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Communications & archiving

Improving quality through follow-up at Wärtsilä Parts Coordination Management Centre Baltic & Black Sea

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BACHELOR'S THESIS

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Abstract

Parts Coordination Management Centre Baltic & Black Sea (PCM BBS) handles quotations and orders for both internal and external customers. Archiving and following up are two of the many important processes of the daily work for coordinators in PCM BBS. Archiving enables other coordinators as well as other departments to investigate both current and past orders. Following up includes providing customers with updates regarding their quotation or order, while also satisfying customer expectations.

In this thesis, the impact of a harmonized standard for archiving and following up is determined. Quality as a concept for PCM BBS is set, and the outcome from the implementation of the harmonized standard will determine if quality has either improved or decreased. Three coordinators with varying experience in PCM BBS are interviewed and observed and will be utilized as a focus group for the whole of PCM BBS.

The results prove that through exploring different processes used by coordinators, quality will be improved. Finding issues and conclusively solving those issues has a positive impact on the overall quality of not only PCM BBS, but the company-wide process of delivering parts to a customer.

Language: English

Key words: Wärtsilä, Supply Chain Management, Coordinator, Archiving, Customer service, Follow-up, Qualitative interview

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EXAMENSARBETE

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Titel: Kommunikation & Arkivering – Att förbättra kvalitet genom uppföljning vid Wärtsilä Parts Coordination Management Centre Baltic & Black Sea.

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Abstrakt

Parts Coordination Management Centre Baltic & Black Sea (PCM BBS) hanterar offerter och beställningar för både interna och externa kunder. Arkivering och uppföljning är två av de viktigaste processerna för det dagliga arbetet för koordinatorer inom PCM BBS. Arkivering tillåter andra koordinatorer samt andra avdelningar inom Wärtsilä att undersöka både tidigare och pågående beställningar. Uppföljning innebär att förse kunder med uppdateringar angående offerter eller beställningar, medan kundens förväntningar samtidigt möts.

I detta examensarbete undersöks en harmoniserad standard för både arkivering och uppföljning. Kvalitet som ett koncept fastställs av koordinatorer, och resultatet av implementeringen av den harmoniserade standarden avgör om kvaliteten antingen förbättras eller försämras. Tre koordinatorer med varierande erfarenhet inom PCM BBS blir intervjuade och observerade, och fungerar som en fokusgrupp för hela PCM BBS.

Resultatet bevisar att genom att utforska olika processer som används av koordinatorer, kan kvalitet förbättras. Att upptäcka problem och lösa dessa, samt utveckla fungerande system, har en positiv inverkan på den övergripande kvaliteten. Det är inte endast PCM BBS som påverkas av en förbättrad kvalitet, utan även hela företagets process för att leverera reservdelar till slutkunden.

Språk: engelska Nyckelord: Wärtsilä, Supply Chain Management, Koordinator, Kundservice, Uppföljning, Arkivering, Kvalitativ intervju

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OPINNÄYTETYÖ

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Nimike: Kommunikaatio & arkistointi – Laadun parantaminen seurannalla Wärtsilän Parts Coordination Management Centre Baltic & Black Sea -osastolla.

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Tiivistelmä

Parts Coordination Management Centre Baltic & Black Sea (PCM BBS) käsittelee tarjouksia ja tilauksia sekä sisäisille että ulkoisille asiakkaille. Arkistointi ja seuranta ovat kaksi tärkeintä prosessia PCM BBS:n koordinaattorin päivittäisessä työssä. Arkistointi mahdollistaa, että sekä toinen koordinaattori että toinen osasto voivat tutkia aikaisemmin tehtyjä ja käynnissä olevia tilauksia. Seuranta sisältää koordinaattorin kontaktia asiakkaisiin, missä koordinaattori toimittaa päivityksiä tarjouksista, tilauksista ja toimituksista, kun samalla pidetään huolta asiakkaan odotuksista.

