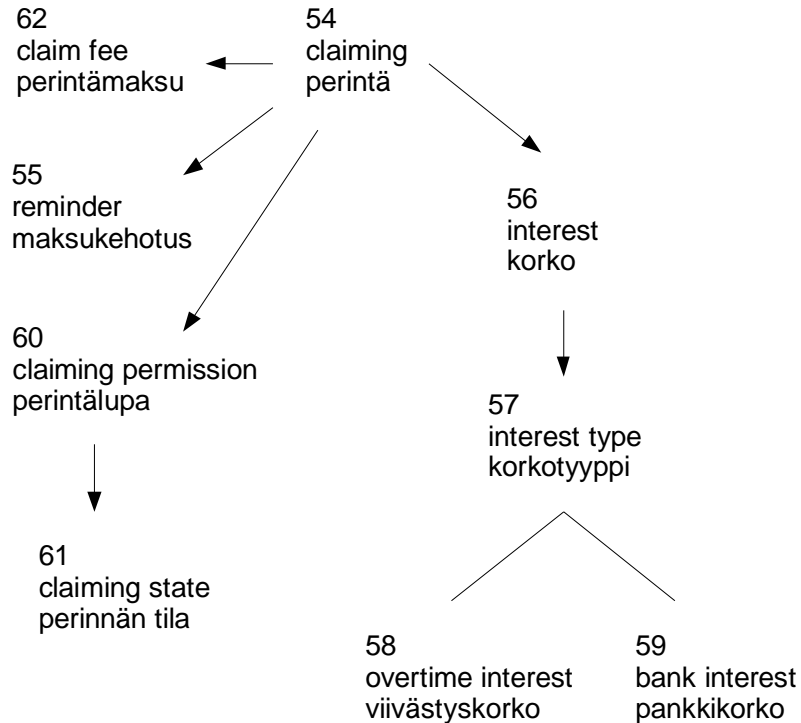
This fairly simple four term concept system starts from the concept of *revenue* (45), whose meaning in this specific system required some investigation. As soon as the meaning was clarified, it became easier to search for the correct Finnish equivalent, which was established as being *myyntitulo* (45).

6.1.7 Balances



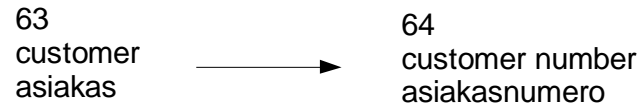
The concept system that is formed around the term *balance* (49) contains five concepts. Even though the English term *customer balance* (53) does not include the word report in it, the function under this tab in the system is that a report of a certain customer's balance is printed. This led the previously non-existing Finnish term as being a slightly more illustrative *asiakaskohtainen taseraportti* (53). The disadvantage of this fairly long term is its suitability for the graphic layout of the system.

6.1.8 Claiming



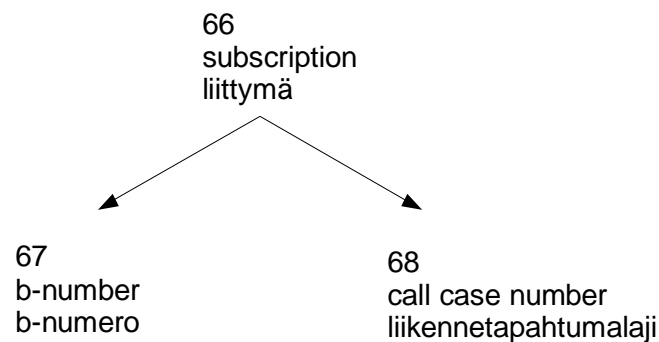
This concept system presents the concepts in the realm of *claiming* (54). All of the terms here were fairly straightforward when it comes to finding the Finnish equivalents for them. The term *claiming permission* (60) was proposed as the more suitable term over the synonymous **claim permission*, which also occurred in the material. This suggestion is based on the clarity of the term; *claiming permission* is clearer compared to *claim permission*, whose meaning is not actually even equivalent to the Finnish term (since *claiming permission* means the permission to start claiming the amount of the unpaid invoice, *claim* on the other hand could be mixed with the noun *claim*). Similarly, the term *claiming state* (61) was preferred over **status of claim*, based on the more compact layout that suits better in the TMS system.

