

Veromaa Tommi

CO-OPERATION AMONG INDEPENDENT STATION DEALERS
IN COUNTRIES AROUND THE BALTIC SEA

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Veromaa, Tommi
Satakunta University of Applied Sciences
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Supervisor: Koivula, Reijo
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The purpose of this thesis was to create a service and do service designing for independent station dealers around the Baltic Sea. The idea is to introduce cooperation possibilities and to create a system that works through the interest driver organizations of each country involved. The buyer's pool-service which is a system that collects offers from different oil refineries that produce diesel and gasoline for fuel service stations around the Baltic Sea. There are additional services that are included in the same pool of service: Image and logo changing, contracting and co-operation in getting equipment for the stations

The case company has over 200 fuel service stations of which approximately 170 are owned by the dealer. The case company was originally founded by the station dealers itself that got bored to the concatenation of the fuel market. The company was founded in 1978. The case company is 100% owned by the independent station dealers. This is what makes the case company different from its competitors who have mostly company owned fuel service stations. In 2008 the case company launched a "facelift-project", targeting to make the total change in the company image and promote the company values to serve the customers better than ever.

The need for this thesis however is to find a way to offer this same service for all the independent station dealers in European countries around the Baltic Sea, excluding Germany. The aim of the research of the thesis is to find as relevant information as possible. The financial benefit of the thesis study is to create savings in the contracting, equipment buying, image and logo changing and fuel buying activities of all the independent station dealers in the company.

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1 INTRODUCTION

Earlier in the summer 2012 I was working for a Finnish consulting company that makes all kinds of different development, port operations, renewable energy planning, EU-project applications and environmental permit tasks for domestic and foreign institutions or companies. The consulting company has the same CEO as the case company. I asked about a possible subject for a thesis, and got introduced to making a research about co-operation among the independent station dealers in countries around the Baltic Sea.

This thesis focuses on studies about independent station dealers' and interest driver organizations' co-operation possibilities in Finland, Sweden, Denmark, Estonia, Latvia, Lithuania and Poland. These countries are presented as countries around the Baltic Sea. There are feasible co-operation possibilities and also problematic possibilities that need either investments or changes in political aspect.

2 DEFINITIONS

CABS: Countries around the Baltic Sea, the countries are: Finland, Sweden, Denmark, Estonia, Latvia, Lithuania and Poland.

Company owned station: Fuel service station owned by the company.

Independent station dealer: Fuel service station owned by the dealer.

Interest driver organization: An organization that pursuits the benefits of independent station dealers in a specific country.

UPEI: Umbrella organization of independent European oil trade.

SWOT-analysis: Strength, Weakness, Opportunity and Threat-analysis.

BEF: Benzinforhandlernes Faelles Repraesentation.

Renewable fuel: Fuel that is not of fossil origin, and of which source is renewable.

LNG: Liquid natural gas.

Winter grade: A quality grade for diesel that is determined by the outside temperature during winter.

Biocomponent: A component that has biological origin.

Bio rule: Government regulation to include certain amount of biocomponents in fuel.

3 PURPOSE OF THE STUDY

The main purpose of this thesis is to create connection between the interest driver organizations in CABS. The idea itself is to create a buyers pool system and centralized oil product purchasing opportunity for independent station dealers in CABS and collect different services to the pool. This allows the case company's total of over 170 independent station dealers to create savings in contracting, fuel purchasing, equipment trading and image- and logo changing activities.

3.1 Case company

As mentioned the case company is fully owned by the independent station dealers it consists of. The motivator for the case company of this study is to create financial savings in contracting, equipment trading and image- and logo changing activities of the company's station dealers. Other significant motivator for the case company is a service called the buyers pool system for independent station dealers, if implemented, will boost the company's image and make it more attractive to other station dealers.

The case company does not have refinery of its own in Finland and the fuel is supplied from a domestic refinery owned by a rival domestic oil company. The idea in this area is to create a centralized fuel purchase among the independent station dealers in CABS. This enables to create savings in fuel supply costs as the buying volume would be higher with all independent station dealers in Baltic Sea area ordering fuel together and receiving lower costs.

3.2 Interest driver organizations and UPEI

This is from the point of view of all the interest driver organizations each CABS country has for independent station dealers. Interest driver organizations idea is to represent its members, who in this case are the independent station dealers of the specific country. The interest driver organizations job basically is to defend all of its

members activities in doing business and to pursuit new opportunities and possibilities to improve the business of its members. There is also an Umbrella organization of the independent European oil trade(UPEI), they consist of 18 European countries, including of which Poland and Latvia are included in CABS. This organization is an union of interest driver organizations and independent station dealers that promote competitiveness of independent oil trade in Europe.

Umbrella organisation of the independent European oil trade (UPEI) is an association of independent European oil traders from majority of the member states that work through the national trade organizations. UPEI consists mostly of small and medium independent companies, and is active in all fields such as saving crude oil production, that is in importing, retailing, wholesaling, distribution, logistics and refinings – some also in renewable energies, gas and electricity.

UPEI functions in Europe with:

- Ensuring the fair trade conditions for its members
- Seeking of fairness and equal treatment in distribution and retailing of oil products in Europe.
- Promoting a competitive market

Issues believed important by the independents of UPEI:

- Lively competition
- Logistics supply efficiency
- Free and independent market
- Environment protection

(Umbrella organisation of independent European oil trade 2013)

Each of the interest driver organizations follow the following mission statements:

Finland

Suomen Bensinikauppiain ja Liikennepalvelulojen Liitto SBL ry serves its members by taking responsibility of the beneficiary activities and services for its members. The most important areas of action is the business- and competition prerequisites sustainability of the entrepreneurs, equal availability of business locations

along with assistance in the formalities of contract in between of an oil-company and the station dealer.(Suomen bensiinikauppiain ja Liikennepalvelujen Liitto SBL ry 2013)

Sweden

The Svensk Bensinhandel represents the fuel retailers, that are independent station dealers in their various different roles. The Svensk bensinhandel was founded in 1934 and is actively doing business and the goal is to sustain the high level of service and to deliver significant value increase for independent station dealers.(Svensk Bensinhandel 2013)

Denmark

Benzinforhandlernes Faelles Repraesentation BEF actively attends in legislation activities concerning fuel stations, environmental issues, kiosk- and retail activities of the independent station dealers. BEF also does co-operation with other interest driver organizations in northern countries.(Benzinforhandlernes Faelles Repraesentation 2013)

Poland

Polish Chamber of Liquid Fuels is an organization of local economic development. it was established in 1991 by Polish entrepreneurs, private sector fuel. The main tasks and activities of the Chamber are advice in legal, technical and organizational issues, the fight against unfair competition in the market, actively participate in the creation of the legal framework for oil sector, protection and representation of the interests in of its affiliates.(Polska Izba Paliw Plynnych 2013)

4 DEFINITIONS OF COMMUNICATION

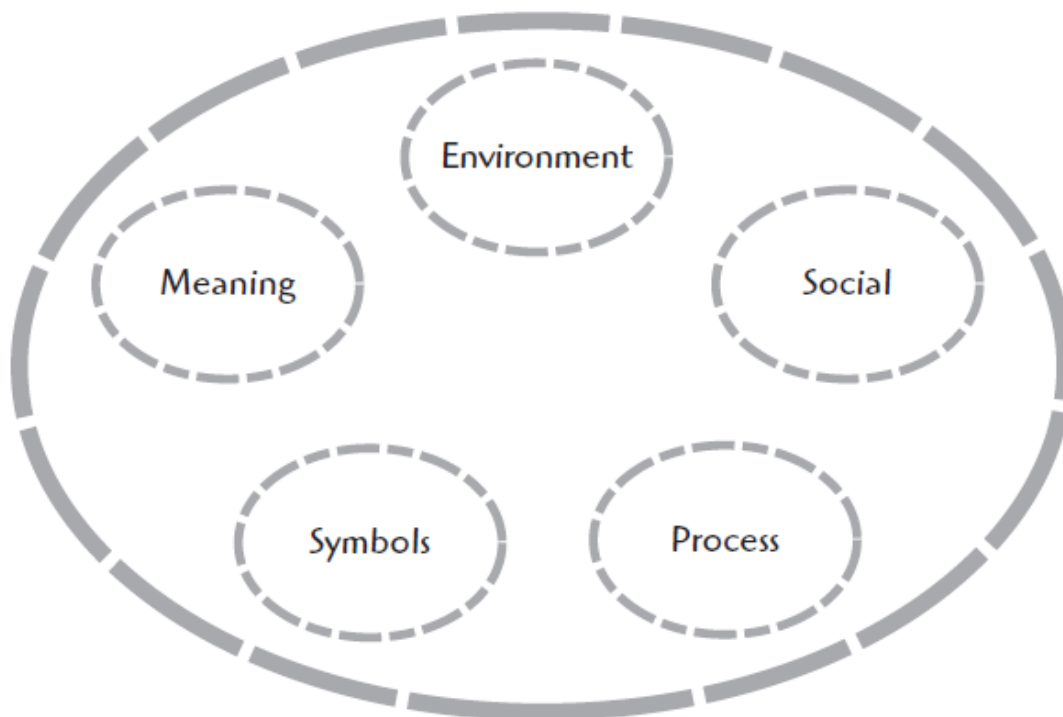


Figure 1: (Introducing Communication Theory, West & Turner 2000, 4.)

