

Anastasia Grenko

**Selection Process of Aluminium Suppliers  
on the Chinese Market  
Case Accent Ltd**

Bachelor's Thesis  
Business Management


May 2013



**MIKKELIN AMMATTIKORKEAKOULU**

Mikkeli University of Applied Sciences

## DESCRIPTION

 <p><b>MIKKELIN AMMATTIKORKEAKOULU</b> Mikkeli University of Applied Sciences</p>		<b>Date of the bachelor's thesis</b>  07.05.2013	
<b>Author(s)</b>  Anastasia Grenko		<b>Degree programme and option</b>  Degree in Business Management Bachelor of Business Administration	
<b>Name of the bachelor's thesis</b>  Selection process of aluminium suppliers on the Chinese market: case Accent Ltd.			
<b>Abstract</b> <p>The selection process of suppliers is a fundamental objective during a purchasing act. A superior-selected supplier makes a strategic diversity to a company's opportunity to decrease costs and refine the quality of its ultimate production.</p> <p>The purpose of this bachelor's thesis was to select a right supplier for the medium-sized Russian construction company Accent Ltd. Since the case company had a lot of activities, the search area was narrowed to aluminium railings (fence). The main reason why the case company had a strong willingness to find a new supplier was the high price. Moreover, price was the general criteria for searching suppliers.</p> <p>In order to create a theoretical background, this bachelor's thesis includes supply chain management, business logistics management, purchasing management, suppliers' management, aluminium market study, and research on the Chinese market.</p> <p>The research data was gathered by a participant observation, an in-depth interviewing method, precisely elite interviewing method, and document overview. These methods concern both parties of the thesis: the case company and potential Chinese suppliers.</p> <p>As a result, a pool of the Chinese suppliers who could fulfill the company's requirements was defined. According to the theoretical knowledge and the case company's request, the superior-selected supplier was found.</p>			
<b>Subject headings, (keywords)</b>  Supplier, suppliers, process, selection, selection process, China, Chinese market, Chinese suppliers, supply chain management, aluminium, aluminium railings, aluminium fence			
<b>Pages</b> 55p + 5 app.		<b>Language</b> English	<b>URN</b>
<b>Remarks, notes on appendices</b>			
<b>Tutor</b>  Eila Jussila		<b>Employer of the bachelor's thesis</b>  Accent Ltd	

## CONTENTS

1	INTRODUCTION.....	1
2	ALUMINIUM AS A RAW MATERIAL FOR THE CONSTRUCTION INDUSTRY.....	2
2.1	The history of aluminium.....	3
2.2	Aluminium in the construction sector.....	5
2.3	London Metal Exchange.....	6
2.4	Price formation.....	9
2.5	Geographic pricing methods.....	11
3	PURCHASING PROCESS.....	12
3.1	Purchasing cycle.....	16
3.2	Purchasing activities.....	20
3.3	Supplier selection process.....	23
4	RESEARCH DESIGN.....	25
4.1	Research methods.....	27
4.2	Data collection.....	27
4.3	Research process.....	29
5	ACCENT LTD AND ALUMINIUM SUPPLY CHAIN.....	30
5.1	Description and services of the case company.....	31
5.2	Purchasing activities of Accent Ltd.....	33
5.3	Supplier selection process in Accent Ltd.....	36
5.4	Payment methods and conditions.....	37
6	CHINESE SUPPLIERS OF ALUMINIUM RAILINGS.....	39
6.1	Country profile of China.....	39
6.2	Chinese aluminium market.....	43
6.3	Doing business in China.....	45
6.4	Implementation of supplier search process.....	46
7	RECOMMENDATIONS.....	48
7.1	Selected supplier.....	48
7.2	Business relationships with Chinese suppliers.....	50
7.3	Reliability and validity in qualitative research of the study.....	52
8	CONCLUSION.....	54
	BIBLIOGRAPHY.....	56
	APPENDICES	

## 1 INTRODUCTION

In today's global market, a lot of factors have affected companies to hunt for a competitive advantage by concentrating attention on their entire supply chain. Of the different actions compromised in supply chain management, purchasing is one of the most strategic processes because it ensures companies with possibilities to decrease costs and, consequently, raise profits. A significant objective within the purchasing responsibility is supplier selection. In most industries, like the construction sector, the value of raw materials and component parts represents the ultimate percentage of the total product cost. Therefore, selecting the right suppliers is a factor in to the procurement process and represents a major opportunity for companies to reduce costs across entire supply chain.

China is already the world's largest manufacturer and customer of primary aluminium. Additional powers on the Chinese aluminium market will come in 2013, and this will put down the compression on metal cost, which will continue to degenerate the smelters' financial attitudes. This fits the wide conceptual specification of China's structural involvement: "over-capacity in the aluminium industry" plus "slow" minus "recovering requirement" equals "a deflated metal price". According to the USGS (United States Geological Survey), the largest aluminium producer in the world in 2010 was China (16800 tons for 2010). Proceeding from this information, it can be safely said that it is most advantageous to buy aluminium in China. The world becomes more integrated every other day, so cooperation between Russia and China, for instance, is much more profitable than ever.

In the contemporary world, aluminium is a widely used non-ferrous metal that is produced from mineral bauxite. Aluminium exceeds that of any other metal. It is a very light material, its specific weight is equal to one-third of that of the steel, a fact that makes this material more attractive as far as concerned problems of transport. After all, pure aluminium's strength is very low for structural applications, a sufficient way to increase this strength is to alloy it with other elements (Mg, Mn, Zn, silicon); its behavior can be further improved if heat treatment is applied. Plain aluminium is not suitable for structural applications because of the low qualities of its mechanical characteristics.

The main objective of this bachelor's thesis (and study) is to find good aluminium suppliers from the Chinese market for the Russian building/industrial company Accent Ltd. In reaching this objective I am going to search through Internet existing Chinese aluminium/metal producing companies step-by-step, using all the criteria for finding impeccable Chinese suppliers, and then choose several Chinese companies from that list that will undoubtedly suit Accent Ltd.

In order to reach the desired goal and objective, the following research questions have been formulated:

Q1: What is the situation on the aluminium market nowadays?

Q2: What is the purchasing process and how it relates to the supplier selection process?

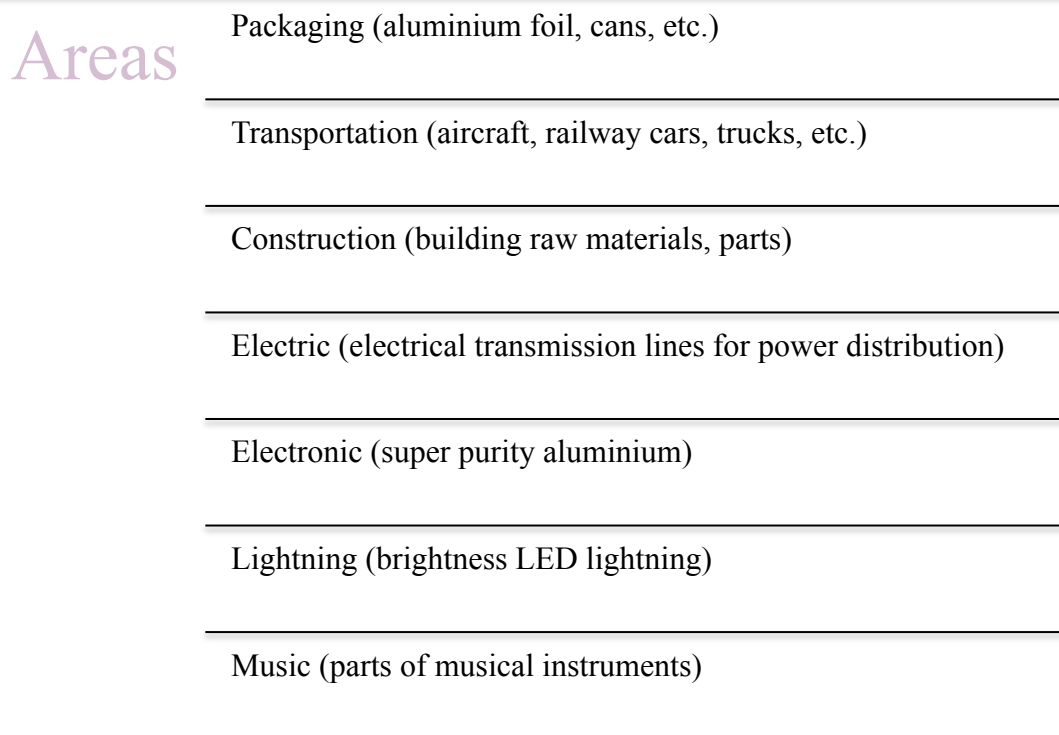
Q3: How to find and select the suitable supplier on the basis of the theoretical knowledge?

Further, I set a goal to improve my skills in the building/construction business while doing the deep research for the thesis process. Different models, approaches and multiple theories from the large variety of particularized books, business magazines and also Internet provided me the necessary information and assisted me to finish the bachelor's thesis.

## **2 ALUMINIUM AS A RAW MATERIAL FOR THE CONSTRUCTION INDUSTRY**

When exposed to the air, the superficies of the metal react with oxygen to form an aluminium oxide coating, preventing further corrosion of the metal underneath. All these properties make aluminium a very significant element. Its uses scope from making chewing gum wrappers and beverage cans to armor plating for tanks and airplane bodies. Indeed, the modern world would be a very dissimilar place without aluminium. (Farndon 2001, 4) Practically always, people use aluminium, which is alloyed,

almost in all the spheres of our lives. Aluminium alloy is most often used in the following areas that are shown in Figure 2.



**FIGURE 2. The scope of using aluminium**

Aluminium has been known for thousands of years. Ancient Egyptians, Babylonians and Persians used aluminium compounds in fabric dyes, cosmetics, medicines, and also made the strongest vessels from clay that contained aluminium oxide. In the early nineteenth century aluminium was identified as a chemical element and isolated as a pure metal.

### **2.1 The history of aluminium**

Small quantities of aluminium are found across the universe. Approximately, around 2,000 atoms in every billion in the universe are aluminium. Most of the aluminium found on the Earth probably formed about five billion years ago in a heart of a red giant star. (Farndon 2001, 7)

As mentioned above, aluminium starts its history from the ancient times (around 5000-5300 BC). However, the real name aluminium get in the early 1800's and also

externally discovered by English chemist and inventor Sir Humphrey Davy (1778-1829). Then, over 10 years later one unknown French scientist discovered approximately 50% aluminium oxide in southern France and named it bauxite (the most common aluminium's ore). In the middle of 1825 the physicist and chemist Hans Christian Ørsted (1777-1851) from Denmark produced a small lump of aluminium metal. His work was developed and continued by the chemist Friedrich Wöhler from Germany. Wöhler isolated aluminium as a powder in 1827. After long nine years, the French scientist Henry Sainte-Claire Deville (1818-1881) improved Wöhler's theories and methods regarding aluminium and created his first commercial production process. (Davyson 2011)

In 1855 aluminium was very expensive and cost more than gold or even platinum. Aluminium was named "the new precious metal". Through the next ten years aluminium's cost was reduced by 90% but was still the most expensive metal in the world. In the same year, 1855, this "precious metal" was exhibited at the Paris Exhibition and the size of aluminium did not exceed a chocolate bar. In 1885 methods were improved and annual output of aluminium was 15 tonnes. (Davyson 2011)

Through the thirty years a procedure of aluminium manufacturing was highly developed. The huge revolution occurred the year later (1886) when the French scientist Paul Louis Toussaint Héroult (1863-1914) and the American inventor Charles Martin Hall (1863-1914) both came up with a process of dissolving aluminium oxide in molten cryolite (to lower the melting point and therefore the energy required) and passing through a large electrical current. When this was done pure aluminium gathered at the bottom. The process was named after both scientists and we still use the Hall-Héroult Method today. Also, there is another method known as "The Bayer process". In 1889 the Austrian chemist Karl Josef Bayer (1847-1904) developed a new and efficient method/process for the extraction of alumina from bauxite. (Davyson 2011)

Incidentally, Hall-Héroult Method used globally because in conjunction with cheaper electronic power helped make aluminium an affordable and inexpensive commodity. And with regards to the second process, called the Bayer process, it is also used and even more by many large companies but still the Bayer process is less favorable in the production. The inventors of both processes are shown in Figure 3 below.



**FIGURE 3. Aluminium processes**

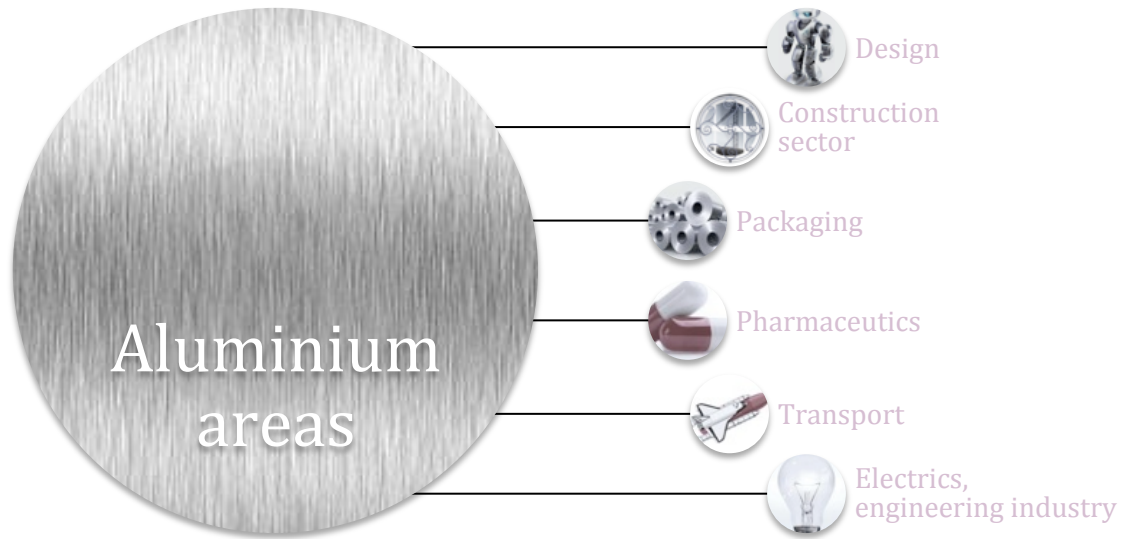
Aluminium is very brittle and so it is troublesome to extract. This meant revelation was expanded until the 19th century. At first it was a very rare item, but as processes developed and prices decreased, it became more widely available. Now it has one of the world's highest annual production levels. (Davyson 2011)

## 2.2 Aluminium in the construction sector

Aluminium is used in almost all the known aspects of our life. All aspects and areas are shown in Figure 4. It is a reliable and practical material with many different advantages. The main and global spheres where you can find aluminium alloys are: design, construction sector, packaging, pharmaceuticals, transport, electrics and engineering industries. Despite the multiple applications in different fields, the most common by far is the construction sector. So, this sector will be discussed further.

More than 20% of the total aluminium output is used in the construction and building area. Aluminium has superior qualities and unique properties, which are essential in modern construction. Thanks to its strength, durability, corrosion resistance and recyclability, it has become a necessary product for the building industry and over the past 50 years its use in building applications has shown a continuous and consistent growth.





**FIGURE 4. Aluminium general areas (based on different sources)**

Aluminium is a suitable and appropriate material for regions with severe weather conditions. Moreover, by using or applying aluminium alloys to construction architects or builders can expand place, reduce the weight, and also speed up the process of building.