6.1.9 Customer



The two term concept system of *customer* was the most uncomplicated in the project. Here the term *customer* was harmonized with the TMForum glossary, as was the company's wish. In the material the term *customer* was often replaced with *client*, and as the TMForum glossary does not contain the term *client*, a suggestion was made to favour the term *customer*. In Finnish the correct term would in either case be *asiakas*. The associative relation between the two concepts in this system could be described as object/identification; *customer* takes the role of an object and *customer number* is identification.

6.1.10 Subscription



The concept system of the term *subscription* contains three terms that are related to each other via an associative relation. The term *b-number* could not be found in any LSP dictionary available, but its meaning could be verified from the contact person in the

company. B-number is the number that receives the call from another number, which again is called the A-number. The concept of A-number did not occur in the material of this terminology project and is thus not included in the glossary. *Call case number* was at times shortened as *ccn* in the material, which would be an ideal term as far as conciseness is considered. However, it is not a very clear term and it would be difficult to comprehend for a layperson unfamiliar with the jargon. This is why *call case number* was considered as the preferable term. Its Finnish equivalent *liikennetapahtumalaji* is undisputably somewhat long, but on the other hand it is a well established term in the field of telecommunication.

In addition to the concepts presented in the concept systems above, there was one concept (*commission*) in the material that did not belong to any system, and also could not form one by itself. Thus it is only mentioned in the terminological entry list in the end of this study.

7. CONCLUSION

The purpose of this study was to produce a comprehensive glossary on the accounts receivable module of the TMS solution. The completely bilingual (English-Finnish) glossary finally sent to the client, Qvantel Business Solutions, consisted of 68 terms with definitions and ten graphically presented concept systems.

The nature of this thesis did not allow for an actual hypothesis to be made, but instead, some assumptions were made in the beginning of the process. These assumptions were the expected difficulties in conducting a normative terminology work as well as the difficulties in separating LGP from LSP in the material provided. Nevertheless, both of these difficulties were manageable and the work could be completed. Even producing a normative glossary, as the client wished in the beginning, would have not been an entirely impossible task, provided that the expertise assistance would have been more systematic and reliable.

The terminology used in the field of accounting, and even in economics, is fairly manifold; different terms are used frequently. Also in this project the main terminological objective was trying to eliminate synonymy. However, synonymy did not occur as much as it could have, considering the almost negligent attitude towards the terminology during the development of the TMS system. The material contained two clear cases of synonymous usage of terms, which were recommended in this glossary as inappropriate choices.

An essential part of any terminology work is always the evaluation by experts, or in this case the client. Unfortunately the glossary presented in this study lacks the consultation of the client, and can thus only be regarded as a proposal of a glossary that would fill the company's needs. However, with the expertise that I have gained during this and the previous terminology process during the proseminar study, I would estimate this glossary as being usable. At the very least it could well be used as a profound groundwork for some more extensive terminology project in the company, or in the field of telecommunication accounting in general.

Even though there are certain disadvantages in performing this type of terminology work with a so called outsider approach to the terminology at hand, it could also be seen as a valuable approach; if the terminology work would be done by an employee within the company, the terms might not appear as difficult to understand at all, since they belong to the jargon the person is used to. For the future terminology projects in the company (or any other company or field), a combination of an external linguist and an internal specialist in the field at hand could well produce an excellent terminological result.

The problem that the more recent studies on terminology have pointed out, i.e. the general theory of terminology being too simplistic and textbook-like, was also verified in the making of the terminology work presented here. The reason why most of the material of the glossary could not be used as the examples in the theoretical part of this study was that the material in fact was far from exemplary. This is also why it at times felt difficult to apply the examples presented in the literature in practice; they did not always seem to be suitable to describe the more complicated material of this particular terminology work.

Above all, this thesis is a scientific research with a strong practical orientation. It provides an insight to the process of completing a real commission of an area that has not been terminologically covered previously. Chapter 4 of this study gives a good picture of what a terminology project as a subject of a thesis can be, both at its worst and at its best. All things considered, a terminological study can be seen as a recommendable choice for a thesis, as long as the project is kept reasonable by ensuring the special field assistance and carefully considering the size of the special field area to be covered.