Below the mentioned five key terms shown in the figure 1. from the perspective of the authors of the book. (West and Turner 2000, 5)

Communication is a social process. Communication interpreted as a social activity suggests that it means involving people and interaction, both face-to-face or online, like having a conversation. (West and Turner 2000, 5)

Suggesting communication as a process means that the whole communication is actually an ongoing process that never ends. It means also that the conversation can have many twists and turns during between the beginning and end of the conversation. (West and Turner 2000, 5)

Symbol means arbitrary label given to a certain effects or phenomenons. The idea of symbols is really practical, words are basically symbols for concepts and things, for example the word *love* presents the idea of love, and chair presents an object or thing we sit on. (West and Turner 2000, 5)

Meaning is considered a central to the definitions of communication. When a message is extracted it gives one a meaning of the message, messages can have multiple meanings or sometimes even many layers of meaning. For example if one says “I have never been on a rollercoaster” it requires the listener to understand and know the meaning of the word “rollercoaster” to correctly extract the message. ‘What is meant with “message” is that it can be spoken or written words, sounds, gestures or actions. (West and Turner 2000, 5)

Environment in communication represents the context of where the communication takes place. Environment consists of different elements, such as time, place, relationship, historical period and cultural backgrounds of the listener and speaker. Environment in communication can be explained with for example what one thinks about euthanasia or eating dinner at 9pm. There is also a mediated environment which means that the communication happens in a mediated environment, for example e-mails, chat rooms, or in the social network.(West and Turner 2000, 6)

5 INCOTERMS

Transport systems don't always inspect the goods at points where the risk is transferred to the other party. It is advisable to agree terms of delivery to understand the part where the risk is transferred from one party to another. Risk means the possibility of problems in transport, such as loss of product quality or safety issues. Agreements made based on incoterms all parties should state the terms of delivery presented in the contract of sale and commercial invoices. This helps to prevent interpretation which may occur in countries that have their own delivery terms and definitions. (If 2010, Incoterms 2010)

EXW means ExWorks and is an incoterm where the buyers risk stands when the goods have been delivered to certain place at the agreed time. The buyers bears the risk during the whole process of transport. FOB means free on board and is an incoterm where the buyer has the risk when the goods are onboard of a ship at the port of shipment. Until the goods are loaded to the ship the insurance is covered by the seller and when the goods are onboard it's covered by the buyer. (If 2010, Incoterms 2010)

6 SWOT ANALYSIS



Figure 2: Definitions of SWOT-analysis, Modified from (Business Analysis Techniques, Cadle, Paul and Turner 2010, 33-34)

SWOT-analysis is a business tool used to consolidate internal and external business environment analyses. As seen on the figure 2. SWOT stands for Strength, Weakness, Opportunity and Threat, these four environments can be divided into internal and external business environments. SWOT is used to consolidate and summarize main issues of an organization's business environment. After development of SWOT analysis, it can be used to evaluate the organization's business situation and to help identify possible strategies for the future. SWOT analysis often forms a basis for an organization's strategic definitions.(Cadle, Paul and Turner 2010, 33-35)

6.1 Internal

Strength represents the positive aspect in internal environment of the organization. Strength evaluates the capabilities of organization's staff motivation, market reputation and financial resources for example. Weakness presents the internal negative aspect that seeks for negative things in the organization's environment. For example unmotivated staff, lack of managers or too old technological equipments are a sign of weakness in an organization.(Cadle, Paul and Turner 2010, 33-34)

6.2 External

Opportunity presents the positive external factor that helps an organization to find possibilities of success in its external environment. For example realizing the development of technology can help the organization to detect new supply chain methods. Threat is the negative aspect of external environment that presents factors that could possibly harm the organization in some way. An external harmful intention against the organization can be for example the changes in refining of aviation gasolines that can cause increased costs for carrier company. (Cadle, Paul and Turner 2010, 33-34)

7 DEFINITIONS OF SUPPLY CHAIN

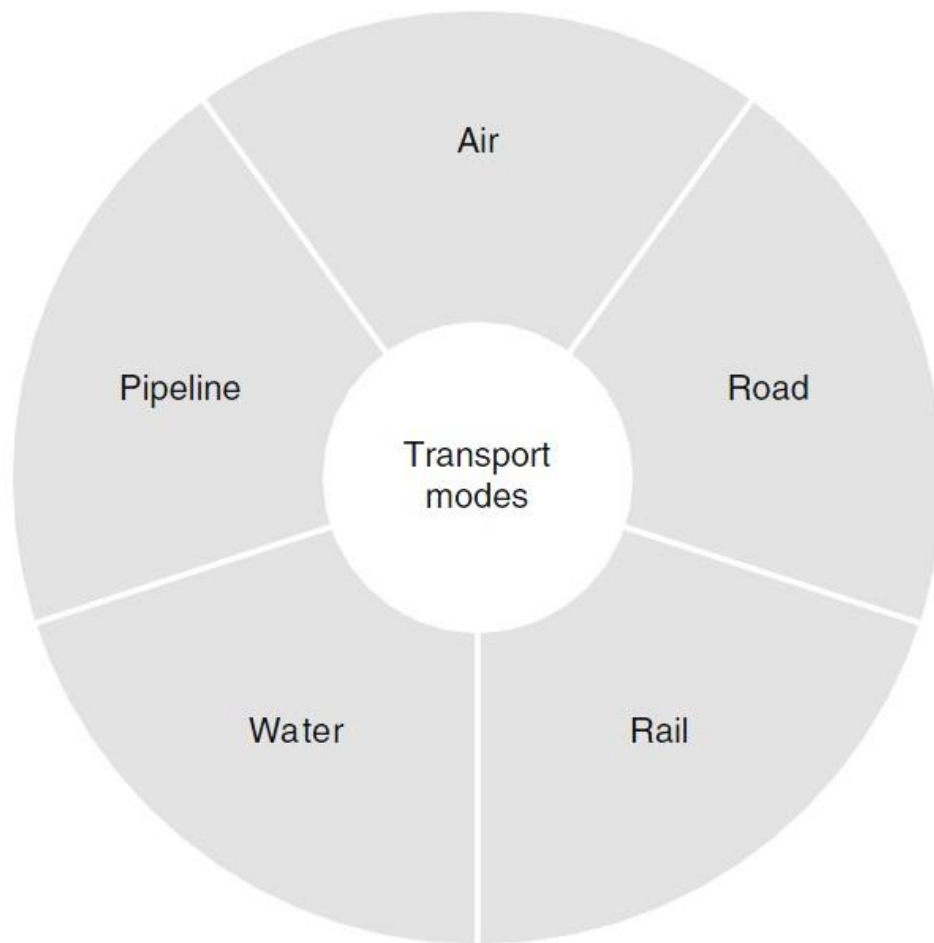


Figure 3: (Different modes of transport, Scott 2011, 79-80)

Nowadays global supply chain in transport management needs to be innovative and quickly evolving part of the business. Its role often is to guarantee that the product made in certain part of the world make it to the other part of the world in full condition and on time without any extra costs or loss of quality. There are six variables used in transportation management:

- Speed
- Reliability
- Security
- Quality
- Environment
- Cost

(Scott 2011, 78)

Transport management can boost the value of global supply chain operations by presenting variety of transport choices that behave differently on the six variables of transport management. Security for example differs depending on where the product is transported from and what the nature of the delivered product. Cost impact of transportation costs significantly contribute to the overall cost of the goods sold in the target location of the transport. (Scott 2011, 79)

Five different modes of transport presented in figure 3. available for businesses to choose from: road, rail, water, pipeline and air. Every mode in the figure 3. have unique aspects that fulfill different supply chain needs. The choosing of a transport mode are strongly affected by two factors: product nature and specific customer needs.(Scott 2011, 79)

7.1 Water transportation

Transportation by water includes three main activities to follow.

- Tankers: oil product and liquid natural gas carriers.
- Container vessels: Standard and refrigerated container carriers.
- Inland waterways: Barges and boats that use river networks and canals.

Maritime shipping has gone a long way from a taxi-like service that had no fixed schedules or routes to a very carefully planned service, for example nowadays it's like a bus-service where everything is scheduled and routes set efficiently. Tankers carry liquid products such as chemicals, crude oils and LNG. Container vessels were the transport invention of Malcolm McLean in 1937 and are very important part of water transportation, the ships can be 400 meter long and carry up to 15,000 containers. Inland waterways have been used in long distance transports. Countries like India rely greatly on inland waterways, India has approximately 14,500 km of navigable waterways. (Scott 2011, 82)

8 STATISTICAL INFORMATION PER COUNTRY

‘Statistics is the science of collecting, organizing, summarizing, analyzing, and making inferences of data.’(Jaisingh, 22) Statistics can be divided into two areas, descriptive and inferential statistics, these areas include summarizing, analyzing, collecting, organizing and making inferences from data as seen in the figure 4.