### 2.3 London Metal Exchange

As the metal industry developed, the London Metal Exchange adapted its rules and improved or changed the terms of its benchmark contracts to cater for the needs of the industry. This attracted more people to use the market, which enlarged the volume and therefore the chances of finding counterparty at an acceptable price. This in turn made it easier to offset earlier contracts and so advanced trading flexibility, which itself brought further liquidity into the market. (Crabbe 2000, 5)

Since being officially established in 1877, the London Metal Exchange has sought to modernize while still maintaining its traditional strengths. A member of Hong Kong Exchanges & Clearing Limited, the LME remains close to its core users by providing its contracts continue to be pertinent to the physical metals industry. (London metal exchange 2012)

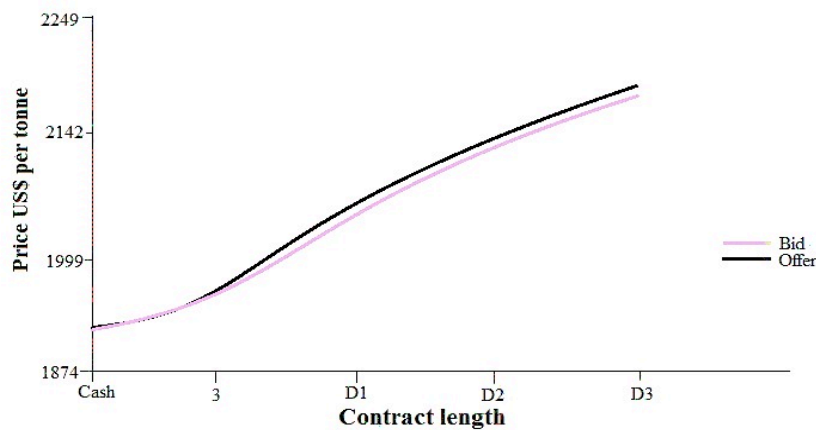
Talking about the price, the LME publishes a set of daily prices that are used worldwide by financial and industrial participants. All the prices on this portal are in US

dollars and the pricing category is divided into five general segments for each metal, which are shown in Figure 5.

Segments	London Metal Exchange official prices, US\$ per tonne
	LME official prices curve
	LME official opening stocks in tonnes
	Settlement exchange rates
	LME Asian benchmark, US\$ per tonne

**FIGURE 5. Five general segments of London Metal Exchange (LME website)**

London metal exchange has different subgroups of metals (non-ferrous, minor, steel billet and precious). However, metal, which is related to this bachelor's thesis purpose, is located in the non-ferrous metal subgroup. Though, LME has two different non-ferrous metals concerning aluminium in it: Aluminium and Aluminium alloy. As long as the world and Accent Ltd use aluminium as a raw material, so the price was searched through the data that is related to aluminium. Figure 6 is clearly showing the curve of bid and offer of contract length and price in USD for Aluminium.



**FIGURE 6. LME official price curve for aluminium on May 2013 (based on the London Metal Exchange data)**

Before defining the prices for aluminium by LME data, it is necessary to note that almost all the raw materials, metals and other global market things are sold and purchased in United States dollars (USD). Aluminium is also sold and purchased in US dollars worldwide.

LME provided a curve, which shows that the price USD per tonne for aluminium growing and increasing at least every year. Though, it means that the rise in prices on the world market significantly declined the situation in the small companies like Accent Ltd. Beyond that, large suppliers from leading countries such as Turkey are forced day by day lift the price of aluminium. Fortunately, there are still suppliers, such as the Chinese, who can afford to sell at cheaper and more competitive prices. Unfortunately, it is hard to even forecast a price for “tomorrow” and the only way remains is to provide an example of the price for aluminium on May 2013.

**TABLE 1. LME official prices, USD per tonne for aluminium on May 2013  
(based on the LME data)**

<b>Contract</b>	<b>Price</b>
<i>Cash Buyer</i>	1788.00
<i>Cash Seller &amp; Settlement</i>	1788.50
<i>3-months Buyer</i>	1828.00
<i>3-months Seller</i>	1828.50
<i>Dec 1 Buyer</i>	1960.00
<i>Dec 1 Seller</i>	1965.00
<i>Dec 2 Buyer</i>	2048.00
<i>Dec 2 Seller</i>	2053.00
<i>Dec 3 Buyer</i>	2135.00
<i>Dec 3 Seller</i>	2140.00

Table 1 of the official prices from London Metal Exchange website provides clarity concerning the price of the aluminium for date. It is a very convenient and effective way for all the participants from different spheres of using aluminium as a raw materi-

al. Based on the Table 1 cannot just determine the price for today but also get familiar with the price range for the past three months.

Nevertheless, the numbers about the Asian benchmark should be mentioned because case company interested in cooperation with the Chinese market, not the European one. (Table 2) Fortunately, London Metal Exchange provides this information also on its website.

**TABLE 2. Asian benchmark on May 2013, USD per tonne (based on the LME data)**

Metal	Price
<i>Aluminium</i>	3-months ABR 1858.99

The prices for aluminium on London Metal Exchange source are changing every few days and even worldwide. As mentioned above, it is difficult to forecast or know prices beforehand so buyers and suppliers need to track these prices very carefully to understand each other better. Moreover, not by a jugful, both parties in purchasing process mustn't be confused with the European and Asian prices.

## 2.4 Price formation

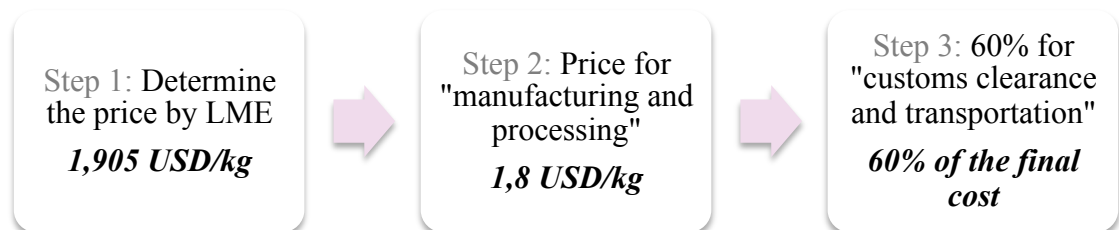
Pricing is a process of determining what a company will receive in exchange for its production. Moreover, it is a special process of earning money and the premise of healthy competition. Most frequently, the basis of pricing is already the pre-set price of raw materials. In order to compete and earn money, a company increases or decreases the price of the intermediate (in-between) stages. Furthermore, it is a set decision-making problem involving the buyer behavior theory, economic theory, and theory of competition, among others. (Ballou 1999, 67)

The following discussion is limited to the methods of pricing that are geographically related and to inducement pricing arrangements that are deduced from logistics costs. Accent Ltd kindly explained the price formation in the aluminium business. Many

people consider that the price of aluminium as a raw material is the final selling price but as it turned out, there are several stages of pricing that are shown in Figure 7.

First of all, two parties, the company and the supplier get the price for the aluminium from the London Metal Exchange website and this price is exclusively for the raw material. In the second step, the supplier assigns a price for further “manufacturing and processing”. Second step is the most essential in the price formation process. Precisely for this extra charge related to “manufacturing and processing” the most profitable and best supplier can be determined and revealed. The last step of pricing is about “customs clearance and transportation”, and it accounts for 60 percent of the final cost of the whole order price.

Later, when the three main stages of pricing are already passed, the supplier is ready to send goods to the destination provided by the customer. For the best understanding of price formation, I have created a Figure 7 showing all the steps with examples of real prices.



**FIGURE 7. Price formation for aluminium purchasing (based on Accent Ltd facts and experience)**

Roughly speaking, after all those steps the company will get the real price for finished goods. The price that I used in the second step (1,8 USD/kg) is the real price of the Turkish supplier. The Chinese suppliers are ready to sell for 1,1 USD/kg or 1,2 USD/kg.

After a rather simple and intuitive explanation, really important and related theory of product pricing must follow. Further, based on the principles of Business Logistics

Management, the product price theory will be fully disclosed in terms of the professional terminology and related approaches.

### 2.5 Geographic pricing methods

Customers are not focused on a single point for most distributors, but usually they are scattered over extensive areas. This implies that the total value to spread to them ranges with their emplacement. Should pricing be simple then?

The selection of a pricing method depends in part on balancing the pricing structure and its parts with the costs of managing it. There are a limited number of categories that specify most geographic pricing methods. There are single or uniform, zone, Free On Board incoterm (FOB), and basing point and freight equalization. Since the company Accent Ltd is concerned only by FOB pricing, the emphasis will be placed exactly on it. Further information regards to the FOB pricing method, since it is directly related to this bachelor’s thesis.

#### *FOB Incoterm® Pricing*

For the best understanding of geographic pricing, it is important to begin by considering the FOB pricing options. According to Incoterms, the abbreviation FOB stands for “free on board”. The most popular and effective policies are FOB factory price and FOB destination price.

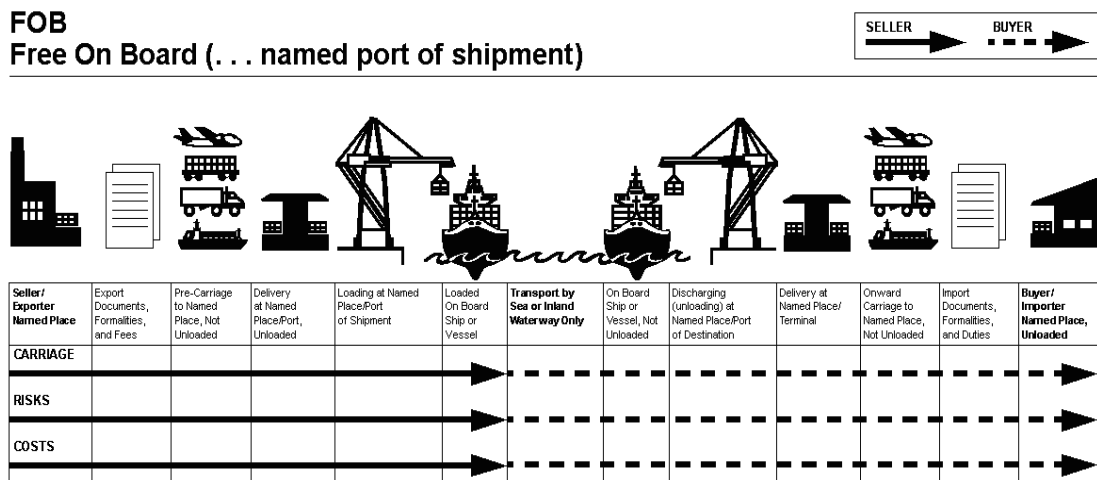


FIGURE 8. Free on Board Incoterm® (World Trade Press 2013)

Free on Board means that the supplier/seller is responsible for getting the goods onto a ship appointed by the buyer. Figure 8 is showing the full procedure of Free on Board Incoterm®. At this point, the risk of loss passes from the distributor to the customer. However, a lot of conjunctions of FOB factory and destination pricing exist, depending on how freight charges are paid. Detailed step-by-step description is provided in the Appendix 1 – Appendix 1(1).

**TABLE 3. The main FOB policies (based on Business Logistics Management theory)**

The FOB <i>factory price</i>	The FOB <i>destination price (or delivered price)</i>
It is a single price fixed at the factory location. Customer takes possession of the goods at this point and crucial for transportation beyond this point.	It is the price to the customer's location or in the general neighborhood. Under this policy, shipment costs are already included in the price. It is expected that the distributor will make all the transport arrangements.

Table 3 is providing information about two known definitions and varieties of Free on Board policies. (Table 3) According to the Accent Ltd policies and methods, the company uses for a long time the FOB *factory price* policy. This policy is useful for both parties: Accent Ltd has the supplier make the shipping arrangements simply because the supplier is better equipped and more skilled at it, and Accent Ltd is then billed for the actual transportation costs (as described above – sixty percent of whole order price).

### 3 PURCHASING PROCESS

*“Purchasing – The term used in industry and management to denote the function of and the responsibility for procuring materials, supplies, and services.”*

(APICS Dictionary, 9<sup>th</sup> edition, 1998)

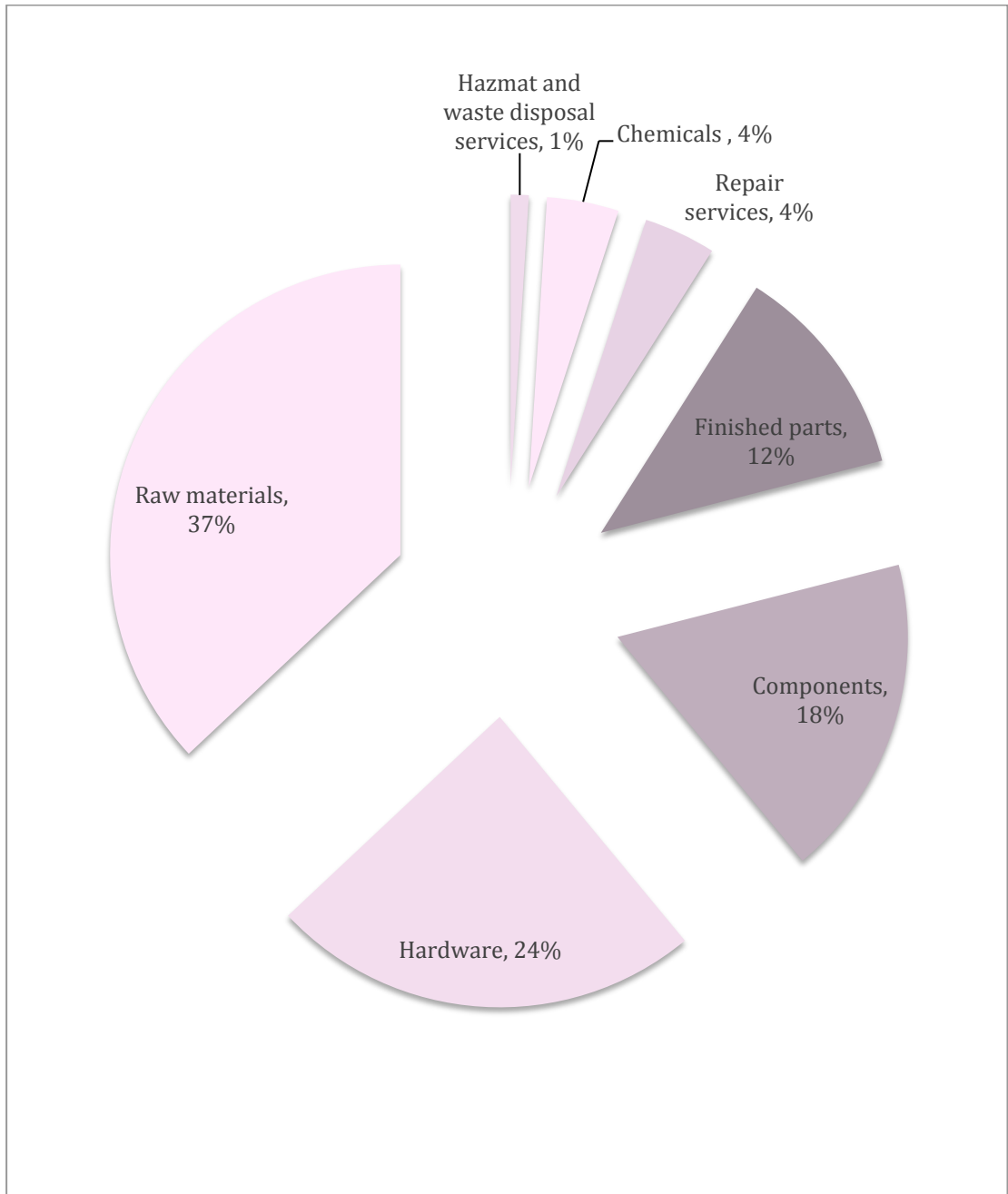
Purchasing is indeed an unusual and multifaceted job. It operates at the vital intersection between buyer and seller, where supply and demand forces meet. As such, its scope is broad, encompassing both internal and external elements of supply interaction. The terminology used in the purchasing profession has witnessed a similar evolution. The term “buyer” has taken on a generic connotation today, but in fact, many types of buyers exist. Another term that has undergone some revision is “vendor”. Some prefer the term “supplier”. (Pooler V.H. et al. 2010, 3)

A large number of multi national firms throughout the world sell to a worldwide market. Any geographical location that will optimize production costs is a potential plant location and any country that can supply reliable materials or parts at a low cost can be likely resource. In a truly interdependent world, political boundaries need not be a barrier to the free flow of raw materials and supplies. A well-managed company should look upon world trade as an opportunity to improve its supply capabilities. This often involves assigning appropriate responsibility to purchasing managers that gives the company a competitive advantage. Purchasing products and services of foreign origin can be highly challenging. The key to buying overseas is the availability of a product specification, market access, formulating a negotiating position to obtain the product at right price and being distributed ideally in the logistics environment. (Bhat 2011, 101)

In a large amount of firms purchasing has been seen as clerical duties. Purchasing encourages to a firm’s efficiency and forcefulness in many ways. Foremost, it assists to define a firm’s cost structure through negotiations with distributors. Developing the quality of incoming parts and components, and decreasing the investment in inventory via its supplier development policies and vendor selection. (Fredendall & Hill 2000, 205)

In addition, there is data about purchased goods and services worldwide. This data (Figure 9) has a direct relevance to this bachelor’s thesis because of the percentage amount of all raw materials bought in every country.