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APPENDIX I

TERMINOLOGICAL ENTRIES

1

account

fi tili

written record of money that is owed to a business and of money that has been paid by it

kirjallinen rahatallenne, joka kertoo yritykselle olevat velat ja sen maksut

[Oxford Advanced Learner's Dictionary]

2

accounting

fi kirjanpito

process or work of keeping financial accounts

yrityksen tai yhteisön taloudellisen toiminnan rekisteröinti

[Oxford Advanced Learner's Dictionary]

3

accounting period

fi tilikausi

time period for which accounts are prepared, usually one year

ajanjakso, jolle tili tehdään, yleensä vuosi

[Accounting Dictionary, Ventureline]

4

credit

fi kredit

in accounting, an accounting entry system that either decreases assets or increases liabilities; in general, it is an arrangement for deferred payment for goods and services

kirjanpidossa taloudellisen tapahtuman merkintä, joka joko vähentää varoja tai lisää velkoja; yleisesti kreditillä tarkoitetaan sopimusta tavaroiden tai palveluiden jaksotetusta maksamisesta

[Accounting Dictionary, Ventureline]

5

credit control

fi luottotietokontrolli

policies and procedures aimed at controlling the granting of credit

toimenpiteet, joilla kontrolloidaan luoton myöntämistä

[Accounting Dictionary, Ventureline]

6

credit loss

fi luottotappio

loss made by a financial institution on its lending activities

taloudellisen instituution lainaa antaessaan tekemä tappio

[Financial Times Lexicon]

7

debit

fi debit

record of an indebtedness; specifically: an entry on the left-hand side of an account constituting an addition to an expense or asset account or a deduction from a revenue, net worth, or liability account

merkintä velkaisuudesta, tarkemmin: merkintä kirjanpitotilin vasemmalla puolella merkitsemässä lisäystä kuluihin tai varallisuustilille tai vähennystä tuloista, nettoarvosta tai vieraasta pääomasta

[Accounting Dictionary, Ventureline]

8

invoicing

fi laskutus

actions through which the telecommunications company collects the compensation for the use of connections and teleservices

toimenpiteet, joiden avulla teleyritys perii asiakkaalta korvauksen teleyhteyksien ja palvelujen käytöstä

[Telepalvelusanasto TSK 26]

9

invoice

fi lasku

note asking for a payment for goods or services supplied

tiedotus, jolla pyydetään korvausta tavaroiden tai palvelujen käytöstä

[Dictionary of Accounting]

10

invoice date

fi laskun päiväys

date on which an invoice for a good is issued, which is usually the same day the good is sent to the buyer

päivä, jona lasku on tehty; yleensä sama päivä, jolloin lasku lähetetään ostajalle

[Financial Dictionary]

11

invoice number

fi laskun numero

number by which an invoice can be identified and tracked later

numero, jonka avulla lasku voidaan myöhemmin tunnistaa ja jäljittää

[Laskentatoimi]

12

invoice type

fi laskutyyppe

type of the invoice, for example pre paid or post paid

laskun tyyppi, esim. prepaid tai tavallinen, jälkikäteen veloitettava laskuliittymä

[Qvantel Business Solutions]

13

post paid

fi laskuliittymä

model of cellular service where the customer is charged for usage in the prior month and hence does not feature any limitations on volume of the service used

matkapuhelinpalvelumalli, jossa asiakasta laskutetaan edellisen kuukauden käytöstä eikä käytön määrää tai palveluiden laatua näin ollen ole rajoitettu

[Qvantel Business Solutions]

14

pre paid

fi prepaid

model of cellular service whereby the customer pays the charges in advance

matkapuhelinpalvelumalli, jossa asiakas maksaa käytettävän saldon etukäteen

[Qvantel Business Solutions]

15

credit note

fi hyvityslasku

note showing that money is owed to a customer

lasku, joka osoittaa asiakkaalle olevan velan

[Dictionary of Accounting]

16

open invoice

fi avoin lasku

invoice that is made but not yet paid

luotu lasku, jota ei ole vielä maksettu

[Qvantel Business Solutions]