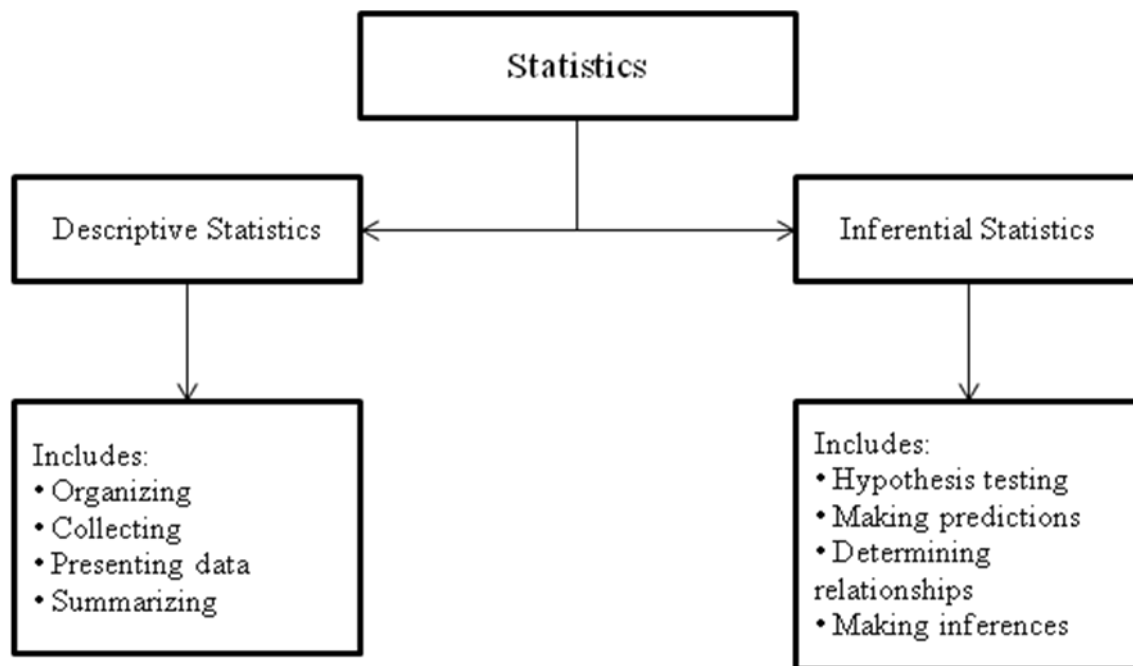


Figure 4: Statistics breakdown, modified from (Breakdown of statistics, Jaisingh, 22)

Statistical information about the market is crucial in fuel business, as the fuel prices are highly correlated from the recent oil barrel prices. The reason for statistical information in this case is that it gives evidence and proof about the current situation of a certain country’s service stations, independent station dealers, production and demand of oil products. Statistics also help to analyze the situation per country and makes it easier to understand the potential of this case idea, for example the amount of independent station dealers in a specific country.

8.1 Service stations separation

	Stations	Automated stations	TOTAL	Stations for heavy vehicles
ABC	124	288	412	0
Neste Oil	277	204	481	311
SEO	101	85	186	0
Shell	153	49	202	153
St1	86	243	329	92
Teboil	140	197	337	214
TOTAL	881	1066	1947	770
TOTAL with heavy			2717	

Figure 5: Service stations, 4.1 – 31.12.2011 Finland, (Suomalainen Energiao-suuskunta)

Finland has total of 2717 stations at the end of year 2011 as seen on figure 5. The number of independently owned stations is approximately 547. Independent station dealers own 20% of the total amount of fuel stations. Some stations for heavy vehicles function within normal or automated stations. There is total of 64 functional boat filling stations that are not included in this table.

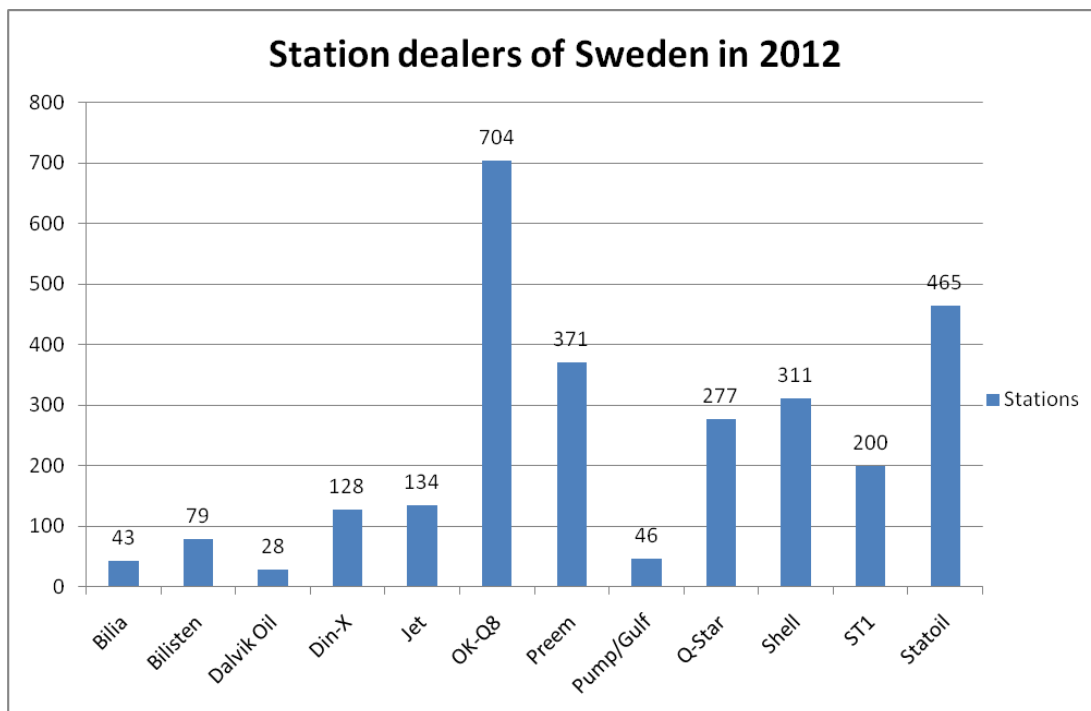


Figure 6: Station dealers of Sweden in 2012, (Svensk bensinhandel)

Sweden has total of 2786 service stations in 2012 as seen on figure 6. Independent station dealers have total of 763 stations in 2011. Independent station dealers have approximately 27% of the total fuel stations in Sweden.

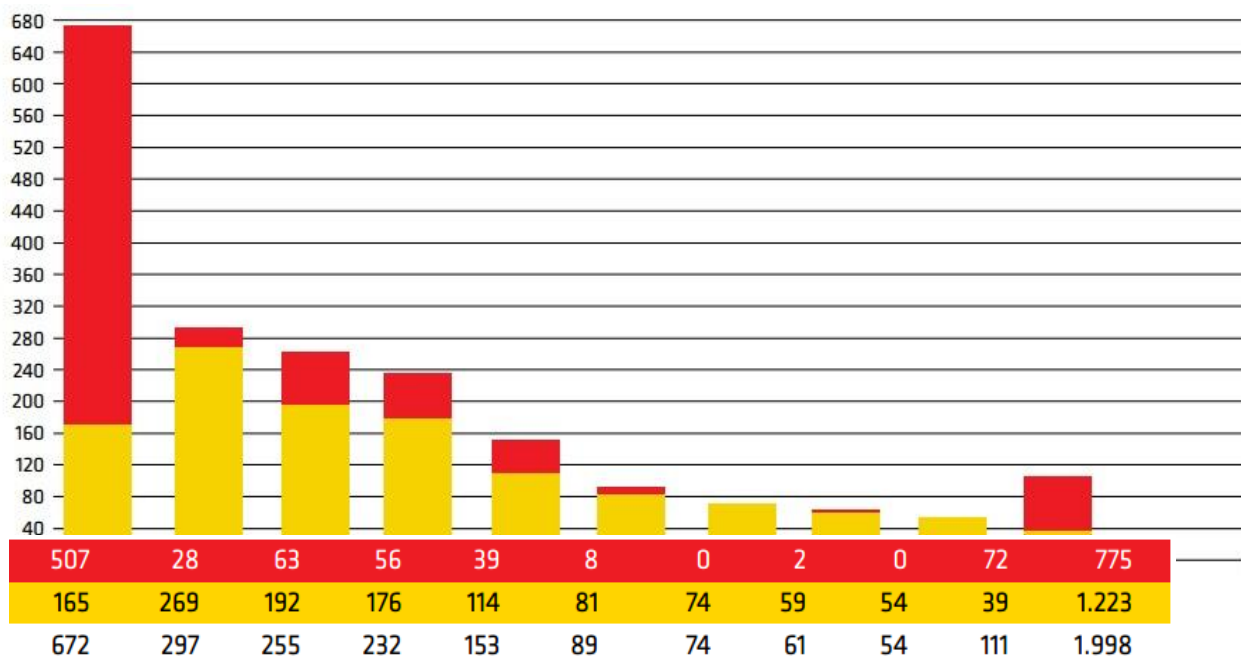


Figure 7: Independent and company owned fuel stations in Denmark 2011, (Benzinforhandlernes Faelles Repraesentation)

As presented in figure 7. Denmark has total of 1998 service stations in 2011. Independent station dealers own 775 of the total amount of service stations. Independent station dealers have approximately 39% of the total fuel stations in Denmark. Red stands for independent station dealers and yellow for company owned stations.