**FIGURE 9. Percentage of goods and services purchased (Turner 2011, 11)**

In addition, there are two main reasons for purchase international. The first one is to obtain raw materials, components or finished goods which are not available in the buyer's country and which are needed for the buyer's business. The second reason is to obtain goods and/or materials from a source which is the most economical or which is of the highest quality/standard for a given price. (Bhat 2011, 102) Moreover, Table 4 is showing the advantages of international purchasing. Furthermore, disadvantages of purchasing are located in the Appendix 2.

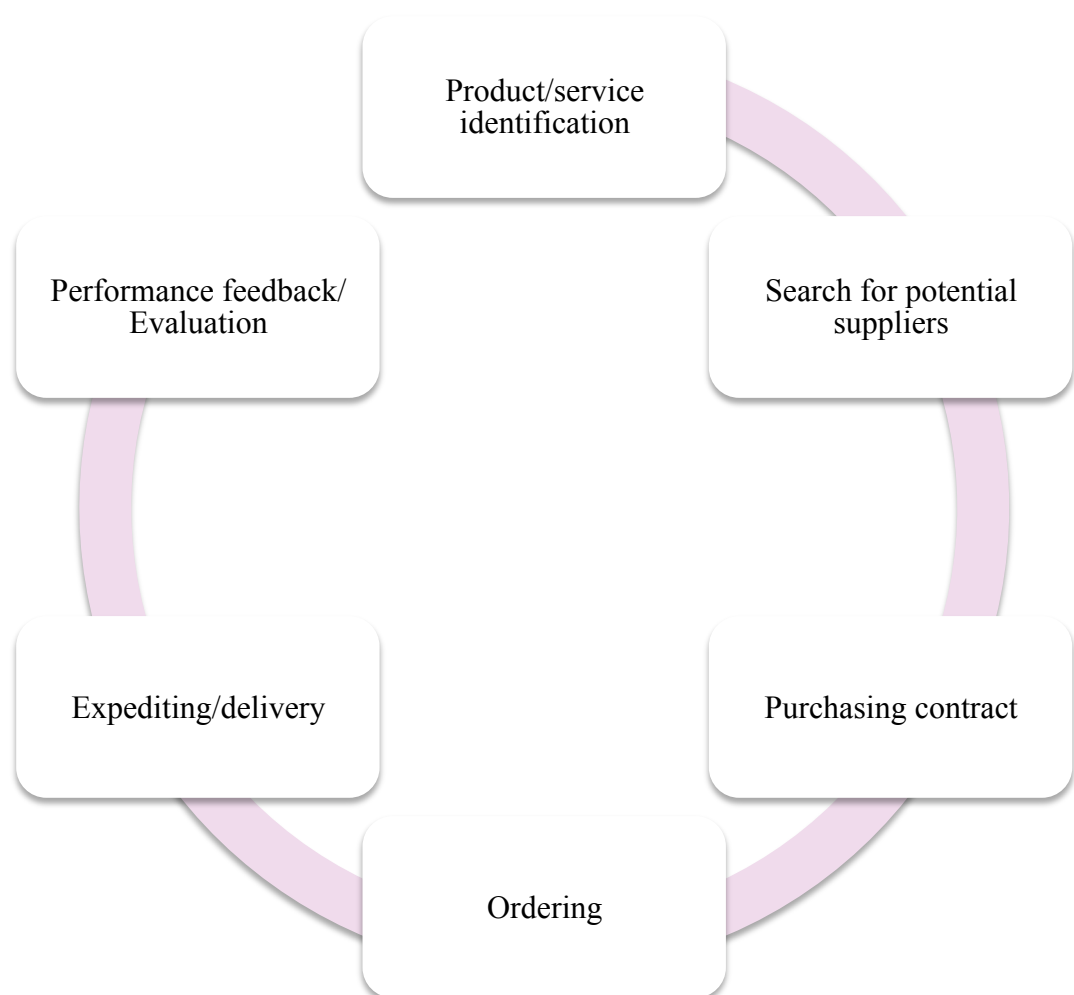
**TABLE 4. Advantages of international purchasing (Bhat 2011, 102)**

<b>Advantages</b>	
<i>Lower prices</i>	This may be due to lower labor cost, better quality control and more efficient production technology of the foreign supplier firm as compared to the domestic supplier. Also exchange rate levels can play a decisive role.
<i>Product availability</i>	The goods or materials may not be available in the buyer's country.
<i>Quality</i>	A key reason for international sourcing is to obtain goods and materials of required level of quality when quality is critical factor.
<i>Product's added value</i>	An importer can improve his/her firm's competitiveness by improving his/her product's added value through design, quality standards, durability, efficiency, technology and the like.
<i>Product and process technologies</i>	International sources in some industries are more advanced technologically than the domestic industries. Outsourcing products enables the importer to use high technology goods and materials. It also permits immediate availability and no lead-time in product development and production.
<i>Broadening the supply base</i>	Professional buyers want to develop and maintain an adequate supply base for the materials required. Hence they may develop international sources in order to have competitive supply base.

After all, the buying process cannot be unbroken and entire, so it has a number of stages. The so-called steps generate a kind of cycle that consists of fundamental knowledge. Frankly, there are many different variations in the number of the steps and their description, but it is better to focus on the most ubiquitous and widely used cycle of these phases.

### 3.1 Purchasing cycle

Frequently, purchasing is seen only as the actual buying operation where money is transferred and goods change owners. If purchasing is needed to make a strategic business operation it is significant to catch sight of various phases of the process and develop them apart. On the whole, purchasing can be separated into six major steps that should be taken each time.



**FIGURE 10. Traditional purchasing cycle (Fredendall & Hill 2000, 206-208)**

In addition, purchasing in a company usually includes all the steps related to the buying process. According to Van Weele (2003), these steps are: identifying the need, searching for the potential supplier, arriving at a proper price/negotiations, agreeing on terms and conditions, contract or order delivery, and follow up/evaluation. Figure 10 is illustrating the main steps within the purchasing process.

#### *Product/service identification*

More often, the first step/action of purchasing is to identify what is needed to purchase and the quantity of it. The evaluation of the equipment's quality in the company needs to be done regularly. (Van Weele 2003)

Once a source has been recognized, purchasing typically calls in the sources to bid by sending a query for proposal (RFP), a document that declares requests for a service or product, and requests an offer from suppliers, or quotation to them. Today, when there is such a thing as the Internet, some would-be suppliers are able to automate this by ensuring web pages that permit a potential purchaser to introduce their RFP electronically. If the demand for a product is comparable to what has been produced by the company, it is occasionally possible for the purchasing department to promptly obtain an electronic bid. (Fredendall & Hill 2000, 206)

#### *Search for potential suppliers*

Fresh from identifying what to purchase and how much, it is required to solve from whom to purchase it. Primarily, the search should be realized in the sphere that was chosen and was met all the searching criteria. Right after that sub step, it is necessary to allocate the suppliers from the large pool. Defining possible suppliers requires some market research. It is very significant to create questionnaires, which should be sent then in the format requested, so that the conditions and offers can be compared. (Van Weele 2003)

#### *Purchasing contract*

When the superior supplier is found, it is time to proceed to the circumstances. The purchasing contract should involve everything that has been coordinated of, from

shipment time to warranty matters. For the cost and terms of shipment, the most eligible setup for the consumer is the fixed price. The cost is set in discussion and bidding, and both parties have accepted it. Financial documents and papers should be clear for both the consumer and supplier; the first-rate supplier is crucial for everything that is not mentioned separately.

For the large purchases the disbursement generally takes place in a few stages. For the supplier it might demand big investments and equity related to the machinery to the output the facilities or generate the service. In the purchasing agreements it is also good to refer to the requests for the items bought. For evading the situation of having to discuss every detail separately when making a purchase, a set of international benchmarks contracts are created. (Van Weele 2003)

### *Ordering*

In some occasions, generally big ones, one-time buying, contracts must be ordered simultaneously and these to place the individual order. If the purchases are repeated and for example the costs are discussed in advance, the once discussed purchase contract/deal is valid for the defined number of time and order. The company just alerts the supplier about the needed amount. Another significant information is for instance unit price, total cost, requested purpose date, quantity required, shipment address and billing address and depiction of the product. After obtaining the order, suppliers are constantly needed to send out a purchase order acknowledgement in return. This reports that they have obtained the order and took the information in it. (Van Weele 2003)

Once the purchasing division has a bid that is admissible (which means that the provider is respected, the product to be purchased meets technical requirements, and the price is suitable), the purchasing department arranges a purchase order (PO), which should comprise applications of the name, quantity/amount, part number, description, and cost of the goods or services ordered; agreed-to terms as to disbursement, discounts, date of performance, and shipment; and all other agreements relevant to the purchase and its implementation by the supplier. The formality of this PO may rely on the size of the order. If it is an expensive one-time buy, the purchase order may be

very itemized. If it is a low-cost product, such as the purchase of book or a training manual, it may be done over the phone or by fax. (Fredendall & Hill 2000, 206-207)

### *Expediting/delivery*

When the supplier has accepted the shipment date and terms/conditions, the waiting for the purchased products begins. Commonly the shipment time is evaluated to provide issue for potential delays. This indicates there might be room for certain expediting.

There are various expediting types specified. One of the most used but still the most inefficient is the expediting, where the consumer begins to take influence when the company encounters zero-stocks. Belated shipments get no consideration this way if safety stocks are sufficient. If there are no acts performed every time the purpose date is neglected, the supplier might suppose they have no need to esteem the purpose dates. (Van Weele 2003)

Other method is an ordinary status verification that can operate if there is not too large a number of orders. In this approach the supplier is reached defined number of days before and asked to verify the shipment date. This provides the signal that the customer is waiting the products and reporting if they are in delay.

For the crucial parts and suppliers there is a procedure named advanced status check. Crucial in this occasion does not surely indicate significant. In this approach manufacturing is given a production outline, a kit of “milestones” to be monitored by the purchaser. This occurs by creating audits and verifications to the production premises. (Van Weele 2003)

### *Performance feedback/evaluation*

Frequently, when the items being bought are used by production, purchasing will supervise the headway of the order. It will estimate progress by the supplier and keep procedures informed about any challenges. This may be done with some kind of purchasing follow-up paper or via data that is put up on the company’s intranet. (Fredendall & Hill 2000, 207)

The purchasing procedure is not completed when the items are supplied. The purchaser has the great role even after the products are taken into exploitation or material into production. If anything is to go improperly, it is essential that somebody knows the circumstances of the purchase; possible insurance issues and return rights. From time to time, products might require some sudden fixing or regulation, effected in expenses that must be initially affirmed by the management and reported to the purchasing prices for the hereafter assessment. The assessment process is the serious tool to see the challenges that can be got away next time and if the supplier in matter can be used again. (Van Weele 2003)

Purchasing fulfills otherwise responsibility during this purchasing cycle. It maintains to write about suppliers and their productivity as well as records about the receiving of materials and the sources of these materials. (Fredendall & Hill 2000, 208)

### **3.2 Purchasing activities**

Buying intermediately influences the flow of products in the physical supply channel, though not all the activities of purchasing are of straight concern to the logistician. Solutions referring to the choice of vendor shipping points, the definition of purchasing amounts, the synchronization of supply flows, and the range of the product form and transport approaches are some of the important decision influencing logistics costs. (Ballou 1999, 415)

Purchasing is in provision to gain information not only about prices and availability of goods, but also about new supply sources and new technology in the market. The activities associated with buying the raw materials, supplies, and components for company are shown in Figure 11.

Purchasing activities are more detailed and the “step by step” review of purchasing cycle. Purchasing activities are intended more for professional use and moreover for large companies and corporations that have a logistics department. In small companies, where there is only an export-import manager. It is better to use the purchasing cycle instead of activities because of the clearly presented steps.

## Purchasing activities

Evaluating supplier performance

Bargaining/negotiating contract

Matching price, quality and service

Sourcing goods and services

Scheduling purchases

Adjustment of sale terms

Estimating the value received

Forecasting price, service, and sometimes demand changes

Indicating the form in which goods are to be received

Choosing and qualifying suppliers

**FIGURE 11. Purchasing activities (Ballou 1999, 415)**

These purchasing activities are almost the same thing as a purchasing cycle. The important difference between the cycle and activities is the depth approach of the last one. Furthermore, there are six major documents used in international purchasing process that are shown in Table 5.

**Table 5. Documents used in international purchasing. (Bhat 2011, 104)**

<b>Documents</b>	
<i>Bill of lading</i>	It is a proof of dispatch of goods by the supplier and gives the title of goods to the buyer and enables the buyer to claim the



<i>Invoices</i>	<p>goods on arrival at the destination. The bill of landing is signed by the master of the ship that carries the goods to the buyer's country (destination).</p> <p>The types of invoices are: <i>commercial invoice</i>, <i>customs invoice</i> and <i>proforma invoice</i>.</p>
<i>Packing list</i>	<p>It serves to indicate the exact nature, quantity and quality of the contents of each package in a shipment.</p>
<i>Certificate of origin</i>	<p>Certain commodities require a document certifying the country from which the goods originated as distinct from the country from which they were immediately exported.</p>
<i>Inspection certificate</i>	<p>It is a document normally prepared by an independent agency other than the exporter to certify the condition, quality or quantity of goods being shipped as per the requirements of the importer.</p>
<i>Letter of credit</i>	<p>It is an arrangement by which the importer is obliged to pay the exporter through the undertaking given by the importer's bank to the exporter's bank.</p>

### *Supply problems*

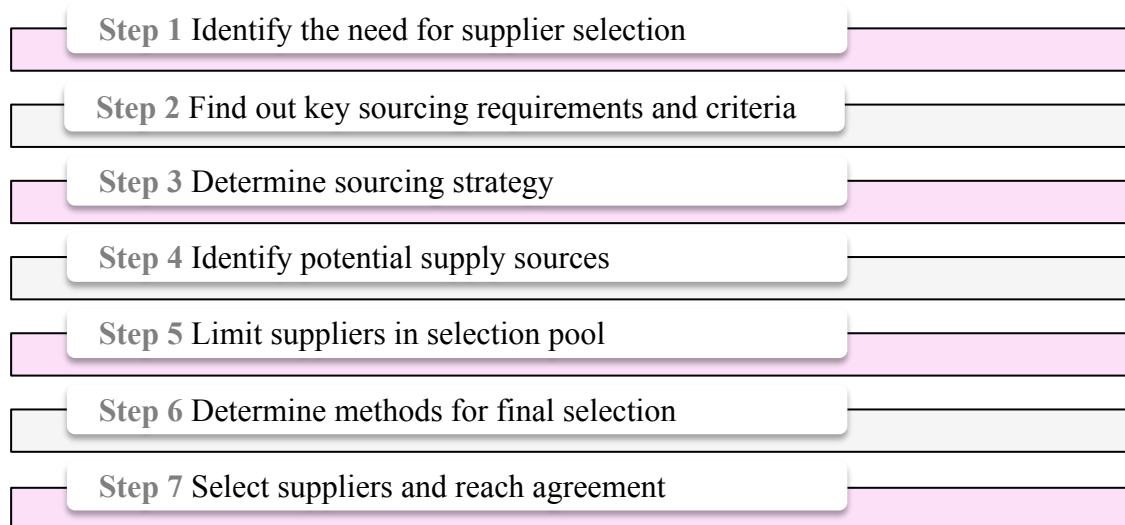
Purchasing is involved not only in obtaining and receiving supplies into the firm, but also in resolving any problems with the supplies during their use. This requires purchasing to stay in communication with the users of the materials and supplies. Typically supply problems that need to be resolved are a supplier's inability to meet delivery dates, nonconformance of materials to specifications, receipt of damaged materials, or receipt of the wrong quantity of materials. An additional problem is when there is a need to change the specification for the materials to be purchased. To resolve these quickly, purchasing must stay in communication with the suppliers of the materials

and have clear procedures in place for resolving problems. (Fredendall & Hill 2000, 208)

### 3.3 Supplier selection process

As a rule, the customer managed the relationship. The supplier abided. The twenty-first century business establishes the roles on a more egalitarian basis. The customer generates the business demands for the supplier but the supplier also ensures entry in the form of products or services to satisfy the subordination of the customer. The supplier holds a crucial position in the supply chain. (Norausky 2000, 21-22)

This part presents the steps involved in the supplier selection process. The quality of the eventual number of suppliers largely depends on the quality of all the steps engaged in the selection process. The first part of this study describes a methodology for supplier selection that combines the different steps of the selection process. Figure 12 depicts the supplier selection and evaluation process.