17

unpaid invoice

fi maksamaton lasku

invoice that has not yet been paid

lasku, jota ei vielä ole maksettu

[Qvantel Business Solutions]

18

credit loss invoice

fi luottotappiolasku

unpaid invoice that is more than 365 days old

yli 365 päivää vanha maksamaton lasku

[Qvantel Business Solutions]

19

due day

fi eräpäivä

day on or by which something, especially a sum of money, is owed or expected

päivämäärä jolloin, tai johon mennessä rahasumma on maksettava

[Oxford Advanced Learner's Dictionary]

20

reference number

fi viitenumero

line of 4 to 20 numbers that is used to individualize a money transfer, usually an invoice sent from a company to a customer

4-20 merkkiä sisältävä numerosarja, jolla yksilöidään tietty tilisiirto, käytännössä yrityksen tai vastaavan tahon asiakkaalle lähettämä lasku

[Sivistyssanakirja]

21

invoice journal

fi laskurekisteri

listing of invoices according to given parameters

listaus laskuista määriteltyjen parametrien mukaan

[Qvantel Business Solutions]

22

invoicing group

fi laskutusryhmä

group that defines for example when the invoice is sent and when the due day is

ryhmä, jonka mukaan esim. laskun lähetys- ja eräpäivä määräytyvät

[Qvantel Business Solutions]

23

age analysis

fi ikäerittely

listing of unpaid invoices according to their age

iän mukaan järjestetty listaus maksamattomista laskuista

[Qvantel Business Solutions]

24

invoice taxes

fi veroraportti

report of the taxes in different invoices

raportti laskujen veroista

[Qvantel Business Solutions]

25

direct debit

fi suoraveloitus

instruction to a bank to allow somebody else to take an amount of money from an account on a particular date

käskey pankille sallia jonkun muun veloittaa tililtä sovittu summa ennalta määrättynä ajankohtana

[Oxford Advanced Learner's Dictionary]

26

direct debit authorization

fi suoraveloitustuutus

authorization to allow somebody else to take an amount of money from an account on a particular date

valtuutus sallia jonkun muun veloittaa tililtä sovittu summa ennalta määrättynä ajankohtana

[Qvantel Business Solutions]

27

direct debit bank account

fi suoraveloitustili

bank account from where the direct debit is taken

pankkitili, jolta suoraveloitus tapahtuu

[Qvantel Business Solutions]

28

direct debit send status

fi suoraveloituksen tila

status of the command for a bank to execute the direct debit

pankille annetun suoraveloituskäskyn senhetkinen tila

[Qvantel Business Solutions]

29

payment

fi maksu

sum of money paid or expected to be paid

rahasumma, joka maksetaan tai johon odotetaan maksua

[Oxford Advanced Learner's Dictionary]

30

payment plan

fi maksusuunnitelma

customer tailored plan for payments

asiakaskohtainen suunnitelma maksuista

[Qvantel Business Solutions]

31

payment forecast

fi maksuennuste

forecast of payments calculated by customer's recent payment behaviour

asiakkaan viimeaikaisen maksukäyttäytymisen perusteella laskettu ennuste maksujen suorittamisesta

[Qvantel Business Solutions]

32

payment day

fi maksupäivä

day on which a payment is conducted

päivä, jolloin maksu suoritetaan

[Qvantel Business Solutions]

33

payment journal

fi maksurekisteri

listing of payments and postings according to a given criteria

annettujen kriteerien mukaan järjestetty listaus maksuista ja tiliöinneistä

[Qvantel Business Solutions]

34

payment type

fi maksutyyppi

type of the payment, for example a topup payment to a prepaid subscription

maksun laji, esim. saldon korotusmaksu prepaid-liittymässä

[Qvantel Business Solutions]

35

topup taxes

fi saldonkorotusten verot

taxes paid from the topup payments of prepaid subscriptions

prepaid-liittymien saldonkorotusmaksujen verot

[Qvantel Business Solutions]

36

deposit payment

fi takuumaksu

payment that is demanded in case customer's credit is not appropriate

maksu, joka voidaan vaatia jos asiakkaan luottotiedot eivät ole asianmukaiset

[Qvantel Business Solutions]