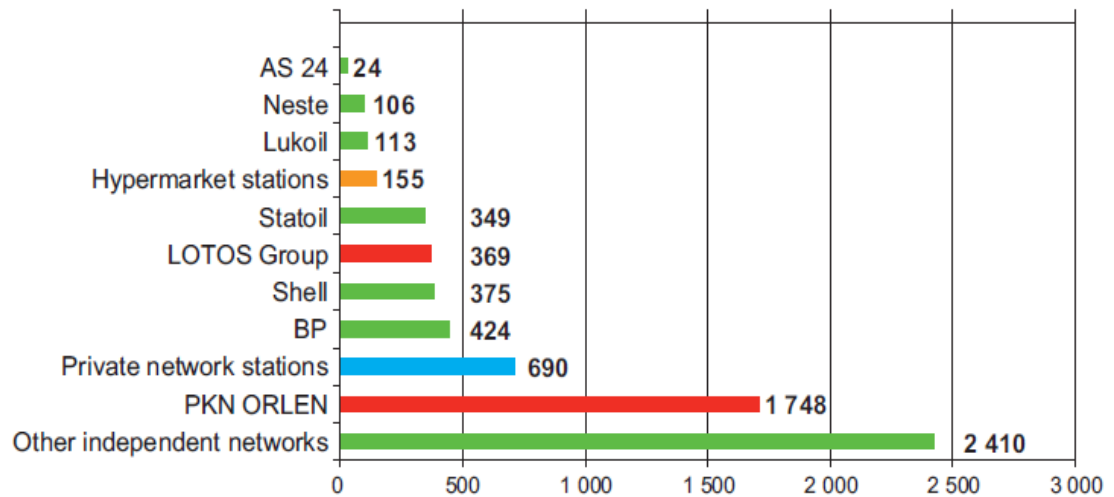


Figure 8: Service stations of Poland in 2010, (Polish Fuel Market annual report 2011, 66)

Figure 8. shows that Poland has total of 6609 fuel stations in 2011. Independent station dealers or independent networks have approximately 3100 of the total fuel stations as stated in the Figure 8. Independent station dealers or independent networks own total of 45% of the total service stations. Independent network is a company that consists of independent station dealers only and is owned by the independent station dealers.

8.2 Production and demand

All of the following marketing information and calculations exclude light fuel oil or heating oil because majority of it isn't sold in ordinary service stations and are used to heat houses. The selling volumes and amounts per independent station dealer are calculated only using the consumption and service station data. The columns

Gas/Diesel stands for Gasoline/Diesel. The consumption data per country can be seen on the ANNEX 1.

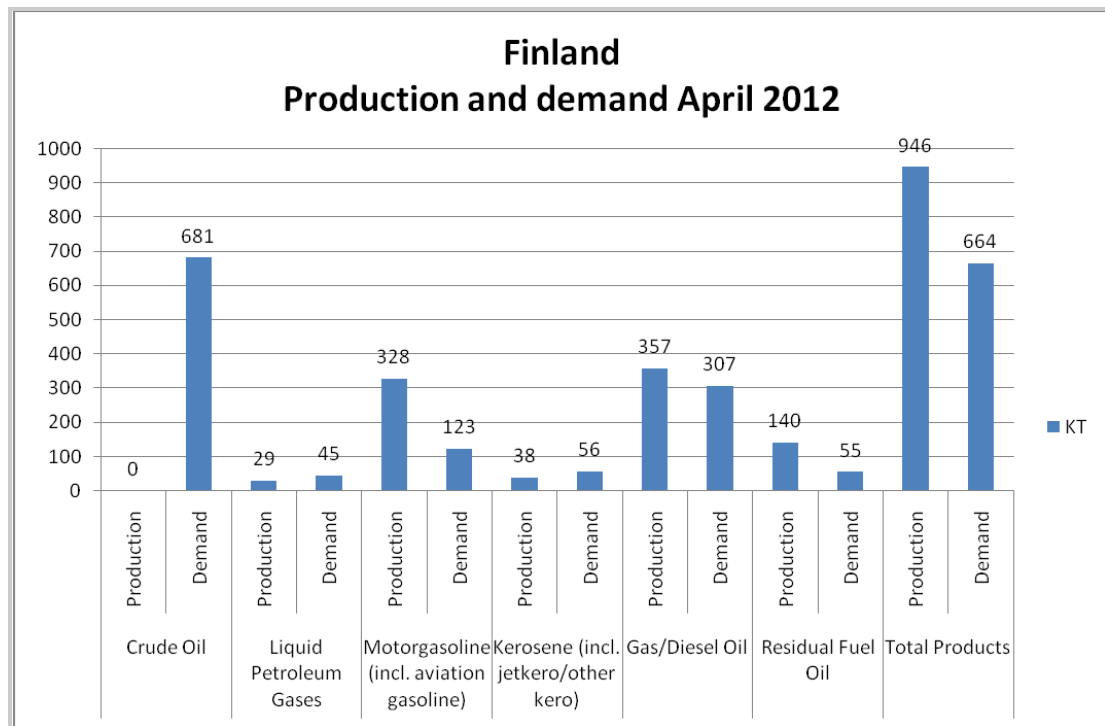


Figure 9: Production and demand of oil products in Finland in April 2012, (International Energy Agency)

As seen on the figure 9. in 2010 the yearly consumption of gasoline and diesel was 3 940 000 tons per year. 1 station dealer, independent or company owned, in Finland sells average of 1 450 tons of gasoline and diesel per year. Independent station dealers in Finland do not have any filling stations for heavy vehicles which sell approximately 50% of the total diesel consumption, therefore the yearly sell volume for independent station dealer is slightly less than the average 1 450 tons. Independent station dealers in total sell approximately 793 150 tons of gasoline and diesel per year. Market segmentation is 20% for independent station dealers and 80% for company owned station dealers.

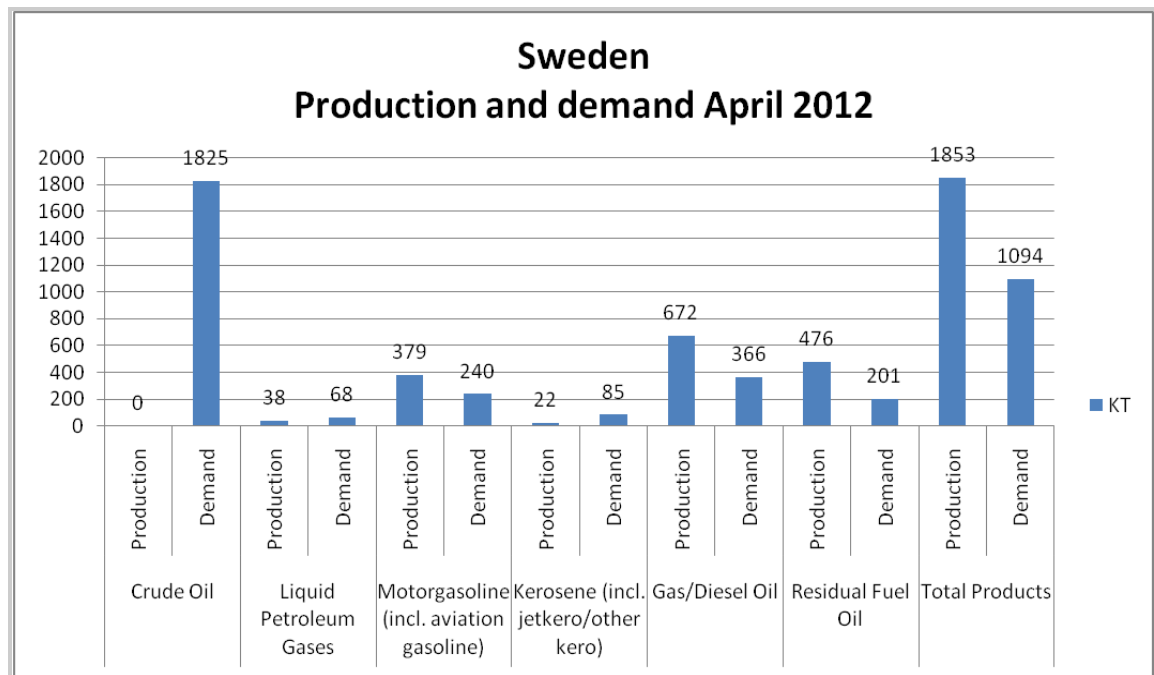


Figure 10: Production and demand of oil products in Sweden in April 2012, (International Energy Agency)

Total consumption of gasoline and diesel of Sweden in 2010 was 4 980 000 tons per year as shown on the figure 10. A single service station, independent or company owned, sells approximately 1 787 tons of gasoline and diesel per year. Independent station dealers in total sell approximately 1 363 481 tons of gasoline and diesel per year. Market segmentation is 27% independent station dealers and 73% company owned stations.