**FIGURE 12. Supplier evaluation and selection process**

#### *Step 1: Identify the need for supplier selection*

Usually, the identification and recognition of a need, service or product is the main step in every purchasing and search procedure. Different cases may trigger the need for supplier selection.

*Step 2: Find out key sourcing requirements and criteria*

Supplier selection is sophisticated because of the numerous criteria engaged in the decision process. Besides, many times these criteria may contradict the each other. Consequently, specifying the appropriate criteria becomes critical.

*Step 3: Determine sourcing strategy*

Sourcing needs that companies obviously specify the strategy attitude to be taken during the supplier selection process. Instances of sourcing strategies are: domestic versus international, short-term versus long-term distributors' contracts, and single versus multiple suppliers.

*Step 4: Identify potential supply sources*

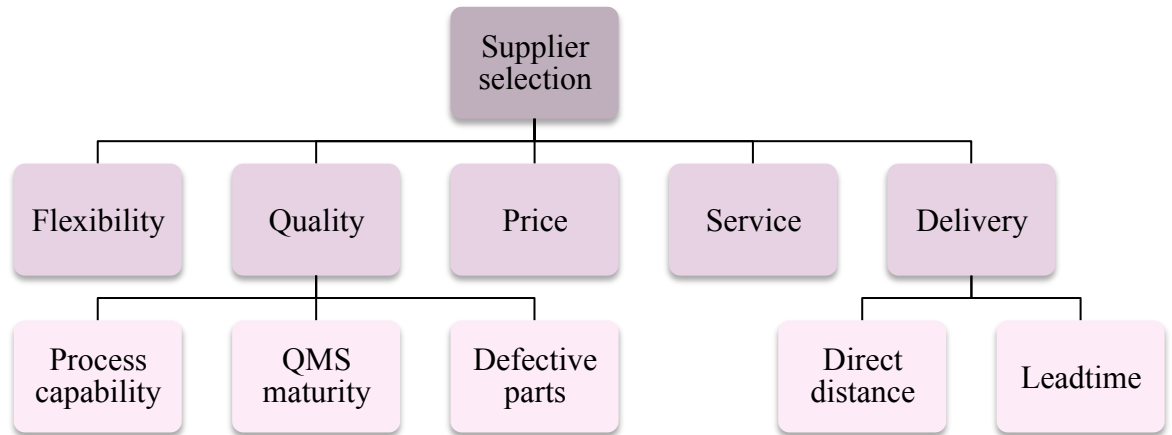
The significance of the product under investigation influences the resources spent on matching potential suppliers.

*Step 5: Limit suppliers in selection pool*

Firstly, need to understand more or less clear signs where which of suppliers are strong and competitive enough. Given the finite resources of a company, a customer needs to pre-screen the would-be suppliers to decrease their amount before continuing with a more detailed analysis and evaluation.

*Step 6: Determine methods for final selection*

There exist various methods and ways of assessment and selection suppliers. The analytic hierarchy process (AHP) is regarded as one of the most extensively used linear weighting techniques. The main benefit of AHP is that it processes both quantitative and qualitative criteria. (Figure 13)



**FIGURE 13. Analytical Hierarchy Process (AHP) approach**

*Step 7: Select suppliers and reach agreement*

The last step of the supplier estimation and selection process is to evidently select those suppliers that best meet the company's sourcing strategy. This solution is frequently accompanied with defining the order number allocation to selected suppliers.

#### **4 RESEARCH DESIGN**

For the investigator in applied fields, research is a process of attempt to gain a best understanding of the complications of human interactions. In qualitative research, primary questions (for study) oftentimes come from real-world observations, dilemmas, and questions, and have arisen from the interaction of the researcher's direct experience, tacit theories, and growing scholarly interests. The basic methods leaned on by qualitative researchers for collecting information are (1) direct observation, (2) taking part in the setting, (3) document overview, and (4) in-depth interviewing. These methods form the substance, the staples of the diet. Supplementing these are a few particularized methods. (Marshall & Rossman 1995, 15-16; 78)

As mentioned in the first chapter, the main goal of this thesis is to find a superior supplier among potential candidates in the aluminium fence field on the Chinese market. It can be met by responding to the research questions.

Research question 1 (Q1). *What is the situation on the aluminium market nowadays?*

The case company had previously an experience in working with foreign suppliers but did not know exact strategies and methods how to find the superior supplier for company. As long as the Accent Ltd operates in aluminium the field, it would be necessary to start with studying the today's situation on the aluminium market. By exploring all available information, sub-questions have been formulated:

- 1 What does the construction sector look like and how does it operate nowadays?
- 2 What are the prices for aluminium on the modern market?

Research question 2 (Q2). *What is the purchasing process and how it relates to the supplier selection process?*

The purchasing process, as known is one of the most important mechanisms in every company. Despite the fact that it is important, it is also complex. Furthermore, the purchasing process is relevant to the suppliers' search process. Two sub-questions have been formulated for the best understanding:

- 1 What are the general steps and actions of the purchasing process?
- 2 How is the suppliers' search linked to the purchasing process?

Research question 3 (Q3). *How to find and select the suitable supplier on the basis of the theoretical knowledge?*

This research question is related to the theoretical overview and frameworks. As long as the purpose of this bachelor's thesis is to find a supplier is necessary to use the theoretical knowledge. Thus, one sub-question has been formulated:

- 1 What are the main and existing approaches of the suppliers' selection?

#### **4.1 Research methods**

It is not necessary to provide the differences between qualitative research and quantitative data analysis because this thesis' purpose of the study is qualitative research, and precisely exploratory and explanatory methods combined. According to Catherine Marshall and Gretchen B. Rossman (Marshall & Rossman 1995), research questions and research strategy have a direct bearing to several data gathering methods, like observation, in-depth interviewing and review of documents. It is worth noting about the interviewing process that Internet (e-mail), telephone and Skype interviews were applied. These groups of interviews have the straight relation to electronic interviews. (Saunders et al. 2009, 348-351) Even more, information search was conducted solely on the Internet, so more attention will be paid to the online study. In Appendix 3 detailed and convenient figures how the research methods were formed and identified.

To begin, it is better to notice about the research on the Internet because it is a basic way today of gathering the information (besides books and professional magazines) and write this thesis. According to Eric Branscomb (Branscomb 1998), the Internet ensures investigators with many implements. Communication media such as e-mail, Skype and other newly emerging programs allow people to communicate with others in the world who has the Internet access and to join chats and conversations with others in any area of interest. Information implements such as World Wide Web (often called "WWW") allow people to find the information worldwide. Furthermore, for gathering information Google as a general search engine will be involved.

#### **4.2 Data collection**

According to Catherine Marshall and Gretchen B. Rossman (Marshall & Rossman 1995, 99), a lot of qualitative studies match a few data collection methods over the course of the study. Limitations in one method can be offset for by the strengths of a supplementary one. This paper is directly related to research, so data about suppliers, interviews, information gathering will be in two ways: through primary and secondary data collection.

### *Interview*

Analyzing the Chinese companies that supply and produce aluminium railings, parts and accessories, it is very important to find out the best one according to the main criteria *price*. For an in-depth interviewing method was chosen this study. Furthermore, in order to clarify the interviewing process it should be noticed that *elite interviewing* will be used as a method to identify terms and conditions of each company.

An elite interview is a particularized occasion of interviewing that concentrates on a particular type of interviewee. Elite persons are considered to be the powerful, the eminent, and the well-informed people in an organization. Elite interviewing has many advantages such as providing the overall view of an organization by elite; elites are familiar with the legal and financial structures of a company, etc. (Marshall & Rossman 1995, 83-84)

Elite interviewing is a small subgroup of an in-depth interviewing. Hence, qualitative in-depth interviews are much more like the dialogue than formal events with predefined answer categories. The researcher studies a few major topics to help disclose the participant's meaning perspective, but otherwise esteems how the participant frames and structures the responses. (Marshall & Rossman 1995, 80) In-depth (elite) interviewing is the best method to gather information from potential suppliers for this bachelor's thesis.

### *Observation*

For a very clear study of all the processes and procedures in the case company, it is necessary to attend and participate in all those actions. Deep research and understanding of the company's processes require immediate participant observation, a form of observation, which is more usually used in qualitative research.

Participant observation should be realized as an operation. First, the researcher should become a participant and take approach to the field and to individuals. Second, the observation should also shift through an act of occasion increasingly specific and concentrated on the facets that are fundamental for the research questions. So, Uwe Flick (Flick 2006, 220-221) differentiates three steps of participant observation:

- 1 *Descriptive observation*, at the start point, serves to ensure the researcher with a finding to the field under study. It keeps nonspecific detail and is used for finding out the complexity of the field as far as possible and to evolve (at the same time) more specific research questions and lines of vision
- 2 *Focused observation*, narrows possibility on those operations and problems, which are most primary for research questions
- 3 *Selective observation*, by the end of the data gathering, is concentrated on finding further proof and samples for the types of proceedings and processes found in the second step

### *Document overview*

As long as the criteria for supplier selection has been and remains the *price* general aim in the document overview is collect pricelists from potential suppliers and then analyze those pricelists for the identifying the best suppliers for the case company.

Researchers elaborate participant observation, interviewing, and observation with the collecting and analyzing of documents generated in the course of everyday events. As such, the overlook of documents an unobtrusive method, one full in describing the meanings and beliefs of taking part in the setting. The use of documents usually involves a specific approach called *content analysis*. A common approach, a process, and an analytic strategy, is satisfied with analysis brings the regular examination of shapes and communication to document templates objectively. (Marshall & Rossman 1995, 85)

### **4.3 Research process**

The aim of this bachelor's thesis research is to find the superior supplier or two for the case company Accent Ltd, and also read and learn new theoretical frameworks and approaches for a better understanding of markets, mechanisms and selection process. Participant observation, elite interviewing (in-depth interviewing) method, and document overview were chosen as the research methods.

The first research method is the participant observation. The role is participant as ob-



server. The choice of the role was defined by the fact that I worked as a trainee in the company for several years and my activities directly involved facing with import-export activities of the company (negotiating with potential customers from abroad, negotiations about contract, communicating with the existing suppliers of the case company).

The first part of the primary data collection was gathering during my job duties in that company by preserving the data for the bachelor's thesis about what the situation used to be and what was the current situation of supply chain and suppliers in the Accent Ltd. As far as the company was working and still work with the foreign suppliers, my aim is to find new ones from the Chinese aluminium market.

The second step for defining the company's needs, the best solution is in-depth interview and still observing because it would allow gathering the required necessary data through the prepared questions, which means versatility and helps to obtain extra information for deeper research. Then, it is a very comfortable way of interview method because all the questions were held on-line via Skype and e-mails. Furthermore, the second step about matching interview and observing regarding not only case company. The Chinese suppliers are the second main objective that should be involved in interviewing process also via e-mail or Skype. Of course, there is a huge difference between questions for the case company and for potential suppliers. Questions related to the case company are about general things that may matter somehow during the thesis writing process and questions for the potential Chinese suppliers are more structured and have the special aim to define based on criteria the best supplier and also reveal the willingness to work with Accent Ltd. Already-formulated questions can be found in Appendix 4.

## **5 ACCENT LTD AND ALUMINIUM SUPPLY CHAIN**

Starting in 1991, the aluminium market was faced with promptly enlarged exports from the former USSR. Until its breakup, extremely little Russian metal emerged in to the Western markets. The sudden production booms in the Chinese and Middle Eastern aluminium industries could further enlarge foreign exports. (Aluminium industry

vision 2001) Figure 14 is providing the main drivers of the aluminium supply chain in the world.

The historical sections of the aluminium supply chain will rearrange in reply to individual economic factors and prosperous business models. The traditional framework of the industry– mining, rolling, smelting, extrusion, refining, casting– will transform as upstream performances get more narrowly equalized with other mining and metal companies, whereas downstream performances get increasingly interspersed and user-focused.

### **Consumers will concentrate on functionality**



- Successful downstream companies will increasingly react to consumer demand for excellent functionality. Request growing for multi-material resolve that capitalize on the out-and-outer features of each material.

### **Direct manufacturer will maintain particularized markets**



- Regulations enforcement more recycling of complex alloys and composites with plastic bonding will manage recyclers to evolve facilities to control these material streams. This will minimize the necessity to add expensive alloying elements, and further reduce energy use and emissions.

**FIGURE 14. Aluminium supply chain drivers (Aluminium industry vision 2001)**

Many smaller, specialized producers will continue to serve distinct customers with unique needs. Simultaneously, some vertically consolidated producers (mining, improve, fabrication) are purchasing procedures further down the supply chain and integrating ahead. (Aluminium industry vision 2001)

## **5.1 Description and services of the case company**

Oleg Grenko and Lilia Grenko, both graduates of Moscow State University of Civil Engineering, founded the company Accent Ltd in 1995 in Moscow, Russia. The type of this company can be attributed to the family business because the founders are spouses. To this day, Oleg and Lilia are working in tandem and I, their daughter, was hired a few years ago and still continue to work as an export-import manager. The

company has a small office in central Moscow with a staff of around 5 employees. The small warehouse and the industrial premises located near the head office. In addition to the key personnel, other employees range from 10-15, and a total of about 20 people are in the company at the moment.

Accent Ltd operates in the construction business field. Competition, of course, is growing every year. Construction - is an extremely profitable environment in Russia and beyond. Fortunately, not all the competitors have and can stay long, because specific narrowly focused knowledge or a low and good price is required in this area. In addition, it is a competition of small and medium enterprise businesses. Large and well-known companies, groups and corporations are not considered.

The company Accent Ltd has its own production with a full fleet of equipment, transportation, universal installation teams and qualified staff in the office. All this allows produce and design of any complexity, including the design of non-standard shapes and sizes. Moreover, since 2007 Accent Ltd is the official importer in Russia profiles and accessories for aluminium railings and railing "Pleksi". Figure 15 is showing the services that company Accent Ltd offers to its customers.