37

advance payment

fi ennakkomaksu

optional payment that can later be used to make payments

vapaaehtoinen ennakkomaksu, jota voidaan myöhemmin käyttää laskujen maksuun

[Qvantel Business Solutions]

38

overpayment

fi liikasuoritus

sum of money that a customer has paid more than needed

summa, jonka asiakas on maksanut ylimääräistä

[Qvantel Business Solutions]

39

payment status

*status of payment

fi maksun tila

status of a payment at a certain moment

maksun tila tietyllä hetkellä

[Qvantel Business Solutions]

40

payment overdue

fi maksun erääntyminen

number of days that the payment is overdue

maksun erääntymisen määrä päivinä

[Qvantel Business Solutions]

41

voucher

fi maksutosite

document received when something is bought; shows the price of the items bought

maksetuista ostoksista saatava paperinen tosite, josta selviää ostosten hinta

[Qvantel Business Solutions]

42

refund

fi hyvitys

returning of money in restitution, repayment or balancing of account

rahan palautus korvauksena, takaisinmaksuna tai tilin tasaamisena

[Qvantel Business Solutions]

43

posting

fi tiliointi

in bookkeeping, to list on the company's records, such as to list the detail of sales and purchases on the accounts receivable or payable records

kirjanpidon listaus yhtiön rekisteriin esimerkiksi reskontraan myynnistä ja ostoista

[Accounting Dictionary, Ventureline]

44

posting date

fi tiliointipäivä

date notifying when the posting has been made

päiväys, josta selviää milloin tiliointi on tehty

[Qvantel Business Solutions]

45

revenue

fi myyntitulo

money that a company receives from its business

rahat, jotka yhtiö vastaanottaa liiketoimistaan

[Oxford Advanced Learner's Dictionary]

46

revenue report

fi tuloraportti

report of invoiced events per given period

raportti tietyn kauden laskutetuista tapahtumista

[Qvantel Business Solutions]

47

average revenue report

fi keskimääräinen tuloraportti

report of average revenue, calculated by subscription type and product

liittymätyypin ja tuotteen mukaan laskettava raportti keskimääräisistä tuloista

[Qvantel Business Solutions]

48

subscription revenue report

fi liittymäkohtainen tuloraportti

report informing the revenue of a certain subscription during a specified time

raportti, joka kertoo tietyn liittymän tulot tietyn ajanjakson sisällä

[Qvantel Business Solutions]

49

balance

fi tase

equality or difference between the totals of the credit and debit sides of an account
in this glossary also: the balance of a prepaid customer

kirjanpitoilin kredit- ja debit-puolien summien yhtäsuuruisuus tai ero
tässä sanastossa myös: prepaid-asiakkaiden saldo

[Accounting Dictionary, Ventureline]

50

current balance

fi saldo

balance of a prepaid subscription at the moment

prepaid-liittymän senhetkinen saldo

[Qvantel Business Solutions]

51

unpaid balance

fi maksamattomien maksujen saldo

balance of customer's unpaid payments at the moment

asiakkaan maksamattomien maksujen senhetkinen summa

[Qvantel Business Solutions]

52

balance report

fi taseraportti

report stating the balance of invoices that have been chosen according to certain parameters

raportti tiettyjen muuttujien mukaan valittujen laskujen taseista

[Qvantel Business Solutions]

53

customer balance

fi asiakaskohtainen taseraportti

report of the accounts receivable status of a chosen customer

raportti tietyn asiakkaan maksujen, perinnän yms. tilasta myyntireskontrassa

[Qvantel Business Solutions]

54

claiming

fi perintä

actions that aim to make the debtor voluntarily pay the overdue debt for the creditor

toimet, joiden tarkoituksena on saada velallinen vapaaehtoisesti maksamaan velkojan erääntynyt saatava

[Qvantel Business Solutions]

55

reminder

fi maksukehotus

request to someone to pay a bill before legal action is taken to make them pay it

pyyntö maksaa lasku ennen oikeudellisten toimenpiteiden käyttöönottoa

[Financial Times Lexicon]

56

interest

fi korko

fixed charge for borrowing money

lainatun rahan kiinteä maksu

[Accounting Dictionary, Ventureline]