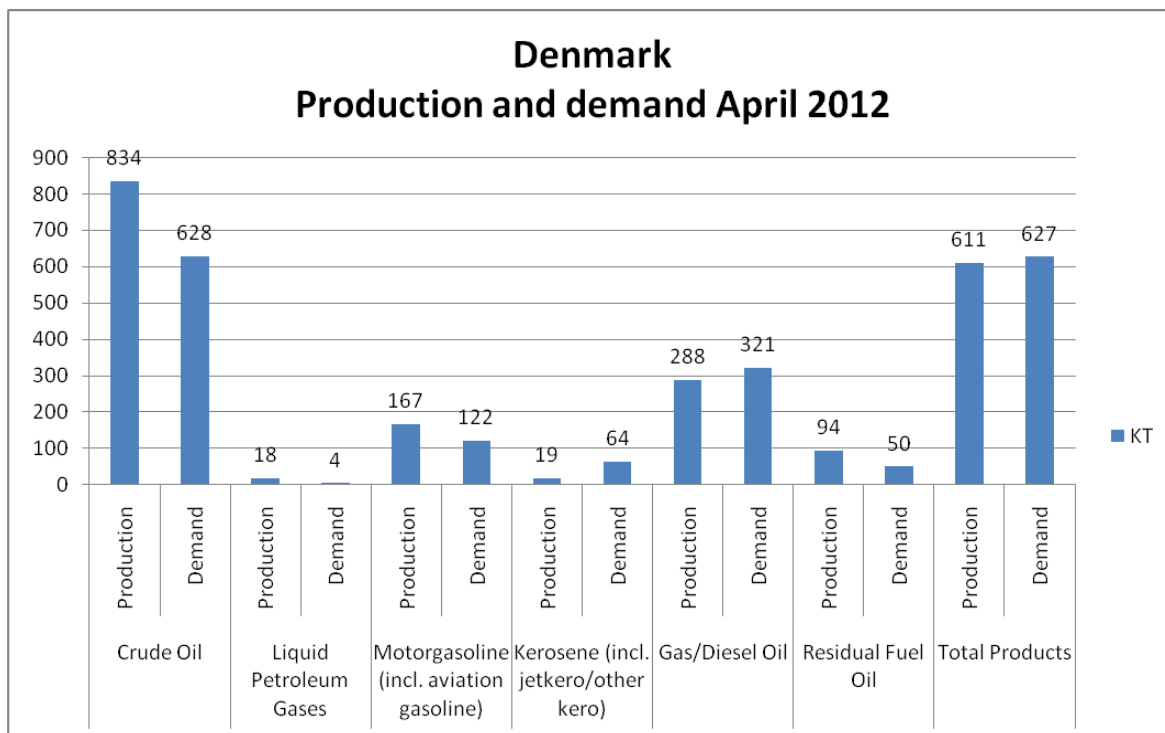


Figure 11: Production and demand of oil products in Denmark in April 2012, (International Energy Agency)

As stated in the figure 11. total consumption of gasoline and diesel in 2010 is 3 770 000 tons per year. A single service station in Denmark sells approximately 1 886 tons of gasoline and diesel per year. Independent station dealers in total sell approximately 1 462 337 tons per year. Market segmentation of independent station dealers and company owned stations is approximately 38% of independent station dealers and 62% of company owned stations.

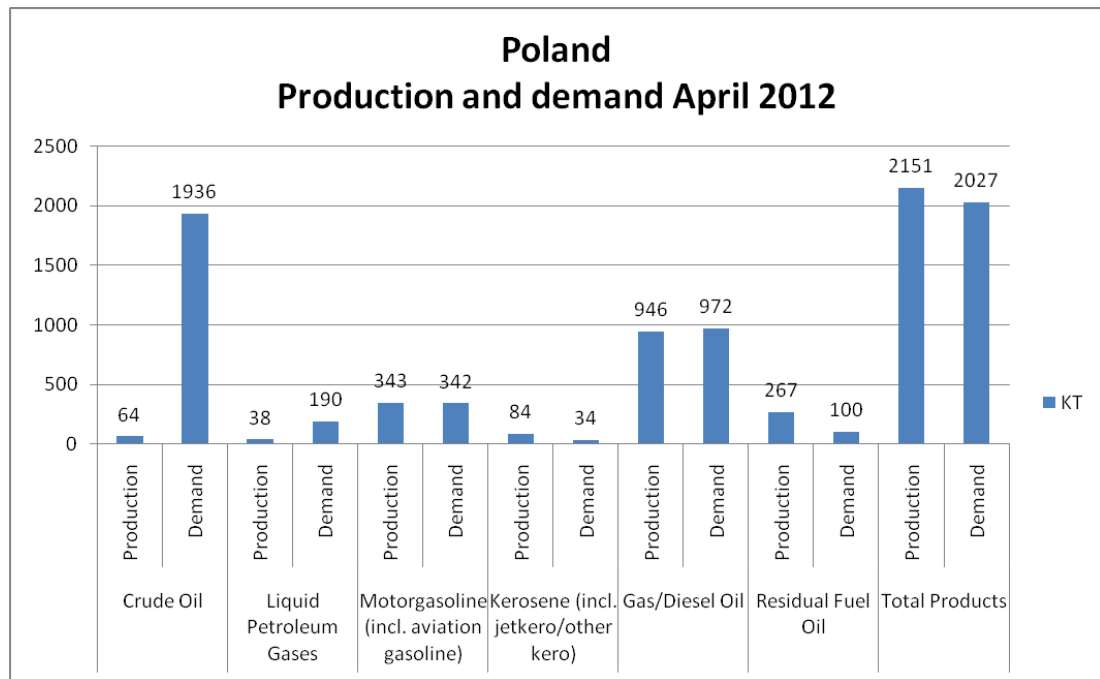


Figure 12: Production and demand of oil products in Poland in April 2012, (International Energy Agency)

Total consumption of gasoline and diesel in 2010 is approximately 11 420 000 tons per year as shown in figure 12. A single fuel station in Poland sells approximately 1 688 tons of gasoline and diesel per year. Independent station dealers in total sell approximately 5 233 885 tons per year. Market segmentation between independent station dealers and company owned stations is 45% for independent station dealers and 55% for company owned stations.

9 RESEARCH

9.1 Methodology

There are two main forms of data, primary and secondary, they vary from each other depending how close it is to the recorded event.

Primary, the data that has been observed, experienced or recorded nearest to the event. The data that can be as near of truth as possible. Secondary, the data can be from websites or other written sources that interpret or record the primary data.(Walliman 2011, 85)

The interest driver organizations survey was directed to the head of the organization in order to receive the most extensive information. The primary research type used to get primary data was 'Interrogation, where the data is gained by probing, asking, informing about organizations convictions, likes and dislikes.' (Walliman, 85) The secondary research type to retrieve the secondary data was from websites of interest driver organizations and oil associations, also the data was extracted from different experts.(Walliman 2011, 85)

9.2 Research methods

9.2.1 Qualitative data analysis

Qualitative data cannot be precisely analyzed and calculated, and is usually indicated in words rather than numbers. Overall the human features and activities like ideas, mores, beliefs and customs that are studied in the study of human beings, societies and cultures cannot be pointed out and measured in any precise way. Data like this is therefore described in character. Qualitative analysis is based on understanding the meaning of words, variables, development of concepts and interrelationships between these categories.(Walliman 2011 87-88)

9.2.2 Quantitative data analysis

Quantitative data analysis means using numbers as the data and using mathematical operations to examine their properties. Measurement levels used to collect the data are i.e. ordinal, nominal, ratio and interval. These measurement levels are a significant factor in choosing the type of the analysis that is suitable, for example the number of cases involved.(Walliman 2011, 128)

9.3 Survey

Asking questions is a relevant method of getting both qualitative and quantitative data from people. Applicable tool for collecting the qualitative and quantitative data is to create a questionnaire. This data collection method is often called a survey. Using of questionnaire enables one to receive replies and arrange the questions without the need to talk to the respondents.(Walliman 2011, 97)

Creating surveys is rather popular in today's world, mostly because it's an effective and easy way of collecting information. The survey in this thesis was made by using MS Word program. Distribution of the survey was handled via e-mail and was sent to each interest driver organization in CABS excluding Estonia and Lithuania. The survey was generally directed to a representative of an interest driver organization that can answer on behalf of the organization's values and interests. In advance of this survey I have held telephone and e-mail conversations with some of the respondents and presented them my thesis statement and the goals of my thesis. The survey was sent to 6 respondents, the interest driver organizations of Estonia, Finland, Sweden, Denmark, Poland and Latvia. Lithuania does not have an interest driver organization. There is no list of addresses or contact information of all the independent station dealers in CABS, therefore the research and survey was directed to the interest driver organizations of independent station dealers.

9.3.1 Questionnaire in the survey

The survey consisted of 7 parts, Introduction, 5 questions and motivator for the respondent. Introduction was a brief explanation of the thesis and how I use my survey results. There was 4 total questions about the main subject communication and cooperation possibilities between independent station dealers in CABS. The questions were both qualitative and quantitative, aimed to seek the information that the interest driver organizations don't openly share in their websites. All of the 4 main questions had multiple-choice questions with each had a section for an open answer aswell. The last question was optional and was about giving the contact information for researcher, this highly related to the motivator part in the end. The motivator part for the respondents works as sort of like a carrot to answer the survey, it gives the respondent possibility to receive summarized information that is collected in this thesis once it is complete.

10 SWOT-ANALYSIS

Internal	
Strengths	Weaknesses
<ul style="list-style-type: none"> • Centralized fuel purchasing, savings in fuel prices • Maintenance in station devices • Joint use of entrepreneuring service companies 	<ul style="list-style-type: none"> • Long and expensive transports from a centralized port fuel storage • Differences in fuel qualities of biocomponents and winter grades • Differences in fuel standards and in implementing future bio rules per country • Differences in culture and business manners
External	
Opportunities	Threats
<ul style="list-style-type: none"> • To create a joint networking in chatting about daily troubleshooting problems, for example station equipment malfunctions 	<ul style="list-style-type: none"> • Dumped prices in stations owned by large oil companies • Future legislation differences in countries

Figure 13: SWOT analysis about co-operation among independent station dealers in countries around the Baltic Sea

SWOT-analysis as seen on figure 13. revealed some key issues in the cooperation among independent station dealers in countries around the Baltic Sea.