## Services

---

Aluminum construction (windows, doors, partitions)

---

Alumo-wooden (windows, doors, stained glass)

---

Doors - hinged, sliding, swing

---

Entrance doors

---

Outlet shops/ medium-sized shops

---

Office partitions

---

Sanitary partitions, showers

---

Aluminum railings and fences, as well as accessories

---

Railings "Pleksi"- with brass or aluminum elements

---

Shutters/blinds for home and office of various kinds

---

**FIGURE 15. Accent Ltd services and products**

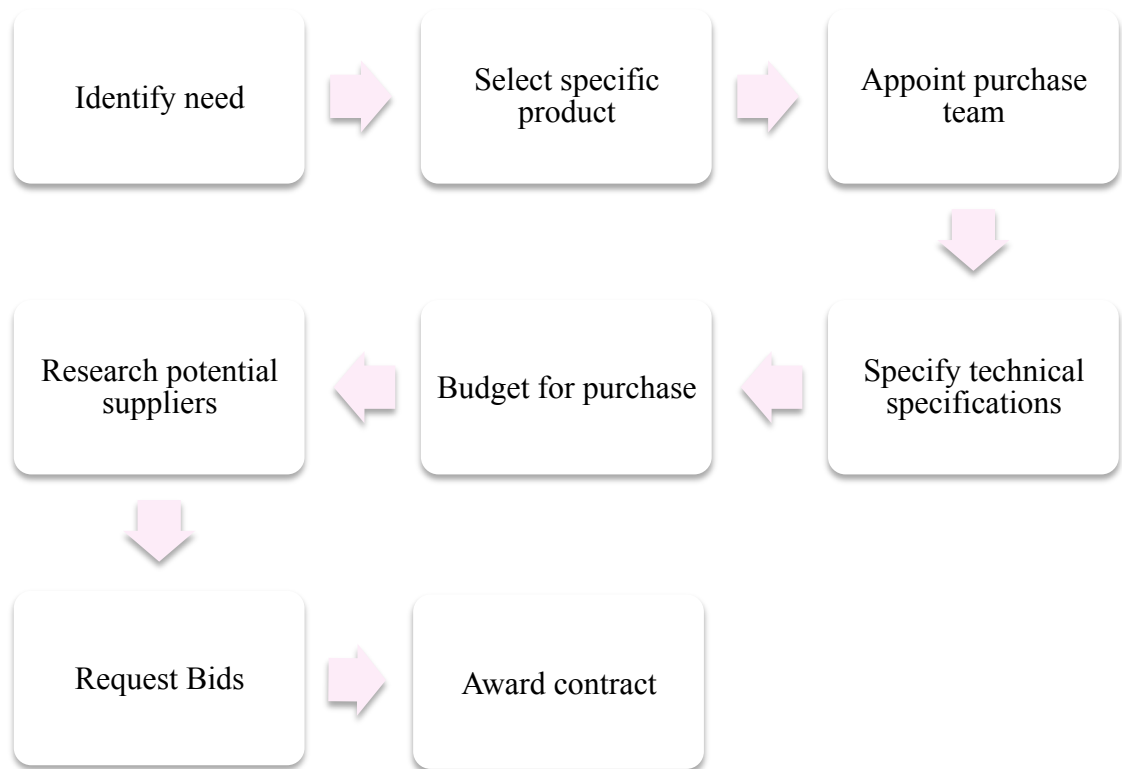
As of today, Accent Ltd cooperates with Turkish suppliers of aluminium components and parts. The Turkish aluminium industry has growing since 2002. Production scales, domestic sales, and imports and exports were unceasingly rising. The enlargement of significant consuming industries such as the automobile industry and housing construction, and the request for semi-finished and finished aluminium goods for the packaging industry as well as electric household devices were powerful factors in the growth of the area. (Küçükserim 2010) Unfortunately, the prices for the products, which Accent Ltd has purchased, from year to year increased and the company in the recent years has to work at a loss. Accent Ltd is willing to cooperate with the Chinese suppliers of parts and accessories for aluminium railings. The company strongly believes that the Chinese suppliers are ready to give lower price for the same-quality production as the Turkish suppliers.

After the company description it is apparently to add information about the theory that implemented precisely in Accent Ltd based on the underlying theory of business logistics management, purchasing management, supply chain management, supplier management, etc.

## **5.2 Purchasing activities of Accent Ltd**

Despite the above purchasing theory, Accent Ltd allowed to conduct research of the purchasing process. The result after the personal study of the purchasing process in Accent Ltd helped me to create a brand new but simplified theory of purchasing activities exactly in the case company. The theory of Accent Ltd purchasing activities consists of eight major steps. All of those steps are unique and have a brief explanation. Thereunto, this theory was improved by the dint of principles of business logistics management and principles of supply chain management. (Figure 16)

Fortunately, this theory and its explanation helped in the writing thesis and creating this paper. The explanation of each step will lead to a key point and help find the right suppliers with incredible precision. Detailed explanation of each single step has a singularity. Consequently, the description is not long but accurate, and concerning to the thesis study.



**FIGURE 16. Accent Ltd purchasing activities**

*Identify need*

Accent Ltd wants to find supplier/suppliers within the Chinese aluminium market of aluminium railings. Also, the price is really important, because previously the case company purchased raw materials for railings from Turkey, and the price was high and unjustifiable. Thus, the need to make a purchase of a product is identified.

*Select specific product*

The company should select which type, color or form it needs for further work. Accent Ltd is interested in any parts for railings. Color, type and form don't matter in that case because in the construction business there are almost the same parts everywhere.

### *Appoint purchase team*

Put a purchase team together to manage the buying process, including finalizing the list of required construction specifications for the product. In this case, every employee is important because extra check of all papers and documents or even creating of new ideas and finding new ways will not harm the process.

### *Specify technical/construction specifications*

Finishing the list of technical/construction specifications for the product to ensure it meets the company's needs. This is necessary as well as for the company, and also for the suppliers. Both parties must have a clear understanding of what they want. Based on the request, it will be easier to calculate the price.

### *Budget for purchase*

Allocate the budget for the purchase relying on the range of prices. CEO, managers and accountants should always have to calculate the company's budget and be aware of how many possible funds are available. Budgeting also seen as a way of predicting and forecasting the future of the company.

### *Research potential suppliers*

This is the important step, especially for this bachelor's thesis. All this time company purchases production mainly from Turkey, Istanbul. Accent Ltd complained about the prices that Turkish suppliers gave them. The company wanted me to find distributors with good quality production and low prices. So this paper concerns supplier searching and the list of potential Chinese suppliers will appear lately.

### *Request bids*

After the search of suppliers has been done successfully and the list of potential distributors has been created, solicit bids enter into battle. Request bids from the distributors of the identified product that meets all the required technical/construction specifications.

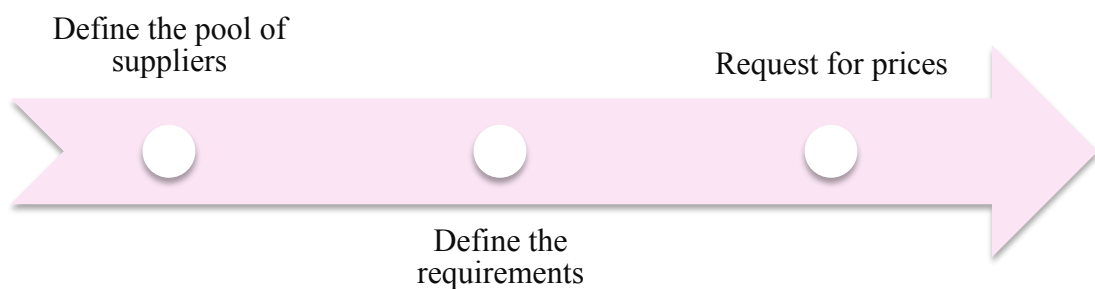
### *Award contract*

Feasibly, the case company will you use this paper in a right and proper way and will note guidance well. Of course, it would be nice if the company used the list of suppliers and signed a contract with one or several of them.

Since the main objective of the thesis is to find good and competitive suppliers, it is necessary to pay attention precisely to the supplier selection process. There is such a theory and criteria for competently and correctly search for suppliers.

### **5.3 Supplier selection process in Accent Ltd**

Based on the theoretical part of the thesis, this supplier selection process is simplified and adjusted for the Accent Ltd case. Moreover, information accumulated through investigation of the real supplier selection process in company. The company uses only three main steps when searching suppliers so that is why I called it “reduced supplier selection”. (Figure 17) In the search for a suitable supplier, Accent Ltd will use the similar supplier search approach that contains three major steps.



**FIGURE 17. Accent Ltd supplier selection steps**

Before the detailed explanation of these three stages of supplier selection the main thing should be noted. Accent Ltd used this approach a very long time ago in the middle of the company’s development and rooting. Even more so, the company didn’t

know about this approach until I asked them about the steps and “sought” help from theories. Furthermore, these steps will be described in the past time style. In the search for a suitable supplier, Accent Ltd will use a similar supplier search approach that contains three major steps.

#### *Define the pool of suppliers*

For a start, critically needed product was defined. It was everything regarding aluminium railings. The company made a small research among existed competitors and discovered that lots of all the rivals cooperated with foreign countries instead of buying raw materials directly in Russia. Moreover, the company selected Turkey as a supplier because of the low prices and good quality. Before that investigation, Accent Ltd repurchased raw materials from Russian suppliers at higher prices.

#### *Define the requirements*

For that moment, Accent Ltd needed to purchase particularly raw material for the aluminium railings. With the other production the company had no problems and challenges. How it turned out, aluminium railings are a very high-selling product and the demand for aluminium railings is permanent. Over the years, customers have become more discerning and their needs are getting higher and higher, in particular, excessive requirements relating to prices and discount system.

#### *Request for prices*

Fortunately, before and now there are a lot of ways to ask/request the price and the cost. The customer can do it by phone, fax or via Internet (e-mail, Skype, etc.). Accent Ltd used this approach for quite a long time and requests for prices made by phone.

### **5.4 Payment methods and conditions**

As mentioned earlier, the case company works with a foreign (Turkish) supplier and has a representation about the features of payment and remittance. Accent Ltd has a clear understanding of all the procedures of payment and payment terms in interna-



tional business. The case company also works with banks and special documents which straight related to a quite widespread payment method *Letter of credit (L/C)*.

Letters of credit are one important means of transferring money and paperwork between a customer and a supplier. The banks act as a trusted in-between. If a seller agrees to be paid by a letter of credit or L/C, then you need a reliable bank to handle the transaction. A letter of credit is a type of contract used by banks to protect their customers when doing international business. Letters of credit are established and used when a customer and a supplier do not know each other very well, and there is doubt about the supplier or buyer trusting each other to fulfill the contract. Sometimes the country requires the Letter of credit where you are doing business in as a way for the government to monitor trade. (Ward 2009, 13)

According to the data of Credit Research Foundation (Credit Research Foundation 1999) a commercial L/C is a contractual convention between a bank (known as the issuing bank) and on behalf of one of its consumers (permitting another bank, known as the consulting or confirming bank) to make disbursement to the beneficiary. The issuing bank, on the application of its consumer, opens the letter of credit. The issuing bank makes an obligation to keep drawings made under the credit. The beneficiary is normally the supplier of goods and/or services. Basically, the issuing bank substitutes the bank's customer as the payer. Further, the main elements and actions of the L/C operation are shown detailed in Figure 18.

### Elements of L/C

---

A payment responsibility given by a bank (issuing bank)

---

On behalf of a purchaser (applicant)

---

To pay a supplier (beneficiary) a given amount of money

---

On submission of specified documents representing the supply

---

Within specified time limits

---

Documents must correspond to terms and conditions set out

---

Documents to be introduced at a specified place

---

**FIGURE 18. Actions of letter of credit (Credit Research Foundation 1999)**

The applying of the letters of credit as a procedure to decrease risk has grown essentially over the past decade. The Letters of credit perform their objective by substituting the credit of the bank for that of the consumer, for the goal of facilitating trade. The credit occupational should be familiar with two kinds of letters of credit: commercial and standby. The commercial letters of credit are used above all to facilitate foreign trade. The commercial letter of credit is the basic payment arrangement for a transaction. The standby letter of credit serves a various function. The standby letter of credit serves as a subordinate payment mechanism. The bank will issue the credit on behalf of a consumer to ensure guarantees of his/her opportunity to fulfill under the terms of a contract. Upon receipt of the letter of credit, the credit occupational should inventorying all items attentively to insure that what is anticipated of the seller is completely understood and that he/she can comply with all the terms and conditions. When the agreement is under consideration, the buyer should be appealed to amend the credit. (Credit Research Foundation 1999)

## **6 CHINESE SUPPLIERS OF ALUMINIUM RAILINGS**

In late 2001, China got in the World Trade Organization (WTO), messaging its entry onto the global milestone and participation as an arising power in the world economy. Since then, China has reached unexampled levels of growth, got one of the most popular purposes for foreign investment. China's business atmosphere is already very uncovered to foreign investment, and it is even prospective to develop as time passes. China's actual policy is transferred to open-market competition and concentrated on refining the effectiveness of spreading market resources. The Economist Intelligence Unit rated China's business atmosphere in a lot of grades far higher from 2011 to 2015 than in the previous five-year period, and China is still shift its policies for correspond the requirements of the World Trade Organization. (Chinese Services Group 2012)

### **6.1 Country profile of China**

China or the People's Republic of China (PRC) is a high commonwealth located in East Asia. It is the world's most crowded country, with a population of over 1.35 billion. The PRC is a single-party state managed by the Communist Party, with

its place of government in the capital city of Beijing. It exercises jurisdiction approximately 22 provinces, four directly controlled municipalities (Beijing, Tianjin, Shanghai, and Chongqing), five autonomous areas, and two primarily self-governing special administrative areas (Hong Kong and Macau). (The International Bank for Reconstruction and Development 2012) Table 6 is showing the China profile overview.

**TABLE 6. China overview (The International Bank for Reconstruction and Development 2012)**

**Country overview**

<i>Region</i>	East Asia and Pacific
<i>Land area</i>	9,561,000 sq km
<i>Population</i>	1,338,300,000
<i>Climate</i>	Continental, with extremes of temperature; subtropical in the Southeast
<i>Language</i>	Standard Chinese
<i>Currency</i>	Renminbi (RMB), or Yuan; RMB 1 = 10 Jiao = 100 fen
<i>Time</i>	GMT +8

In general, China is divided onto four large areas: Eastern China, Southern China, Central China and Northern China. (The International Bank for Reconstruction and Development 2012)

*Eastern China*

Eastern China is the geographical region that embraces most of China's eastern seashore. (Figure 19) For administrative and governmental objectives, the area is designated by the government of the People's Republic of China to involve the provinces of Anhui, Fujian, Jiangsu, Shandong and Zhejiang, and the municipality of Shanghai. Five (Anhui, Fujian, Jiangsu, Shandong and Zhejiang) out of six provinces of Eastern China are concentrated on agricultural sector and only Shanghai, the sixth province,

hosts the world's busiest port and China's leading stock exchange. (Chinese Services Group 2012)



**FIGURE 19. Easter China**

*Southern China*

Southern China is one of the fundamental tourist purposes in the country, consists of the three provinces Guangdong, Guangxi and Hainan. (Figure 20) It is a place to some of China's most significant industries. Guangdong focused on gross domestic product in other words China's fastest growing industries are located in this province. Guangxi concentrated on agriculture and Hainan strongly focused on the tourism industry. (Chinese Services Group 2012)



**FIGURE 20. Southern China**

### *Central China*

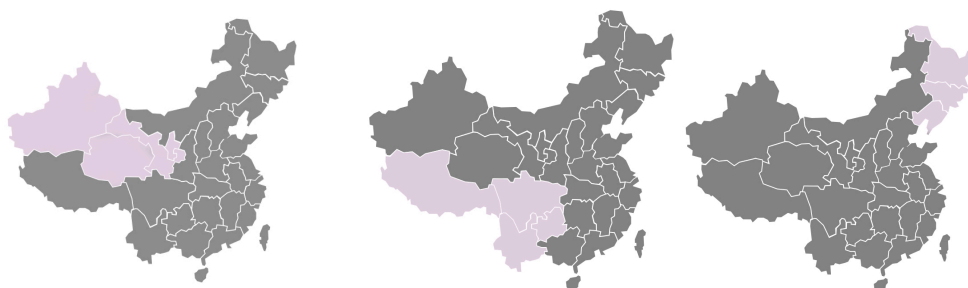
Central China is one of China's major agricultural regions, and it includes a solid industrial base. The provinces: Hubei, Hunan, Henan and Jiangxi. (Figure 21) All of the provinces in Central China are agriculture-oriented. (Chinese Services Group 2012)



**FIGURE 21. Central China**

### *Other parts*

In other different parts, there are located Northwest, Southwest and Northeast parts of China with provinces Ningxia, Xinjiang, Qinghai, Gansu, Guizhou, Sichuan, Yunan, Tibet, Liaoning, Jilin, Heilongjiang. (Figure 23) Further, China has special administrative regions: Hong Kong and Macau. (Chinese Services Group 2012)