57

interest type

fi korkolaji

type of the charge for borrowed money

toisen pääoman käyttöoikeudesta maksettavan korvauksen tyyppi

[Qvantel Business Solutions]

58

overtime interest

fi viivästyskorko

interest that is claimed when the payment has been late for a predetermined time

korko, jota peritään maksun viivästyttyä ennalta määritellyn ajan

[Qvantel Business Solutions]

59

bank interest

fi pankkikorko

interest that a bank pays to an investor

korko, jota pankki maksaa tilin avaajalle

[Qvantel Business Solutions]

60

claiming permission

* claim permission

fi perintälupa

authorization to start the actions that aim to make the debtor voluntarily pay the overdue debt for the creditor

valtuutus aloittaa toimenpiteet, joiden tarkoituksena on saada velallinen maksamaan erääntynyt velka sen antajalle

[Qvantel Business Solutions]

61

claiming state

* status of claim

fi perinnän tila

status of the claiming process at the moment

perintäprosessin senhetkinen tila

[Qvantel Business Solutions]

62

claim fee

fi perintämaksu

fee that is charged for the claiming activities of an unpaid debt

maksamattoman velan perintätoimenpiteistä perittävä maksu

[Qvantel Business Solutions]

63

customer

*client

fi asiakas

customer buys products and services from the enterprise or receives free offers or services; a customer may be a person or a business.

asiakas toimii yhtiön tuotteiden tai palveluiden ostajana tai vastaanottaa ilmaisia tarjouksia tai palveluita; asiakkaalla voidaan tarkoittaa henkilöä tai yritystä

[TM Forum glossary]

64

customer number

fi asiakasnumero

identification number of a customer within a certain company

asiakkaan tunnistenumero tietyn yhtiön sisällä

[Qvantel Business Solutions]

65

commission

fi provisio

remuneration proportional to sales volume; stated as a percentage or as a monetary amount

myynnin määrään nähden suhteellinen palkkio, joka ilmoitetaan prosenttiosuutena tai rahasummana

[Accounting Dictionary, Ventureline]

66

subscription

fi liittymä

connection that enables the use of teleservices through telecommunications network

matkaviestinverkon kautta tarjottavien telepalvelujen käyttöön oikeuttava liittymä

[Matkaviestinsanasto TSK 19]

67

b-number

fi b-numero

number that receives the call

puhelun vastaanottava puhelinnumero

[Qvantel Business Solutions]

68

call case number

*ccn

fi liikennetapahtumalaji

note informing the type of the call case

merkintä käytetyn matkapuhelinliikennetapahtuman tyypistä

[Qvantel Business Solutions]

APPENDIX II

FINNISH TERM INDEX

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ENGLISH TERM INDEX

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FINNISH ABSTRACT

Tutkielman aiheena oli tehdä laaja termityö telekommunikointialan laskutus- ja asiakashallintaohjelmistoja tuottavalle Qvantel Business Solutions yritykselle. Yrityksen toiveena oli saada käyttöönsä kaksikielinen (englanti-suomi) sanasto Tele Management System (jatkossa TMS) -ohjelmiston reskontraosion keskeisimmistä termeistä. TMS-järjestelmää on sen kehitysvaiheiden aikana muokannut useita eri henkilöitä, eikä terminologian yhtenäisyyteen ja loogisuuteen oltu kiinnitetty juuri huomiota. Tuloksena oli asiakkaan näkökulmasta vaikeakäyttöinen järjestelmä, jossa monelle käsitteelle oli käytössä useita eri termejä. Tämän sanaston tarkoituksena on toimia ohjenuorana tuleville kehittäjille, jotta vastaavat ongelmat käyttäjäystävällisyydessä voidaan tulevaisuudessa välttää.

Yritykseltä saatuun toimeksiantoon kuului myös toive sanaston harmonisoinnista TM Forumin tuottaman teollisuusalan kommunikointia parantamaan pyrkivän sanaston kanssa. Työn edetessä varsinaista harmonisoitavaa TM Forum -sanaston kanssa löytyi tosin vain yhden termin verran.