Strengths include centralized fuel purchasing, maintenance in station devices and joint use of entrepreneurial service companies. Maintenance of station devices means the possibility to use the maintenance service companies presented in the buyers'

pool service, to ensure experienced and possibly cheaper option. Joint use of entrepreneurial service companies means for example that the independent station dealers can buy together greater amounts of station equipment and get a cheaper price. Weaknesses of cooperation among independent station dealers in CABS shows long and expensive transports from a centralized port fuel storage, differences in fuel qualities of biocomponents and winter grades, differences in fuel standards in implementing future bio rules per country and differences in culture and business manners. The first three weaknesses presented are related to the centralized fuel purchasing cooperation method. It is rather expensive to transport oil products for example from a Russian refinery and ship it all the way to Denmark's independent station dealers. Fuel qualities also vary a lot as seen on the figure 15. and it is the biggest weakness in centralized fuel purchasing. Differences in culture and business manners can cause communication problems as there are total of 7 countries involved in this study, northern countries like Finland and Sweden share quite different business manners than Poland for example.

Creating a joint networking in chatting about daily troubleshooting problems is an opportunity as independent station dealers suffer from small daily problems such as customer's credit card gets stuck in a billing device etc. This service would help to share the information about such things and help to prevent them in the future. Naturally the station device companies also have a helpdesk, but are often busy and tight scheduled. The biggest threats come from the big oil companies and governments of countries. Big oil companies can dump the fuel prices in their stations and cause the independent station dealer to lose customers. Future legislations are set by governments and ultimately the European Union. EU sets regulations and directives towards reaching a 20% renewable source target for energy until year 2020 for example, this causes the differences in fuel qualities that is problematic for the centralized fuel purchasing.

11 SURVEY RESULTS

Finland, Sweden, Denmark and Latvia seemed to be the most interested in this idea and research right from the beginning when they were contacted first time in October 2012. Telephone conversations were held and e-mails were sent to these countries' interest driver organization representatives. Total respondents of the survey was 3 out of 6, Denmark, Finland and Sweden. The information received was contradictory on some occasions. The amount of respondents was unexpected as only half of the survey receivers answered. The survey for interest driver organization can be seen in ANNEX 6.

On the 1st question in the survey, Finland answered that they have communication between other interest driver organizations in Sweden, Denmark and Norway. Sweden answered that they have communication with Finland and Denmark. Denmark answered that they don't have communication with any interest driver organizations.

To the 2nd question Finland and Sweden answered that they communicate with other interest driver organizations by e-mail and having meetings. Denmark answered referring to the earlier question that they don't have any communication with other interest driver organizations.

On the 3rd question Finland answered that they are not sure if their country's independent station dealers might be interested in co-operation with other independent station dealers in countries around the Baltic Sea. Finland also added that the co-operation within Nordic countries is basically based on sharing information (e.g legislation). Sweden answered directly yes. Denmark answered that they aren't interested in co-operation but added that in specific matters it might be relevant.

The 4th multiple-choice question about co-operation methods had direct answers only from Sweden and Denmark. Sweden answered that they are interested in "Centralized purchase of gasoline and diesel from refinery suppliers/traders" and "Technical assistance networking in station equipment and maintenance between the independent station dealers". Denmark didn't want any of the co-operation methods men-

tioned but added that “influence on legal aspects” would be their choice of cooperation. Finland didn’t answer anything on the 4th question, only referred to the 3rd question where the answer was “not sure”.

The 5th question about handing contact information was answered by Sweden and Denmark.

12 BUYERS' POOL SERVICE

The service is located on a website and maintained by the interest driver organizations. The interest driver organizations have stated in their websites that they drive the benefits of the independent station dealers. Buyers pool service is located on a server that has admin rights for interest driver organizations in CABS and is accessible for all the independent station dealers in CABS. The service itself is updated by the interest driver organizations and accessed by the independent station dealers via internet. Interest driver organizations update the service to present a list that consists of variety of companies from different branches of contracting, equipment trading, image- and logo change that the independent station dealer can contact and ask for a tender. There is no need for significant funding of this service as everyone receives the same benefit as every interest driver organization does their part and shares company information from their country, the funding will be discussed and decided in service planning meeting.

Centralized fuel purchasing is a joint operation by the independent station dealers in CABS to buy oil-products from the same supplier in order to reduce the cost per ton for the independent station dealers. The interest driver organizations can use ANNEX 2 and ANNEX 3 or make a list of their country's refineries and oil suppliers. The joint operation to centralized purchasing of oil products will be done once or twice a year. There are significant supply chain problems with centralized fuel purchasing between CABS that are presented in section 11.

12.1 Service planning

There is a need of communication between the interest driver organizations. The communication needs to be social, face-to-face communication so at first it is wise to book a meeting between all the interest driver organizations of CABS via e-mails and telephone conversations. The meeting should take place in an environment geographically very central to all of the interest driver organizations to reduce overall traveling expenses. The proof and statistical information presented in this thesis can be

shared between all parties and to make sure that everyone understands the meaning of this service and the process to develop an ongoing communication between the CABS interest driver organizations, this allows the service itself to fully grow to its highest potential and be a benefit to every independent station dealer involved as seen in the ANNEX 4.

If the supply chains problems of centralized fuel purchasing were to overcome, the operation to purchase oil products centrally would require meetings to decide what supplier to use each year and how to plan transportation, storing, blending etc. The fuel suppliers will be in a competitive bidding state and negotiations will be held between suppliers and interest driver organizations in order to get the lowest price per barrel as possible.

12.2 Service implementation

The location and installation of the server that runs the service can be decided in the service planning meeting. Once the server is up and running, the interest driver organizations will need to search all the contracting, equipment trading, image- and logo change companies from their country. It is also possible in future to include additional service companies in this. Basically it's possible to put anything in here that might be in need by an independent station dealer in some country in CABS. All these companies are added in to a big list that is divided into different sections depending on the nature of their service as seen on the ANNEX 5. The list is to be updated constantly as there will be emerging and closing companies. The categories for the list would at first be contracting, equipment trading and image and logo changing.

12.3 Contracting

Contracting means the process of making yearly contracts to buy oil products for fuel service stations. The contract to buy fuel is made yearly and things handled in the contract are: calendar year, fuel qualities, amounts per port and transportation either

road or sea transport. Road haulage transport is usually followed by the incoterm EXW and sea transport FOB.

12.4 Equipment trading

Equipment in this case means different signs, fuel pumps, monitors, distribution points etc. Mostly every equipment that can be found from a fuel service station can be under this category. Fuel service stations and oil companies tend to have extra equipment lying in warehouses or service stations, these are often left from different activities like reforming of a fuel service station or after an image change. These equipment can be sold through the buyers' pool service to possible customers in CABS. There are also companies that only sell service station equipment. All European station dealers use the same type of station devices, billing platforms, monitors etc.

12.5 Image and logo changing

Image and logo change means changing the appearance of a fuel service station. For example if oil company X sells its fuel service station to oil company Y there is a need to invest in a logo and image change in order to change the appearance of X to Y. These activities can be surprisingly costly in one country and a lot cheaper in other, for example Estonian workers demand a lot less salary than Finnish workers and the savings can be couple thousands of euros. As mentioned in part 12.4 the service stations use the same type of devices and equipment in the whole Europe, the image change process can be simply done by taking the equipment from some closed service station and put the pylons, monitors, billing platforms and signs to a new station that is in need of an image change, naturally the equipment needs to be modified to present the image of the customer's company.

13 SUPPLY CHAIN

13.1 Domestic non-centralized purchase of oil products

The independent station dealer of the case company orders the fuel to his station by simply calling the warehouse manager of the case company and presents the quantity and quality needs of the batch that is needed in the station in order to keep the station functional and serve the customers. The fuel is then transported to the fuel service station by truck from the nearest warehouse-point from Pori, Naantali, Porvoo, Vaasa, Kokkola, Oulu or Kemi. The transportation is arranged by the case company. The fuel transport will be delivered within 24hours from the station dealer's order. Other station dealers from other oil companies in the group of the countries around the Baltic Sea act mostly the same way.

The warehouse manager in Pori Naantali, Porvoo, Vaasa, Kokkola, Oulu or Kemi will order the fuel to the warehouse from the distribution manager of the case company. The fuel will be delivered from the refineries of Porvoo and Naantali. The fuel is bought from the domestic oil company with and yearly contract that is negotiated each year. The case company is also again responsible for the transportation of the fuel.

13.2 Centralized purchase of oil products

There will be no change in the effect of the distribution for the independent station dealer when he has ordered a batch of fuel. Only thing that is going to change compared to current situation is that the fuel can be transported from foreign refineries will be shipped from the countries around the Baltic Sea to any of the further mentioned warehouses of the case company. This however is problematic since the countries around the Baltic Sea have different product content in their fuels so there would be a need of an extra service to get the bioethanol and sulphur content of the fuel legal according the the standards the specific country has determined. Climate is the factor that mostly causes sulphur content difference in fuels.

Product	Type	Sulphur mg/kg	Renewable fuel volume%
Diesel	-40/-44	3	
Diesel	-29/-34	6	
Diesel	-15/-25	4	
Diesel	-5/-15	5	
Gasoline	95E10	7	10
Gasoline	98E5	6	5

Figure 14: Fuel product content table of Finland, (Neste Oil)

As seen in the figure 14, there are 4 different types of diesel of which are ordered to the service station according to the temperature of the air. Gasoline's ethanol content is determined by the government of the country where the business is done and the product is sold. Each country has their own renewable fuel and sulphur content limits and enactments.