**FIGURE 23. Northwest, Southwest and Northeast China**

### *Northern China*

The Chinese government including the municipalities of Beijing and Tianjin, the provinces of Hebei and Shanxi, and Inner Mongolia Autonomous Region, defines Northern China. (Figure 22) This region owns some of China's most wide natural resource deposits, making it a crucial destination for foreign investment, as well as the general capital of China and rather of its highly developed provinces. Hebei, Shanxi, Inner Mongolia are focused on manufacturing sectors and abundance of natural resources. Beijing is the capital of China and it is the country's largest city-based economy. (Chinese Services Group 2012)



**FIGURE 22. Northern China**

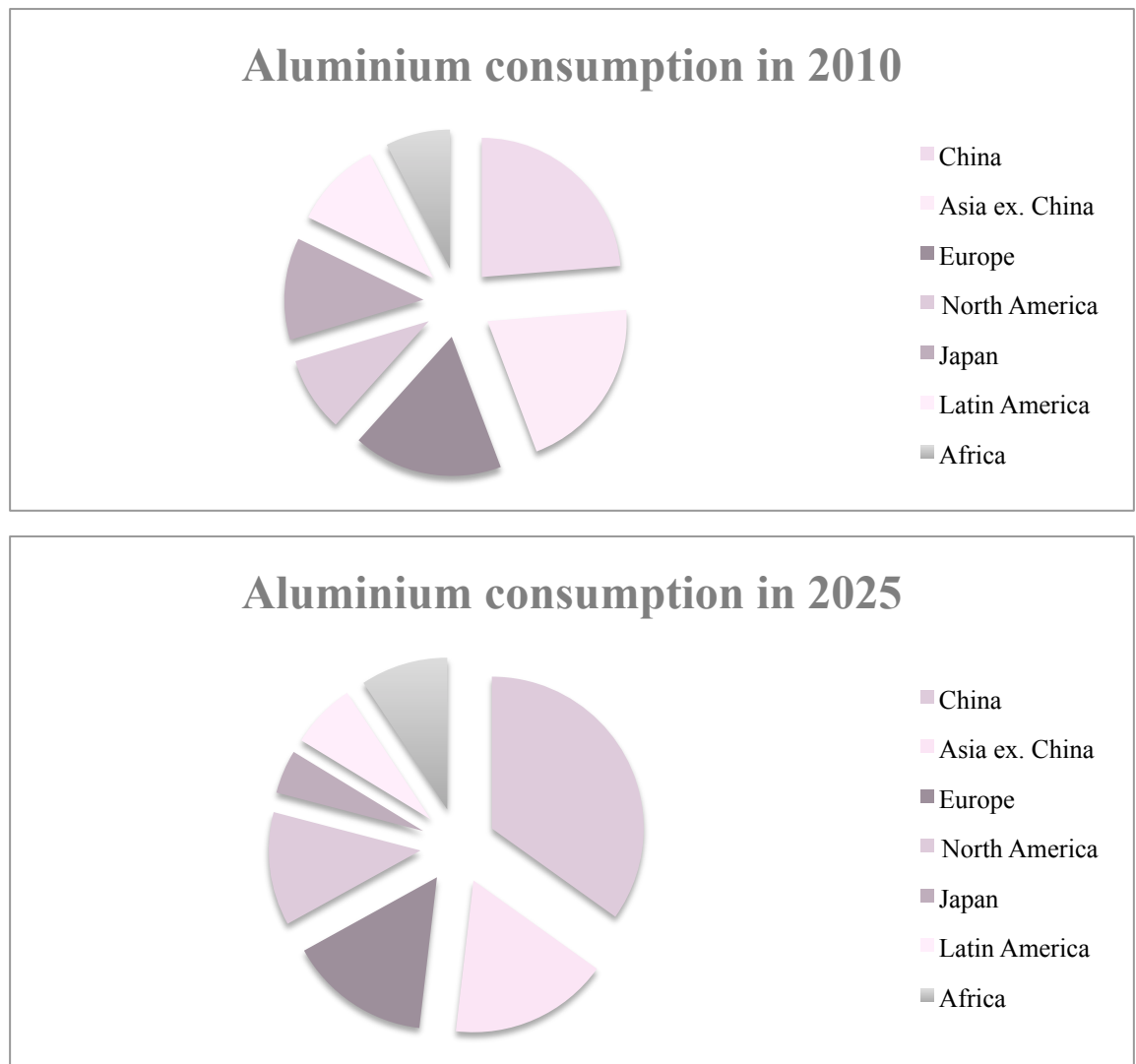
Foreign companies will proceed to be engaged by the possibilities suggested by China's large and fast-growing economy. China has a population of 1.3 billion people, and therefore, the size of the economy will grow to nearly USD13 trillion a year (at market exchange rates) by 2015. However, there will stay large income breaks between provinces in China, the prompt growth of the economy as a whole and the continued candidness of the investment environment will ensure a fixed position for in-bound foreign companies. (Chinese Services Group 2012)

### **6.2 Chinese aluminium market**

There are many different discussions about China within the aluminium industry. In the recent ten years China has quadrupled its intake of aluminium and has the highest

input worldwide. Today, China is the greatest producer and the largest aluminium customer as well as being the country with the largest increase in both consuming and producing. (Greenland Development Inc. 2012)

According to Greenland Development Inc. (Greenland Development Inc. 2012) in China the aluminium industry is extremely affected by the society and the Chinese Government. Furthermore it is the Government looks forward that the aluminium industry will shift to provinces and regions with inferior population density in order to downplay rivalry for energy between industry and cities. The Figure 24 below is showing how great the Chinese share of global expenditure is today and what it is expected to be in 2025.



**FIGURE 24. Aluminium consumptions in 2010 (of 41,2 Mt) and Aluminium consumptions in 2025 (of 82,5 Mt) (Greenland Development Inc. 2012)**

There are three features that promote the Chinese growth in consuming:

- 1 The major expansion and urbanization in China steers in a supreme per capita consuming
- 2 The purposes and strategies of the Chinese Government have issued in investments in infrastructure and housing which also take huge amounts of aluminium
- 3 Eventually, the proceeding powerful stances of China as a manufacturer of industrial goods for export, steer in wide investments in the aluminium industry.

China is still having significant concern the aluminium industry since it introduces part of the global market and the market keeps on to show huge growth rates. In the occasion that China is not capable to support and maintain its self-adequacy in aluminium it may happen on serious and substantial market for global aluminium supply and thus influence the global aluminium market by transforming a more stable purchaser from the global aluminium industry.

### **6.3 Doing business in China**

China is a very exciting market and this country already has made important progress in positioning itself at the front line of the world economy. According to Jonathan Reuvid and Li Yong (Reuvid & Yong 2006) the economic statistics keep on to chart the exceptional rise of the Chinese economy. As a dormant market, China is enormous. The low-cost framework provided by the great labor force is the main attraction.

The marvelous thing about China's growth is that it is not just about low-tech performance. China's business now includes a various range of activities. It is not just the manufacture of the world for everything from clothes to machinery, but increasingly for high-technology industries. (Reuvid & Yong 2006)

Economists and policy investigators have looked into the subject of the high rate of growth of Chinese manufacturing and suppliers over the three decades from 1980 to 2013, which have seen China got the world's largest manufacturer and supplier as a country and one with the second - highest GDP. Much of this effort has concentrated on FDI flows into China as many western manufacturers/companies (or brands) en-



deavored to benefit the low cost and supportive government politicians to adjudge contract manufacturing or their own installations in China. (Murray 1994)

As well known, today China is the most optimized manufacturer and supplier in the world. Most modern companies, including Russians, are forced to work with the Chinese manufacturers and suppliers for insanely profitable prices and terms. As the saying goes: "everything is made in China", and it really is true. Chinese companies are willing to work for the benefit of their customers and create a wonderful atmosphere for cooperation.

The sense of the "good" supplier differs from the "right" supplier. A good supplier is distinctly the right supplier, while the "right" supplier may not prepare to be called a "good" supplier. The right suppliers are a pool of contenders who can perform necessary demands and requirements on the primary level. They can suggest goods and services that are needed and they are pliable to a company's strategy. Thus, looking for the right supplier is a necessary step before selecting a good supplier. Soon the right suppliers were detected. Now it is better to spend a lot of time on breaking down those right suppliers, making collations, and decisively selecting few of the best suppliers.

#### **6.4 Implementation of supplier search process**

Decisively, after all hard work was done, success appeared in suppliers' search and defined a needed pool or it is better to say universe of suppliers. Direct theoretical knowledge and research methods (basically, interview) helped with the right selection. After the overviewed of all collecting data and came to the conclusion, it is need to be clarified that all the interviewees have a strong willingness of cooperation with the medium-sized Russian company. All of these suppliers give the best prices among their competitors worldwide. This factor highlights that China is the best manufacturing/supplying country nowadays.

All nine interviews were done via e-mail and straight with the salespersons of the companies. Appendix 3 has questions of a unified interview, which was made with CEO of Accent Ltd and based on the suppliers' selection theories. Alibaba – is the best search engine of manufacturers and suppliers in China for foreigners and it

helped a lot in suppliers' search for the case company. It should be noted that all the Chinese salespeople were very pleasant and fair in answering for interview questions.

The best criterion is the price in every business, in every field and in every selection process. There are of course exceptions, which only confirms this theory. The case company of this bachelor's thesis was looking initially for a good price and now this thesis can show the very good and satisfied results to Accent Ltd. In Appendix 5 there is a table that clearly shows all the findings. The company name wasn't disclosed because the case company will need it in the future as well as contact person is name. Furthermore, it is good to explain two price columns. First one is the "FOB price", indicating the exact price that each company named in the interview. The second column "“Manufacturing and process” price”” means the Free On Board price divided on LME Aluminium Asian benchmark price, and this is the defined criteria, the needed price for detection the best supplier. It should be noted that all the prices given by the Chinese suppliers did not exceed the prices of the Turkish suppliers, which is definitely good.

There are the previously mentioned geographical areas (parts and provinces) of China and is worthwhile to note about locations of potential candidates. As it turned out, overwhelming majority of the companies are located in Southern part of China in the province Guangdong (six companies out of nine). The other remaining three companies are located in the Eastern China, in the provinces Jiangsu, Zhejiang and Anhui. To be honest, the Southern and the Eastern parts of China are extremely close to each other and for the future visits companies, if the case company wants it. Furthermore, the Eastern part (Anhui, Jiangsu and Zhejiang) hosts the world's busiest port and it means a lot for the future cooperation and business, and also for the non-problematic shipment and delivery. So, the Eastern China has a great advantage for work. The Southern China, precisely the Guangdong province, is focused on gross domestic product, which means nothing in the construction/building sphere and is concerning the case company.

It is relevant to note about the information about the years of establishment of all nine companies. The research through the companies' profiles and information led to the result that four out of five companies were established in the nineties (in the period of 1990 to 1998) and five out of nine companies were established in twenties (in the pe-

riod of 2004 to 2009). The case company was founded in 1991 and it is searching for peers (a contemporary company of the establishment year in the nineties).

## **7 RECOMMENDATIONS**

This chapter will discuss the recommendations that can help the company in further cooperation with the selected supplier. After strong research and study supplier selection process, a right and superior supplier for the case company now can be identified with following comments and pieces of advice.

### **7.1 Selected supplier**

The best bidder among others is the Anhui Yingguan Metal Products Co Ltd. This company was founded in 1998 and it is located in Anhui province, presumably in the Eastern part of China. The company specializes in the aluminium production and also steel items. The business type of the Anhui Yingguan Metal Products Co Ltd is the manufacturer and also the trading, so the company produces and sells its production to the consumers. According to the company's new technologies and R&D it aims to supply its customers with a wide variety of "new crown" brand high-end art production, such as wall fences, mesh fences, fence gates, balcony railings and staircase handrails. Anhui Yingguan Metal Products Co Ltd has 20,000 square-meter production base, first-class production equipment, and a strict management team.

Anhui Yingguan Metal Products Co Ltd is committed to the latest development in the industry to unceasingly invests in technology innovation and adapt to promptly changing market demand, to boost the all-round competitiveness of enterprise (almost 200 employees). The supplier maintains the "people-oriented, customer first, honest and trustworthy, pioneering and innovative" corporate culture and business philosophy, and leans on the principle of "mutual benefit and win-win situation".

The choice fell on this supplier because of the best price given among others. Upwards, theory and practice defined the best criteria and it was the price. Consequently, this criterion has been applied in the first stages of the selection process. Anhui

Yingguan Metal Products Co Ltd gave 1,12 USD per kilogram for “manufacturing and processing” price and, as it written above it is the defining price.

The supplier is ready for cooperation with Accent Ltd and kindly agreed on further relations and communication as well. Terms and conditions are mutually convenient. The delivery and shipment method is still Free On Board and it is very suitably for both companies. The payment method and usage of Letter of Credit in use even though some improvements will be discussed in the process of purchasing later on.

It is worth mentioning what to do in the case of refusal on the part of selected company/supplier. The answer is simple as the solution for this occasion. Simply refer to the list of the selected companies and chose the most decent supplier for cooperation then. The second best potential supplier is a Jiangyin Xinyu Decoration Material Co Ltd. This company was founded in 1992, earlier than the first-chosen Anhui Yingguan Metal Products Co Ltd and it is located in Jiangsu province, near the Anhui province where the first one company is located. As is clear, both suppliers are located in Eastern China so they are near to each other. The Jiangyin Xinyu Decoration Material Co Ltd is a manufacturing company with a huge prerogative for easy shipment and delivery production because of the world’s busiest port nearby. Jiangyin Xinyu Decoration Material Co Ltd gave 1,45 USD per kilogram as “manufacturing and processing” price and not much more than the primary option company. The comparison in Table 7 is showing all the pros and cons of the two selected companies.

**TABLE 7. Comparison of Anhui Yingguan Metal Products Co Ltd and Jiangyin Xinyu Decoration Material Co Ltd characteristics**

	Anhui Yingguan Metal Products Co Ltd	Jiangyin Xinyu Decoration Material Co Ltd
Year established	1998	1992
Location	Feidong New City Development Area, Hefei, Anhui, China	Zhouzhuang Town, Jiangyin City, Wuxi, Jiangsu, China
Business type	Manufacturer, Trading company	Manufacturer
Main production	Aluminium staircase hand-	Aluminium profile, alu-

	rails	minium product
CEO	Yan Liu	Yongfang Wang
Price (USD/kg)	1,12	1,45
Legal form	Limited Liability Company (Invested or controlled by Natural Person)	Equity Joint Venture (Funds from Hong Kong, Macao Or Taiwan)
Number of Employees	101 - 200 People	501 - 1000 People

However, for perfect cooperation in the future with the Chinese supplier, the Accent Ltd should study how to communicate well and productively with Chinese people on the whole. The next step in recommendations will carefully explain how to communicate with business people from China.