Yrityksen ensisijainen toive oli saada tämän termityön tuloksena ohjaava, normatiivinen sanasto. Työn edetessä kävi kuitenkin ilmi, että puhtaasti normatiivisen sanaston tuottaminen sanastoprojektiin käytössä olevan ajan ja muiden resurssien puitteissa oli lähes mahdotonta. Erityisesti tähän vaikutti erityisalan asiantuntijuuden puute projektissa. Tämän projektin tuloksena syntynyt sanasto ei kuitenkaan ole puhtaasti deskriptiivinen, eli kuvaileva sanasto, vaan jotain näiden kahden väliltä. Täysin deskriptiivinen sanasto olisi vain listaus järjestelmästä löytyneistä termeistä, ilman minkäänlaista terminologista työstämistä (käsitejärjestelmät, määritelmät). Tämän tutkielman yhteydessä tuotettu sanasto on jatkoa yhteistyölle yrityksen kanssa, joka alkoi aiemmin tuotetulla pienemmällä sanastolla saman järjestelmän asiakkaalle suunnitellusta käyttöliittymästä.

Qvantel Business Solutions -yhtiölle tehty termityö toimii tämän tutkimuksen empiirisenä osana, jota pohjustaa teoriaosuudessa esitelty yleisen terminologian teoria. Yleisen terminologian teoria on perinteinen, 1920-luvulta peräisin oleva oppi käsitteistä ja niitä kuvaavista termeistä, jonka kehittäjänä pidetään saksalaista Eugen

Wüsteria. Se tutkii käsitteitä, niiden välisiä suhteita, käsitejärjestelmiä, määrittelyä, termejä ja niiden valintaperusteita. Sitten on julkaistu monia enemmän soveltavia terminologian teorioita, näistä esimerkkeinä Sager 1990, Cabré 2000, Temmerman 2000 ja Kageura 2002. Erityinen muutos juuri terminologisen tiedon prosessoinnissa tapahtui tietotekniikan tultua yleisemmäksi; tämä mahdollisti tiedon käsittelyn paljon aiempaa nopeammin. Vaikka yleisen terminologian teoriaa on myöhemmin moitittu monista puutteista, se on edelleen käypä malli tavalliseen termityöhön. Erityinen syy sen valintaan teoriataustaksi juuri tälle sanastoprojektille oli työn kiireellisyys; se mahdollisti työn tekemisen nopealla aikataululla asiakkaan toiveiden mukaan.

Termityön toteuttaminen käytännössä lähti liikkeelle aihepiireihin ja yhtiöltä saatuihin materiaaleihin tutustumisesta. Juuri tämän termityön teki erityisen haastavaksi se, että TMS-järjestelmän reskontraosio sisältää termejä kahdelta eri erityisalalta; kirjanpidosta ja telekommunikointialalta. Työn onnistumisen kannalta oli olennaista tutustua näihin molempiin.

Aihepiireihin tutustumisen jälkeen alkoi materiaalin läpikäyminen mahdollisia esitermejä silmälläpitäen, joista koottiin yli 120 termiä sisältävä esitermilista. Työn aikataulun ja muut käytettävissä olevat resurssit (mm. asiantuntija-apu) huomioon ottaen sopivana sanastoon päätyvien termien määränä pidettiin 50–80 termiä. Termien lukumäärä vaihteli prosessin kuluessa työvaiheesta riippuen, joidenkin termien oleellisuus paljastui vasta esimerkiksi käsitejärjestelmiä muodostettaessa. Lopullinen sanastoon päätyneiden termien lukumäärä oli 68. Tässä vaiheessa projektia termilistaus kävi Qvantelin yhteyshenkilöllä hyväksyttävänä.

Termityö jatkui termien ryhmittelyllä aihepiireittäin. Aihepiirit määräytyivät sen mukaan, mikä tarkoitus kullakin käsitteellä itse TMS-järjestelmässä oli. Tämä aihepiireihin ryhmittely toimi pohjatyönä varsinaisten käsitejärjestelmien muodostamiselle. Käsitejärjestelmissä termit laitettiin järjestykseen aihepiirinsä lisäksi myös sen mukaan, minkälainen suhde niillä on toisiin termeihin.