In the future when the CABS has the same ethanol and sulphur standards it might be possible to implement the transportation of fuels by ship to warehouses in different countries around the Baltic Sea. In this way the fuel could also be bought together with all the independent station dealers around the Baltic Sea communicating together via interest driver organizations to get a lower yearly price of fuel. There is currently a lot of variety and changes in the fuel policies of countries around the Baltic Sea. EU is constantly moving towards a policy where there is increasing amount renewable fuels used in light transportation and every country has the same type of fuels in use. This will take many years still and there isn't plan yet to implement 100% renewable light transportation fuels in each country. The latest EU energy target is to year 2020 when EU should have 20% of its energy from renewable resources including fuels.

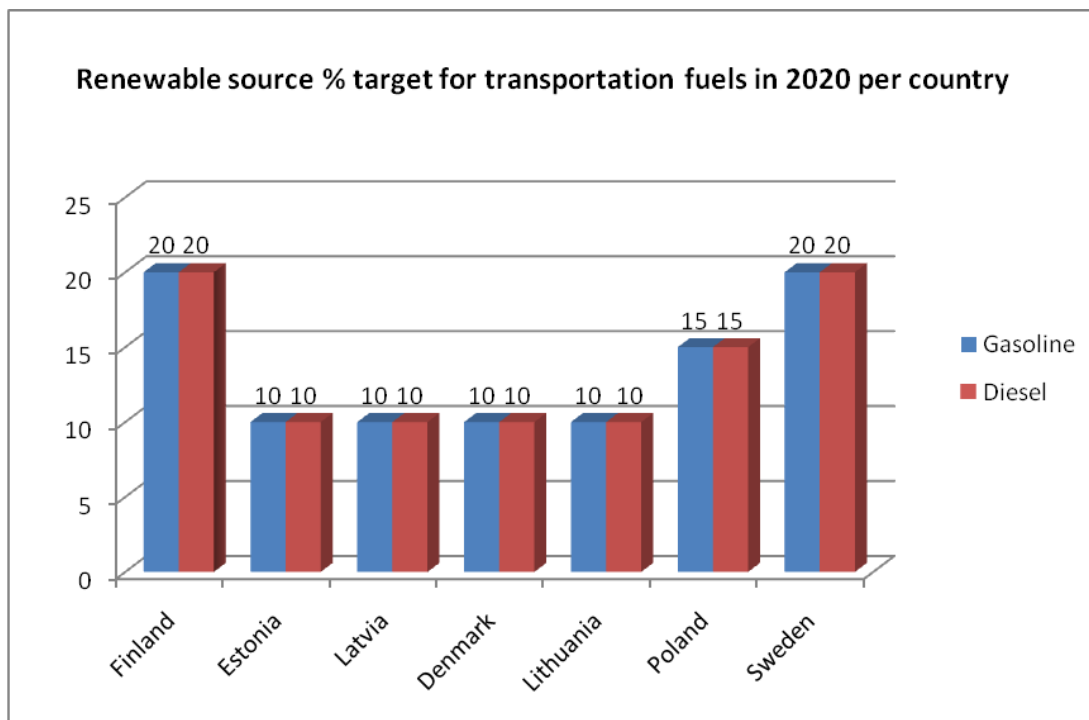


Figure 15: Renewable source % target for transportation fuels in 2020 per country, (European Commission)

The graph in figure 15. shows the value percentage of the renewable source fuel that needs be used in specific country's transportation fuels at the latest of year 2020. Renewable source means blending fossil-based fuel with 20% of ethanol in Finland's case for example. Note: Finland, Estonia, Denmark and Lithuania have solid renewable source percentage target, meaning that diesel and gasoline renewable source percentages are not separated.

13.2.1 Centralized purchase of oil products with blending units

The problems with the renewable source and sulphur content in the centrally purchased oil products can be applied with setting blending units in central locations along the shipping routes or target countries where the oil product is transported. A blending unit is a factory that blends the fuel to match the standards of fuel sulphur and renewable source content limitations of the target country. These factories are costly and there will be need for at least a couple of units. The process is costly and takes time to blend and storage a large tankers fuel to match each countries limitations. For example if transporting the fuel from Kirishi refinery in Russia to CABS

the blending unit would need to be used already at Estonia if the source refinery produces only fuel products by the Russian standards.

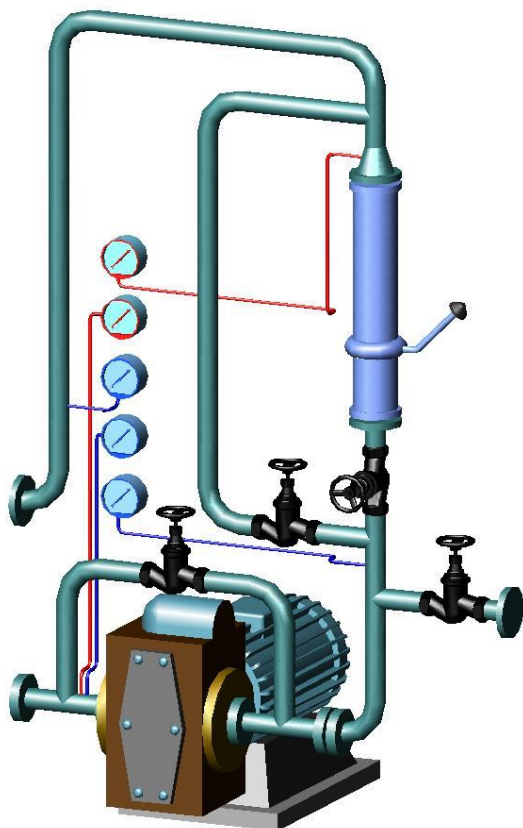


Figure 16: Fuel blending unit, (LogiWin Oy)

The fuel blending unit in the Figure 16. can process 10 tons of fuel per hour. There are blending units available with the average technology of which processing capacity ranges from 3ton/h to 40ton/h. Highest and naturally most expensive technology in blending units can process up to 150ton/h.



Figure 17: Ternhav, tanker for light fuel products, (Neste Oil)

An average tanker that operates in Baltic Sea area, carries normally 3 000 to 15 000 tons of light-fuel products. Ternhav, in the figure 17. has the capacity to carry 14 871tons of light-fuel products and has total of 7 cargo tanks.

In order to blend the cargo of a tanker of the size of Ternhav with 5 blending units each with processing capacity of 10 ton/h it takes approximately 12 days to process the whole cargo load of this tanker. Processing with 5 blending units for 12 days in a row and keeping the ship at berth for days is expensive.

14 RECOMMENDATIONS

14.1 Initiate buyers' pool service

In my opinion, information collection of the service companies for buyers' pool service should be initiated as soon as possible. As the survey showed, there are independent station dealers and interest driver organizations interested in co-operating in different areas. The interest driver organization's should have a meeting between all the interest driver organization's in CABS in some geographically central place in order to avoid high travelling expenses. In the meeting can be decided how the information is put together and by who, meaning the collecting of different service companies, such as equipment trading and image- and logo change companies. Best possible way to progress in the service company searching is to sign a person from each interest driver organization to search for all the service companies in its home country.

When the contact informations of the companies listed in the service is done, the independent station dealers can start to negotiate and seek for good deals with the service companies. For example a Finnish independent station dealer that is in need of station equipment such as monitors and billing platforms, calls to a Polish service company and buys the same equipment a lot cheaper than in Finland.

In the future the service company list can be updated to have even more than just service companies, it can be possible to put almost any service that is in need of independent station dealer.

14.2 Cease centralized fuel product purchasing

The centralized fuel product purchasing idea faces significant problems and as the research shows the centralized fuel product purchasing should be ceased until the fuel qualities are stable in every country. At the moment the whole EU is going through a long transition period from fossil fuels to fuels that are renewable. On the other hand if there's a state of where every country in CABS has the same fuel quali-

ty standards it can be possible to initiate this idea as well. Centralized fuel product purchasing is highly dependent on the regulations of countries governments and EU regulations on the amount of renewable energy needs to be used until a specific year.

In case of investors that are interested in investing fuel blending units, it can be possible to use blending units and blend the fuel to match target country's fuel standards. The blending process itself is time consuming and expensive and there would be an extra need of blending during winters as different countries have different winter grades in their fuels, that is determined by the climate of the country.

15 CONCLUSION

The goal that the case company firstly gave to me was to create a buyer's pool system for independent station dealers in countries around the Baltic Sea. Over time it developed into making a research about the co-operation possibilities between independent station dealers in countries around the Baltic Sea. The idea was to get all the possible information about the subject, wrap it together and add the co-operation possibilities into it.

This study shows that there is some co-operation already among the interest driver organizations, and overall the organizations I've been in contact with have been interested in co-operating with each other. Some of the co-operation possibilities currently still face significant problems and are somewhat highly dependant on EU and government regulations. There are also possibilities that are feasible and can be harnessed after taking required actions in creating a connection between interest driver organizations of different countries.

15.1 Making of the thesis

I started making the thesis in September 2012 and ended the thesis March 2013. I had some expectations towards the subject of the thesis, I thought it was very challenging but suitable for me as I have had some experience about similar subjects during my training period in a consulting company that planned refineries, desulphurization plants and all kinds of consulting related to chemicals.