## 7.2 Business relationships with Chinese suppliers

China's methods of doing business are getting more westernized. The non-Chinese officials still must work diligently at building trust in relationships with their Chinese business partners. Trust lies at the heart of prosperous long-term intercultural business relationships. In cross-cultural business relationships, trust performs an essential part since companions from different cultures do not constantly have the same worth or supposition about how business works. When trust is advanced, partners can manage troublesome issues over time by encouraging a sincere exchange of ideas, issues and agendas. Evolving trust can importantly reduce what Westerners often complain of in behaviors with the Chinese counterparts: unpredictable demeanor and a lack of clarity. (Chua 2012)

### *Face*

The apprehension of "face" is significant. It is basically a sign of status and virtue, and it is important to esteem the Chinese aspiration to retain and obtain face during negotiations. The same is true for acting with employees in the office. Generating someone to lose face by belittling him or her or pulling him or her apart in front of others can break down a working relationship. (Cypress Recruiting Group. Inc. 2007)

### *Greeting*

A normal greeting at business meetings is a slight handshake. Acclaim the most senior person present first and continue standing for the introductions. It is prevalent for the Chinese people to rather lower their eyes as a sign of honor. After this procedure of welcoming a business card may be given. Business cards are very important to the Chinese people. It is proper to offer a card with two hands and accept their card with two hands. It will be nice if a person, who took the card already, stays in the moment and is impressed by the title of job or name written on the business card. Never put it straight into bag or pocket. Instead, it should be arranged on the table in front of the person, taking care to give due prominence to the senior delegates' cards. (Cypress Recruiting Group. Inc. 2007)

### *At the meeting*

The most senior person present usually dictates the seating and the Chinese love of hierarchy will be evident in all the facets of the arranging a meeting. Meetings are frequently held in Chinese. If the person doesn't speak Chinese, this can be discouraging. (Cypress Recruiting Group. Inc. 2007)

### *Entertaining and Gift Giving*

The exchange of presents at the end of a business meeting is frequent. Gifts are not uncovered in front of the giver. Business dinners and after dinner entertainment are an anticipated part of building a Guanxi relationship. Person should be versatile on the menu and be willing to try Asian delicacies (with chopsticks). It is better to leave some food on plate; finishing everything will induce the host to assume the guest is still hungry. (Cypress Recruiting Group. Inc. 2007)

### *Business apparel*

**TABLE 8. Business attire in China**

<b>Business look</b>	
<i>Hair</i>	Conservative hairstyle as much as possi-

<i>Makeup</i>	ble. Natural hair colors is the best thing. Only neutral colors, light day make up for women.
<i>Accessories</i>	Small accessories and jewelry are allowed. Preferably, remove all piercing jewelry, especially facial piercing.
<i>Clothing</i>	Only for appropriate business suits and conservative basic neutral colors.
<i>Shoes</i>	Simple shoes without heels, bright colors

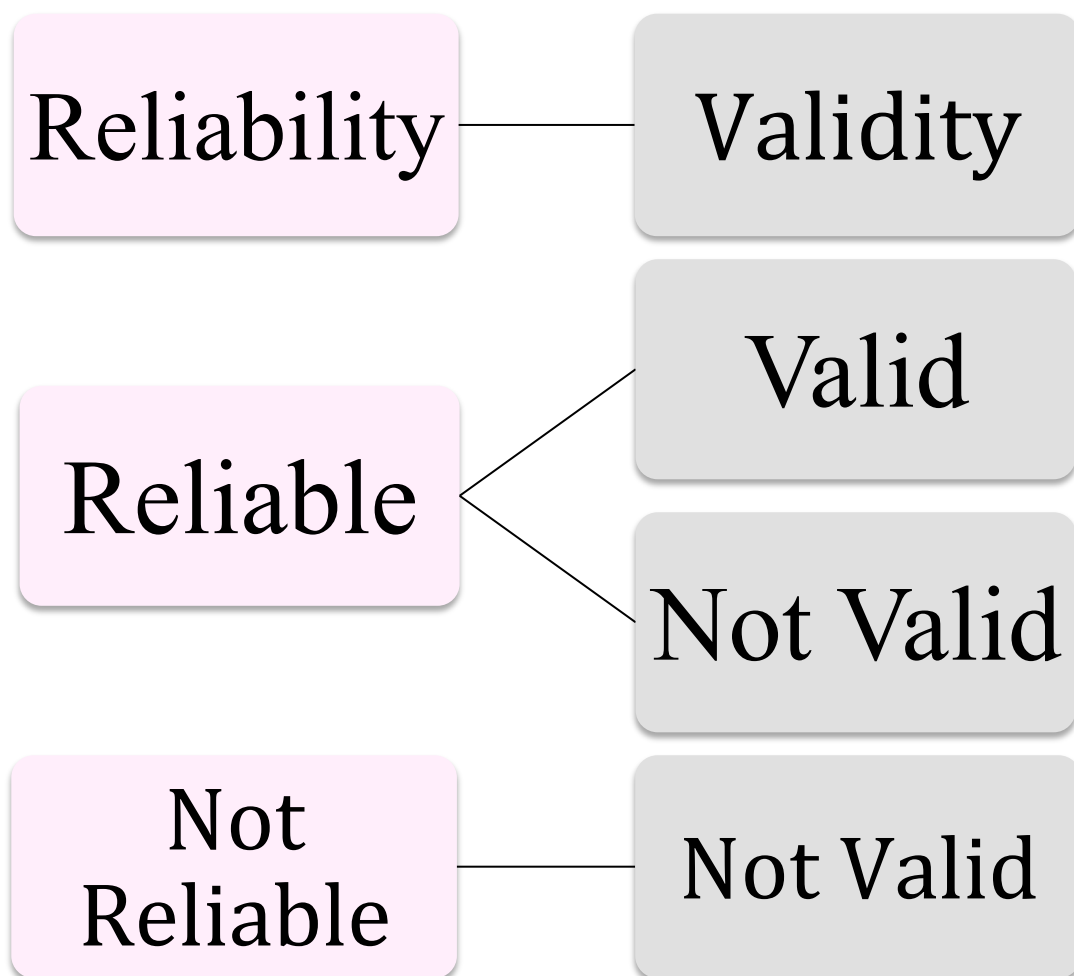
While the majority of countries are calm about the attire worn in business, China is not. Bright colors, unusual style and other non-conservative accessories should be avoided. The person who is planning the business trip to China should carefully learn beforehand about cultural differences and what should be expected in China. No makeup or strange colors of hair. The person, woman or man, should carefully think about appearance and use only neutral colors in everything. (Table 8)

Chinese people are matter about trust and personal relationships before doing business with someone. Internet sources are full of tips how to present person's abilities for Chinese people. Man or woman should feel calm and kind to answer on personal questions that the Chinese partner wants to ask. It is very important to listen and respect every partner in the Chinese company or even the team. The only thing is needed to respect cultural differences and follow the rules how to behave.

### **7.3 Reliability and validity in qualitative research of the study**

The two most significant and primary specifications of any measurement process are reliability and validity. Usually reliability and validity are very spread in quantitative research but recently it reviewed in qualitative research methods. The qualitative research applies a slice-of-life approach for understanding concrete adjustments, like in a real occasion where the researcher cannot do anything but just observe and gather the data. The validity and reliability are two features, which any qualitative researcher should be interested in while planning a study, investigating results, and adjudicating the quality of the study. For the best understanding, Figure 25 is showing the structure

of reliability and validity. Further, is it necessary to provide the definitions and then describe how reliability and validity are relied on this study.



**FIGURE 25. Reliability and validity semi-reciprocal relations**

### *Reliability*

The definition of reliability is the extent to which an interview, questionnaire, different kinds of observation or any data collection method generates the same outcomes on frequent samples. In brief, it is the steadiness or harmony of plenty over time. It is a concept, which is used for the evaluation and estimation of the research process.



### *Validity*

Validity is a kind of an instrument for measurement and data collection. More often than not, validity is suitable for quantitative research method but now it is usual for qualitative research methods. Validity is defined as the rate to which the tool determines what it is proposed to determine.

Primary and secondary data have been used in the research process. In-depth (or elite) interview and participant observations are concerned the primary data collection methods. The case company, Chinese potential supply/manufacturer companies and also the aluminium market were carefully examined through the research process. The interviewees (sales people from potential Chinese supply companies) answered all the questions and provided valid information in their answers during the interviews.

All books, related articles and magazines, electronic sources (WWW- and PDF-documents) and documents overview (price lists and companies' profiles) have been used for the secondary data. Certainly, all sources were accredited and published and electronic sources exclusively. For reaching the purpose and aim of this bachelor's thesis, secondary data was really helpful. The theory parts of supply chain management, business logistics management, purchasing management, supplier relationship management and all theoretical background concerning supplier search process were studied thoroughly. This paper confirms the actual extension of both validity and reliability.

## **8 CONCLUSION**

This bachelor's thesis addresses the importance of both supplier selection process and purchasing process, and how are those processes interrelated between each other and implementation of supplier selection process in company.

In addition, the thesis writing process was sometimes tedious, sometimes interesting and fascinating, sometimes exhausting, but in the end, turned out very good and informative. A lot of effort was applied in finding the right and appropriate information for the theoretical part. Combining business theory and engineering theory is not al-

ways easy, but it is possible, and this thesis shows an excellent example of a successful combination of both business and engineering theories in one well-turned paper. A lot of attention was paid for the empirical research.

The medium- and small-sized construction companies also required in suppliers. This type of companies is competitive on the Russian construction market that is generally dominated by high-quality production and low prices. The case company is a medium-sized Russian company, which wanted to find a supplier with low prices and good quality.

The supplier selection process is in continuous connection with the purchasing process. It cannot be replaced or thrown out of the purchasing process, but at the same time, there is a whole separate process. Purchasing a good product lie in the thorough search of a good supplier/seller. There is a large number of different varieties of supplier selection process with different numbers of necessary steps.

Several variations of the supplier selection process were studied and only one has been used. For this study of supply chains and purchasing process the most suitable process of suppliers' search was one, which consists of only three main steps. Furthermore, the case company used it before.

To sum up, it can be safely said that all study, research and work of this bachelor's thesis has been done adequately and honestly. All research questions were answered through the writing and gathering process, and the result satisfied both the author and the case company. During the creation of this bachelor's thesis books, magazines, articles, web sources and interview were involved in the process of study. It was also found that each process, even the tiniest, is extremely important for companies of all types and sizes.

## BIBLIOGRAPHY

- Alibaba. Chinese search engine for suppliers and manufacturers 2013. [On-line] Aluminium railings [referred 02.03.2013] WWW – document. <URL: <http://www.alibaba.com/showroom/aluminium-railing.html>>
- Aluminium industry vision 2001. Sustainable solutions for a dynamic world. PDF – document. <URL: <http://www1.eere.energy.gov/manufacturing/resources/aluminium/pdfs/alumvision.pdf>>
- Ballou, Ronald H. 1999. Business logistics management. Fourth edition. United States of America: Prentice-Hall International, Inc.
- Bhat, Shridhara K. 2011. Materials management. India, Mumbai: Global Media.
- Black China Blog 2013. Stockpiles of Chinese aluminium, will buyers make a move? WWW – document <URL: <http://az-china.com/blackchinablog/?p=2797>>
- Bossert, James L. 2004. The supplier management handbook. Sixth edition. USA, ASQ.
- Branscomb, H. Eric 1998. Casting your net. United States of America: Allyn & Bacon.
- Burgees, Luke 2010. Top 3 Aluminium Stocks to Play Soaring Demand in China. WWW – document. <URL: <http://www.wealthdaily.com/articles/top-3-aluminium-stocks-to-play-soaring-demand-in-china/2774>>
- Chua, Roy Y. J. 2012. Building effective business relationships in China. WWW – document. <URL: <http://sloanreview.mit.edu/article/building-effective-business-relationships-in-china/>>
- Cox J. F., III & Blackstone, J. H. Jr. 1998. APICS: Dictionary, 9<sup>th</sup> edition. USA: American production and inventory control society Inc.

Crabbe, Paddy 2000. Metals Trading Handbook. USA: Woodhead publishing limited.

Credit Research Foundation 1999. Understanding and Using Letters of Credit, Part I. WWW – document. <URL: <http://www.crfonline.org/orc/cro/cro-9-1.html>>

Cypress Recruiting Group, 2007. Doing business in China – Importance of Relationships .WWW – document. <URL: <http://www.hg.org/article.asp?id=4837>>

Davyson, Sam 2011. Aluminium. [Referred 20.02.2013] WWW – document. <URL: <http://sam.davyson.com/as/physics/aluminium/siteus/index.html>>

Day, Marc 2002. Gower handbook of purchasing management: third edition. USA: Gower Publishing Limited.

Doing Business 2012. Economy profile: China. PDF – document. <URL: [http://www.doingbusiness.org/reports/subnational-reports/~/\\_/media/fpdkm/doing%20business/documents/profiles/country/CHN.pdf](http://www.doingbusiness.org/reports/subnational-reports/~/_/media/fpdkm/doing%20business/documents/profiles/country/CHN.pdf)>

Farndon, John 2001. Aluminium. China: Marshall Cavendish.

Flick, Uwe 2006. An introduction to qualitative research. Third edition. Great Britain, Oxford: SAGE Publications Ltd.

Fu, Susie 2013. Interview via e-mail 28.03. Salesperson of Shenzhen Launch Co., Ltd.

Gordon, Sherry R. 2008. Supplier Evaluation and Performance Excellence: A guide to meaningful metrics and successful results. USA, Florida: J.Ross Publishing.

Greenland Development Inc. 2012. China has great importance to the aluminium industry. WWW – document. <URL: <http://www.aluminium.gl/en/project/china-has-great-importance-aluminium-industry>>

Hakala, Juha 2000. Creative Thesis Writing. Finland: Gaudeamus.

Haksöz, Çagri, Seshadri, Sridhar & Iyer, Ananth V. 2012. Managing supply chains on the Silk Road: Strategy, performance, and risk. Boca Raton: Taylor & Francis.

Hill, Ed & Fredendall, Lawrence D. 2001. Basics of Supply Chain Management. United States of America: CRC Press LLC.

Hu, Jane 2013. Interview via e-mail 25.03. Salesperson of Ningbo Longxuan Aluminium Co., Ltd.

Jamaica Bauxite Institute 2012. [On-line] Bayer Process. [Referred 01.03.2013] WWW – document. <URL: [http://jbi.org.jm/pages/bayer\\_process](http://jbi.org.jm/pages/bayer_process)>

King, Nigel & Horrocks, Christine 2010. Interviews in Qualitative Research. Bodmin, Cornwall: MPG Books Group, SAGE.

Kitching, Trevor 2001. Purchasing scams and how to avoid them. USA: Gower Publishing Limited.

Küçükserim, İhsan 2009. Aluminium Industry in Turkey and worldwide exports. WWW – document. <URL: <http://www.businesssturkeytoday.com/aluminium-industry-in-turkey-and-worldwide-exports.html>>

Lauraéus, Theresa 2011. Uncertainty in Consumer Online Search and Purchase Decision Making. Helsinki, Finland: Aalto print.

Lee, Scott 2013. Interview via e-mail 26.03. Salesperson of Foshan Sanshui Fenglu Aluminium Co., Ltd.

Liu, Ling 2013. Interview via e-mail 29.03. Salesperson of Foshan Chancheng Yu Di Hardware Products Co., Ltd.

London Metal Exchange 2013. LME Aluminium: Stocks & prices. WWW - document. <URL: <http://www.lme.com/en-gb/metals/non-ferrous/aluminium/>>

Luo, Yadong 2003. How to enter China. United States of America: University of Michigan.

Mäkeläinen, Pentti & Hassinen, Paavo 1999. Lightweight steel and aluminium structures. Espoo, Finland: Elsevier.

Marshall, Catherine and Rossman, Gretchen B. 1995. Designing qualitative research. Second edition. United States of America: SAGE Publications.

Mendoza, Abraham 2007. Effective methodologies for supplier selection and order quantity allocation. Doctor's thesis in Industrial Engineering and Operations Research. PDF – document. <URL: <https://etda.libraries.psu.edu/paper/7964/3253>>

Murray, Geoffrey 1994. Doing business in China. The last great market. Folkestone, Sandgate: CHINA LIBRARY.

Newman, Richard G. 1992. Supplier price analysis: a guide for purchasing, accounting, and financial analysts. UK: Greenwood.

Norausky, Patrick H. 2000. The Customer and Supplier Innovation Team Guidebook. USA: ASQ.

Ou, Mei 2013. Interview via e-mail 28.03. Salesperson of Yuexing Hardware Products Co., Ltd.

Pooler, Victor H., Pooler, David J. & Farney, Samuel, D. 2010. Global Purchasing and Supply Management: Fulfill the Vision. USA, Hingham: Kluwer Academic Publishers.

Qiong, Zhang 2013. Interview via e-mail 25.03. Salesperson of Jiangyin Xinyu Decoration Material Co., Ltd.

Reuvid, Jonathan & Yong, Li 2006. Doing business with China: fifth edition. UK, London: GMB Publishing Ltd.

Saunders, Mark, Lewis, Philip & Thornhill, Adrian 2009. Research Methods for business students: fifth edition. Italy: Rotolinto Lombarda.