Käsitteiden välillä voi olla kolmenlaisia suhteita; hierarkkinen, koostumussuhteinen tai funktiosuhteinen. Hierarkkinen suhde muodostuu kahden käsitteen välille silloin, kun käsitteillä on muuten samat piirteet, mutta toisella on lisäksi yksi erottava piirre.

Koostumussuhde taas syntyy, kun käsite on osa jotain toista käsitettä. Funktiosuhde käsitteiden välillä saattaa sisältää hyvin erilaisiakin suhteita, esimerkiksi syyn ja seurauksen suhde, tuottajan ja tuotteen suhde ja toiminnan ja välineen suhde. Kaikkia näitä kolmea erilaista käsitesuhdetta käytetään käsitejärjestelmäkaavioissa kuvaamaan erilaisia symboleita, joilla ne voidaan erottaa toisistaan käsitejärjestelmässä. Käsitejärjestelmä voi sisältää vain yhdenlaisia suhteita, mutta voi myös olla sekakoosteinen, eli sisältää useampia eri käsitesuhteita. Käsitejärjestelmät hahmoteltiin ensin käsin ja toteutettiin myöhemmin tietokoneella hyödyntäen Open Officen Draw-toimintoa.

Seuraava työvaihe oli määritelmien kirjoittaminen, jolle aiemmin tehty käsitejärjestelmien muodostaminen oli edellytys, sillä määritelmä muodostuu nimenomaan käsitteiden suhteista toisiinsa. Määritelmä yksilöi käsitteen kertomalla sen suhteen muihin käsitteisiin, sekä kertomalla muista käsitteistä erottavat piirteet. Määritelmien jälkeen oli mahdollista muodostaa termeistä termitietueet, joista käy ilmi termin numero, termi englanniksi, sen vastine suomeksi, määritelmät molemmilla kielillä sekä mahdollinen lähde. Tämän jälkeen valmis sanasto toimitettiin asiakkaalle.

Tavallisesti sanastotyön vaiheisiin kuuluu lausuntokierros, jonka aikana asiakas käy valmiin sanaston läpi ja antaa siitä palautteen sekä mahdollisia korjausehdotuksia. Tämän sanaston kohdalla lausuntokierrosta ei yhteistyön vaikeuksista johtuen tehty, ja näin ollen tutkielman lopussa tehdyt arviot sanaston käytettävyydestä ovat vain oletuksia.

Tutkielma sisältää myös pohdintaa termityöstä tutkielman aiheena. Vehmas-Lehdon (2005) artikkelin pohjalta voidaan nostaa esiin niin hyviä, kuin huonojakin puolia. Hyviä puolia ovat erityisesti konkreettisen toimeksiannon motivoiva vaikutus, tämä saattaa hyvinkin siivittää tutkielman tekoa nopeammaksi. Yleisesti ottaen jokainen käääntäjä hyötyy perehtymisestä termityöhön koska milloin tahansa voi törmätä erikoisalaan, jolta ei ole valmiita sanastoja tarjolla. Termityö tutkielman aiheena saattaa toisaalta myös helposti muodostua liian vaativaksi erityisesti asiantuntijuuden ja työn laajuuden osalta.

Erityisen ongelmallisia vaiheita tässä sanastoprojektissa olivat muun muassa yleiskieleen kuuluvien sanojen erottaminen erikoiskielen sanoista ja aihepiirin erikoisuudesta johtunut lähdemateriaalin puute. Näistäkin huolimatta lopputuloksena syntynyttä täysin kaksikielistä 68 termiä määritelmiseen ja käsitejärjestelmäkaavioineen sisältävää sanastoa voidaan pitää vähintäänkin perusteellisena pohjatyönä mahdollisille tuleville yrityksessä toteutettaville sanastoprojekteille.

Yleisesti ottaen voitaneen todeta tämän tutkielman yhteydessä tehdyn sanastoprojektin kaltaisille terminologiaselvityksille olevan paljonkin kysyntää, mutta usein tämä huomataan vasta jälkeenpäin, niin kuin juuri TMS-järjestelmän kohdalla kävi. Asiakkaan näkökulmasta vaikeakäyttöinen järjestelmä olisi voinut olla jo lähtökohtaisesti paljon parempi, jos termien yhtenäisyyteen olisi jo kehitysvaiheessa kiinnitetty huomiota.