As I started the thesis I soon realized the magnitude of my work, I was researching the communication between 6 different country's interest driver organizations and each run the benefits of hundreds, even thousands of independent station dealers in their countries. I realized it would be extremely time consuming for me to find and e-mail my survey to each individual independent station dealer in countries around the Baltic Sea, as some interest driver organizations didn't even have a list of their own independent station dealers. It took me some time to even find the interest driver organizations, I had to make several phone calls to oil unions and various contact per-

sons and ask for information, some countries didn't even have interest driver organizations. The communication to abroad was rather hard as the contact information they had in their website was often false and some didn't speak fluent English.

I tried to make my thesis as simple and easily understandable as possible by explaining different definitions. Overall the making of this thesis was very challenging and generally I learned a lot especially about different cultures and their business manners.

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Oil consumption of countries around Baltic Sea in 2010 a)

Figures in millions of tons per year

Norway

Consumption:	11,2
Naphtha:	0,00
LPG:	0,72
Motor Gasoline:	1,27
Aviation Gasoline:	0,00
Jet Kerosene:	0,37
Other Kerosene:	0,05
Gas/Diesel:	3,93
Fuel Oil:	0,23

Sweden

Consumption:	17,6
Naphtha:	0,43
LPG:	0,53
Motor Gasoline:	3,32
Aviation Gasoline:	0,00
Jet Kerosene:	0,14
Other Kerosene:	0,00
Gas/Diesel:	4,20
Fuel Oil:	0,78

Finland

Consumption:	10,9
Naphtha:	0,30
LPG:	0,31
Motor Gasoline:	1,60
Aviation Gasoline:	0,00
Jet Kerosene:	0,13
Other Kerosene:	0,00
Gas/Diesel:	3,94
Fuel Oil:	0,56

Estonia

Consumption:	1,5
Naphtha:	0,00
LPG:	0,00
Motor Gasoline:	0,29
Aviation Gasoline:	0,00
Jet Kerosene:	0,00
Other Kerosene:	0,00
Gas/Diesel:	0,53
Fuel Oil:	0,05

Denmark

Consumption:	7,1
Naphtha:	0,00
LPG:	0,05
Motor Gasoline:	1,64
Aviation Gasoline:	0,00
Jet Kerosene:	0,06
Other Kerosene:	0,00
Gas/Diesel:	3,77
Fuel Oil:	0,16

Latvia

Consumption:	1,5
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Lithuania

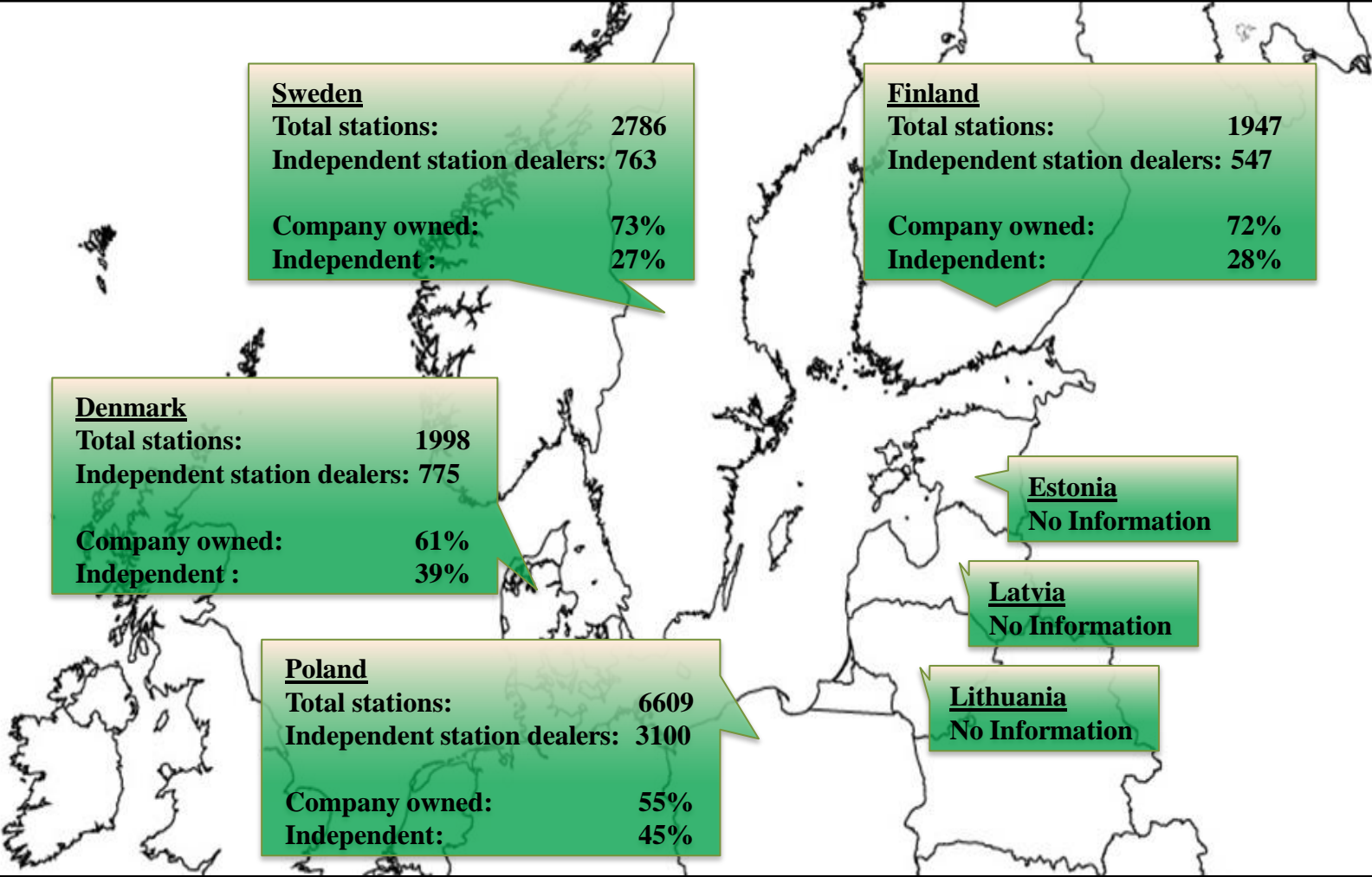
Consumption:	3,3
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Poland

Consumption:	28,4
Naphtha:	0,82
LPG:	2,38
Motor Gasoline:	4,00
Aviation Gasoline:	0,00
Jet Kerosene:	0,00
Other Kerosene:	0,00
Gas/Diesel:	11,42
Fuel Oil:	0,22

a) Figures of consumption per product are from 2009
 Notes:
 LPG: Liquefied Petroleum Gases
 Russia: Includes the consumption of whole Russia
 Gas/Diesel states for Gasoline/Diesel

Independent station dealers in countries around the Baltic Sea in 2011



List of service companies

Equipment trading & Maintenance

(FINLAND) J&K Pajarinen: <http://www.jkpajarinen.fi/yhteystiedot>

(GLOBAL) Wayne: www.wayne.com

(ESTONIA) Tanklaabi: <http://tanklaabi.ee/>

(ESTONIA) Kristengrupp: <http://www.kristengrupp.ee/firmast.html>

Image and logo change

(FINLAND) Tammerneon: <http://www.tammerneon.fi/fi/referenssit/huoltoasemat/unox/>

(FINLAND) Neon2: http://www.neon2.com/tuotteet_huoltoasemat.php

(FINLAND) Neontekniikka: <http://www.neontekniikka.fi/huoltoasemat.html>

(ESTONIA) Digit: <http://www.digit.ee/>

(ESTONIA) Ruutdisain: <http://www.ruutdisain.ee/est/?page=contacts>

(ESTONIA) Dag: <http://www.dag.ee/>

Survey of co-operation and communication between independent station dealers in countries around the Baltic Sea

Introduction

I'm doing my bachelor thesis about communication and co-operation possibilities between independent station dealers in countries around the Baltic Sea. I will use this survey as a tool in the research process.

1. Is there any communication between the interest driver organizations of independent station dealers in countries around the Baltic Sea?

- Yes
 Not sure
 No

If yes, between what organizations?

2. How does the communication occur?

- E-mail
 Social Media
 Meetings

Other (please specify)

3. Would your country's independent station dealers be interested in co-operation with any other country's independent station dealers around the Baltic Sea?

- Yes
 Not sure
 No

Comments

Next page

4. What kind of co-operation your independent station dealers would like to start with?

- Centralized purchase of gasoline and diesel from refinery suppliers/traders. Higher contact volumes - cheaper the price for the independent station dealer.
- Image and logo changes into station from joint entrepreneur companies?
- Technical assistance networking in station equipment and maintenance between the independent station dealers?
- Chat networking between station dealers in failure and malfunction of station equipment?

Other type of co-operation? Please describe.

5. Your contact information (Optional)

Name:

Company:

Address 1:

Address 2:

City/Town:

State/Province:

ZIP/Postal Code:

Country:

Email Address:

Phone Number:

When the project is done we may give summarized information to the respondents that gave their contact information.

For further information regarding this survey or project, contact:

Tommi Veromaa
 +358405677449
 Satakunta University of Applied Sciences
 tommi.veromaa@ibs.samk.fi