Sodhi, ManMohan S. & Tang, Christopher S. 2012. Strategies and Tactics of Chinese Contract Manufacturers and Western OEMs. PDF – document. <URL: <http://www.cassknowledge.com/sites/default/files/article-attachments/cass-knowledge-chinese-manufacturers-tactics-oems.pdf>>

The China factor 2012. Doing business in China. PDF – document. <URL: <http://www.deloitte.com/assets/Dcom-Netherlands/Local%20Assets/Documents/NL/Emerging%20Markets/The%20China%20Factor%20-%20Doing%20Business%20in%20China%20-%20Deloitte%20-%202012.pdf>>

The European Aluminium Association 2011. Aluminium in The Building and Construction Industries - Recycling Aluminium Construction Materials. [Referred 01.03.2013] WWW – document. <URL: <http://www.azom.com/article.aspx?ArticleID=1859>>

Turner, Robert W. 2011. Supply management and procurement: from basics to best-in-class. USA: J.Ross Publishing.

UC RUSAL project 2012. Construction sector. [Referred 01.03.2013] WWW - document. <URL: <http://www.aluminiumleader.com/en/around/construction/>>

Van Weele, Arjan 2003. Purchasing and supply chain management. USA: Cengage Learning EMEA.

Wang, Michelle 2013. Interview via e-mail 25.03. Salesperson of Guangzhou Alufront Aluminium Co., Ltd.

Wang, Sandy 2013. Interview via e-mail 26.03. Salesperson of Anhui Yingguan Metal Products Co., Ltd.

Ward, Thomas H. 2009. Letter of Credit and documentary collections: an export and import guide. USA: Xlibris Corporation.

Wikipedia. The free Encyclopedia 2008. Hall-Hérault Cell. [Referred 01.03.2013]  
WWW- document. <URL: <http://en.wikipedia.org/wiki/File:Hall-heroult-kk-2008-12-31.png>>

World Trade Press 2013. World Trade Press Illustrated Guide to Incoterms® 2010.  
WWW – document. <URL:  
[http://store.worldtradeexpress.com/Illustrated\\_Guide\\_Incoterms\\_2010.php](http://store.worldtradeexpress.com/Illustrated_Guide_Incoterms_2010.php)>

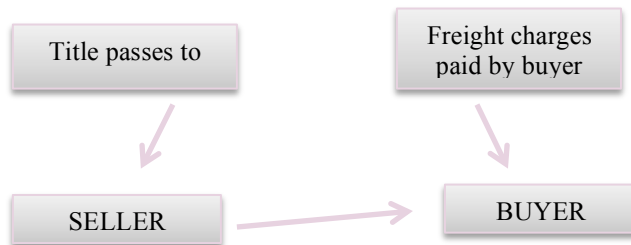
Zhou, John 2013. Interview via e-mail 30.03. Salesperson of Foshan Jianuo Decorative Hardware Ltd.



APPENDICES

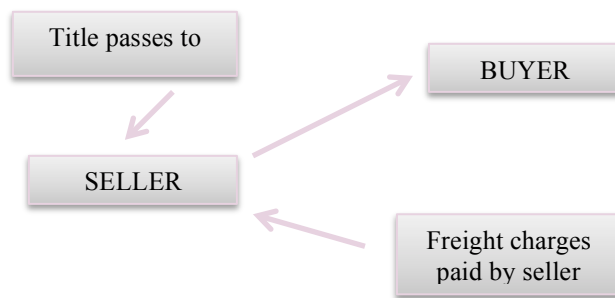
The variety of f.o.b. pricing steps (Ballou 1999, 67-79)

1. Terms of sale: f.o.b. Origin, Freight collect



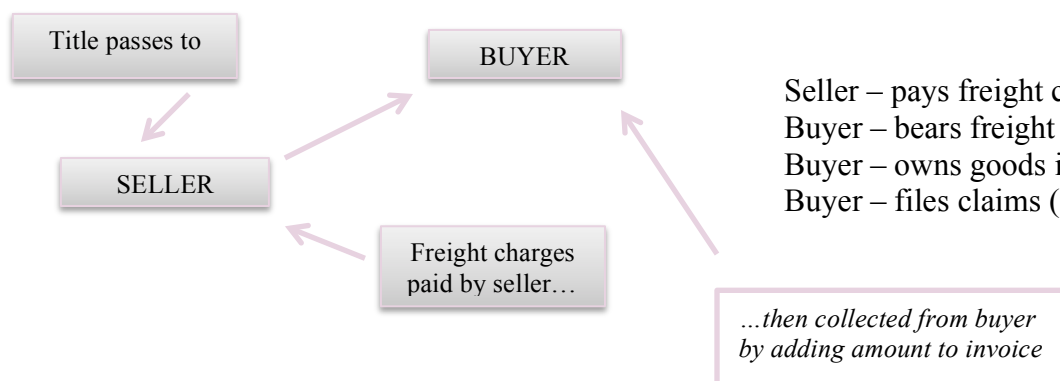
Buyer – pays freight charges  
 Buyer – bears freight charges  
 Buyer – owns goods in transit  
 Buyer – files claims (if any)

2. Terms of sale: f.o.b. Origin, Freight prepaid



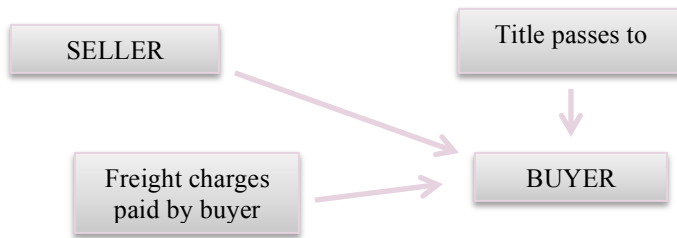
Seller – pays freight charges  
 Seller – bears freight charges  
 Buyer – owns goods in transit  
 Buyer – files claims (if any)

3. Terms of sale: f.o.b. Origin, Freight prepaid, Charged back



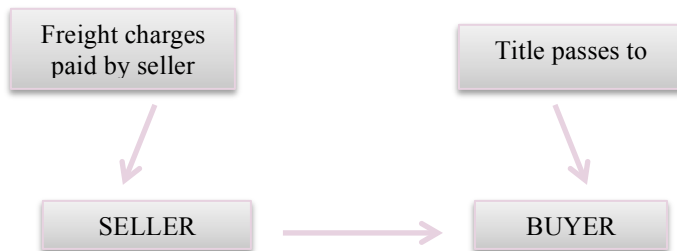
Seller – pays freight charges  
 Buyer – bears freight charges  
 Buyer – owns goods in transit  
 Buyer – files claims (if any)

4. Terms of sale: f.o.b. Origin, Freight collect



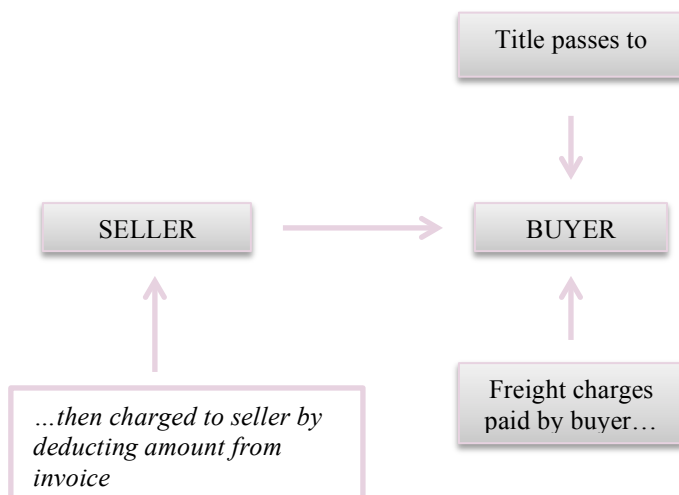
Buyer – pays freight charges  
 Buyer – bears freight charges  
 Seller – owns goods in transit  
 Seller – files claims (if any)

5. Terms of sale: f.o.b. Origin, Freight prepaid (delivered)



Seller – pays freight charges  
 Seller – bears freight charges  
 Seller – owns goods in transit  
 Seller – files claims (if any)

6. Terms of sale: f.o.b. Origin, Freight collected and allowed



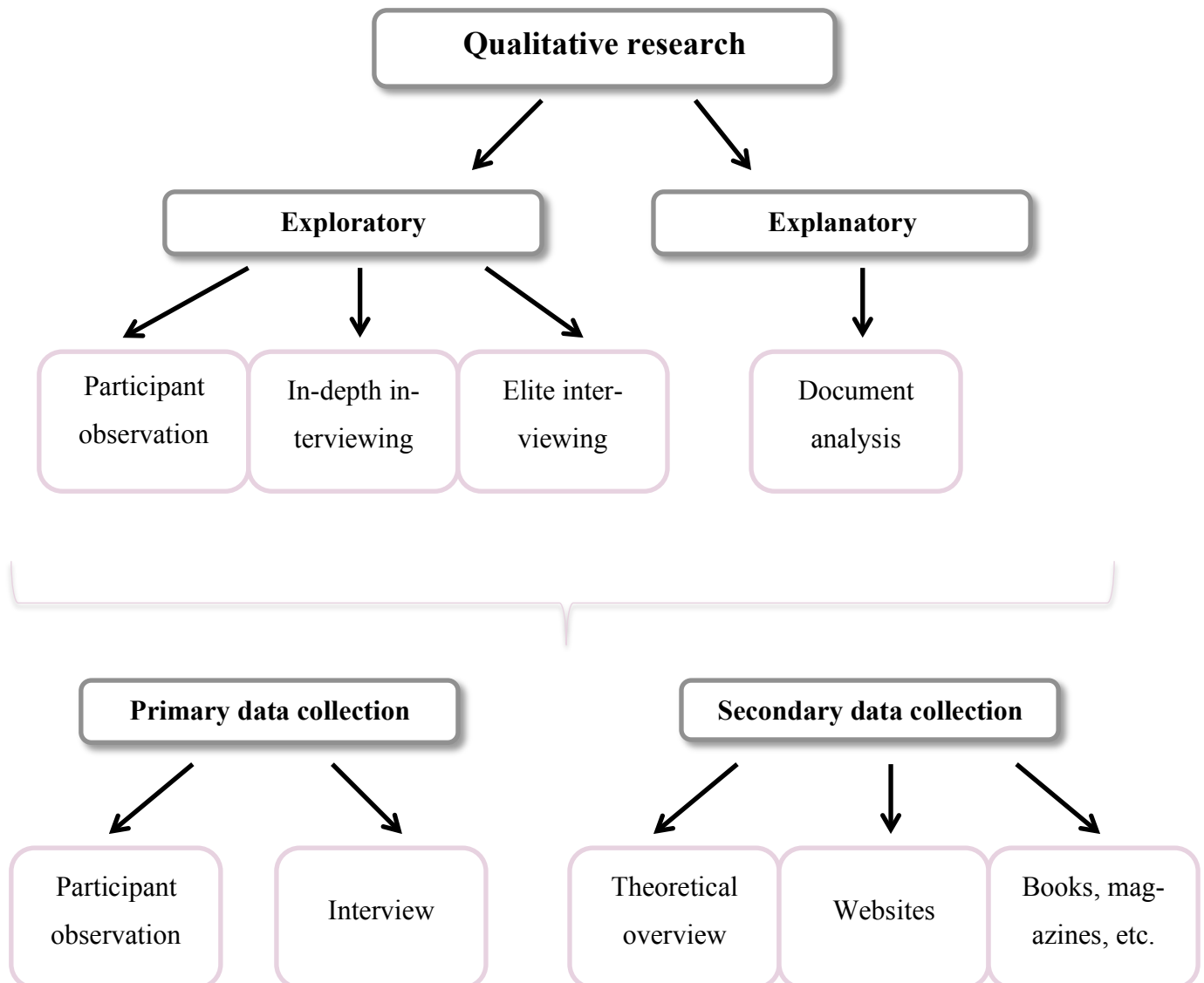
Buyer – pays freight charges  
 Buyer – bears freight charges  
 Seller – owns goods in transit  
 Seller – files claims (if any)

**Disadvantages in the international purchasing. (Bhat 2011, 103)****Disadvantages**

<i>Impact on standard of living</i>	The biggest risk in buying goods and services of foreign origin is its long-term impact on the standard of living of the buyer's country. If a country relies on international sourcing, neglecting domestic sources, the country will lose its status as an industrial power.
<i>Culture and communications</i>	Cultural differences between the buyer and the seller are the biggest obstacles to the development of mutually profitable business relations with international resources. Language poses a significant barrier to effective international business relations.
<i>Payment terms and conditions</i>	Buyers prefer to pay after receipt and inspection of goods. But in many countries, sellers may ask for advance payments to be made prior to the shipment of goods to the buyer. Letters of credit are also commonly used and purchaser's funds may be committed for a longer period of time than if a domestic source were involved.
<i>Long lead times</i>	International purchases usually involve longer lead times than domestic purchases because of variable shipping schedules, unpredictable time requirement for customs clearances, the need for greater coordination, strikes by dock workers and shipping companies, cyclone or storms at

<p><i>Additional inventories</i></p>	<p>sea, etc. Because of the longer procurement lead times involved in international purchasing, it is necessary to carry higher inventory as compared to purchasing from domestic sources.</p>
<p><i>Quality</i></p>	<p>International sources are frequently preferred to domestic sources because many of them can provide consistently high level of quality.</p>
<p><i>Social and labor issues</i></p>	<p>In some countries labor unions and politicians may oppose import of foreign goods from countries in which labor laws are weak or flouted.</p>
<p><i>Higher costs of carrying out business</i></p>	<p>The communication problems, need for translators due to language differences, distances involved in making site visits – all add the cost of doing business with international suppliers.</p>

## Research process design



**Interview questions**

- 1 Do you have experience with businesses like an Accent LTD company (aluminium railings supply)?
- 2 Do you have a willingness to work with Russian market and customer?
- 3 Do you offer proactive and responsive customer service in English or Russian languages?
- 4 Can you provide a price list of your company's production? If not, then please specify the best price of aluminium "manufacturing and processes" price per 1 kg at your company.
- 5 What are your payment terms, and are they negotiable?
- 6 Do you have a discount system in your company?
- 7 Do you have the needful affirmation and licenses to export your production to Russia?
- 8 What is your company's delivery process?
- 9 Who is the general contact person I would be dealing with if I place my order?

## Chinese aluminium railings potential suppliers

Company	Year established	Business type	Main production	FOB price (\$/kg)	“Manufacturing and process” price (\$/kg)	Contact person
<i>Jiangyin Xinyu Decoration Material Co Ltd</i>	1992	Manufacturer	Aluminium profile, aluminium product	2,71	1,45	Ms. Zhang Qiong
<i>Guangzhou Alu-front Aluminium Co Ltd</i>	2009	Manufacturer, Trading company	Aluminium railings	3,17	1,71	Ms. Michelle Wang
<i>Ningbo Longxuan Aluminium Co Ltd</i>	2003	Manufacturer, Trading company	Aluminium profiles, aluminium tubes/pipes	3,61	1,95	Ms. Jane Hu
<i>Anhui Yingguan Metal Products Co Ltd</i>	1998	Manufacturer, Trading company	Aluminium staircase handrails	2,08	1,12	Ms. Sandy Wang
<i>Foshan Sanshui Fenglu Aluminium Co Ltd</i>	1990	Manufacturer	Aluminium products	1,95	1,04	Mr. Scott Lee
<i>Shenzhen Launch Co Ltd</i>	2004	Trading company	Aluminium handrails and fence	3,75	2,01	Ms. Susie Fu
<i>Yuexing Hardware Products Co Ltd</i>	1992	Manufacturer	Aluminium balustrade, handle, spider	2,66	1,43	Ms. Mei Ou
<i>Foshan Chancheng Yu Di Hardware Products Co Ltd</i>	2009	Manufacturer	Aluminium handrails and balusters	2,85	1,53	Ms. Ling Liu
<i>Foshan Jianuo Decorative Hardware Ltd.</i>	2006	Manufacturer	Aluminium handrail, balustrade	3,01	1,61	Mr. John Zhou