Tässä opinnäytetyössä tutkitaan arkistoinnin ja seurannan vaikutusta laatuun PCM BBS:ssä. Koordinaattorit, PCM BBS:än esimies, sekä PCM BBS:än ulkopuoliset henkilöt määrittelivät ensin laadun käsitteen. Ongelmien ja toimivien ratkaisujen selvittämiseksi haastatellaan kolmea, vaihtelevan työkokemuksen omaavaa koordinaattoria. Annettua laadun määritelmää ja koordinaattorien vastauksia käytetään arkistoinnin ja seurannan standardin rakentamiseksi. Standardin avulla määritellään laadun mahdollinen paraneminen tai heikkeneminen.

Tulokset osoittavat, että laatua voidaan parantaa selvittämällä ongelmat ja ehdottamalla niihin toimivia ratkaisuja. Kun ongelmat tuodaan esiin, ja hyvin toimivia järjestelmiä edelleen kehitetään, laatu paranee sekä PCM BBS:ssä että koko toimitusketjussa.

Kieli: englanti Avainsanat: Wärtsilä, Supply Chain Management, koordinaattori, asiakaspalvelu, arkistointi, seuranta, kvalitatiivinen haastattelu

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1 Introduction

This thesis will analyse the different processes for archiving and internal and external communications used by coordinators at Parts Coordination Management Centre Baltic & Black Sea. According to Jani Heinämäki, Team Leader for PCM BBS, the main tasks for the Parts Coordination Management team are to communicate with internal and external stakeholders, create offers and sales orders for spare parts for diesel engines, and make sure that customer needs are satisfied.

Too much relies on personal memory instead of documented information that should be readily available for the whole team. The documented information is the foundation upon which Parts Coordination Management Centre Baltic & Black Sea handles requests for quotations and orders. Archiving is what enables co-workers and other departments to investigate how previous offers and orders are handled, in cases such as when the incorrect spare parts have been sold, or when a customer requires a certain treatment in ordering spare parts.

The current processes for archiving and following up on orders and deliveries will be assessed through qualitative interviews and an on-going observation with selected coordinators and thereafter analysed utilizing a qualitative approach. Once the current processes have been analysed, a standard will be determined, and a harmonized way of working will be suggested. This standard will then be implemented for a trial period of one week, after which the results of the implementation will be analysed and discussed. The results of the implementation will then be used internally to determine if the suggested standard should be implemented for other coordinators in the Parts Coordination Management Centre Baltic & Black Sea team.

1.1 Purpose of research

The purpose of this thesis is to research possible improvements in quality of customer communications, through establishing a solution for archiving and harmonizing the process of following up on quotes, orders, and deliveries. The research will be conducted in the Parts Coordination Management Centre Baltic & Black sea (PCM BBS).

A big part of the theory and other information included in this thesis is specified for the Parts Coordination Management Centre Baltic & Black Sea team and thus part of the sources are internal and unavailable to the public. The team leader for the Parts Coordination Management Centre Baltic & Black Sea team, spare parts coordinators, and Nonconformity Experts will provide sufficient information regarding these processes and will be referenced as personal communication in this thesis.

Three employees will be analysed for both defining the current process and issues, and the same three employees will be acting as implementation subjects for analysing the results from the implementation. The three employees have varying degrees of experience in the Parts Coordination Management Centre Baltic & Black Sea team and should thus give a clear picture of how the employee adapts to changes.

Included in this thesis is also different views on quality in PCM BBS, given by several people both in the PCM BBS team themselves, and outside of the PCM BBS team. This is done to compare what the coordinators view as quality in their work, compared to for example their team leader, or the Parts Quality Coordination team that deal with quality issues daily.

1.2 Disposition

The thesis is structured logically in such a way that the reader can with ease follow the different steps in the researched topic. Chapter 1 introduces the thesis, as well as the purpose of the research and what methods will be used. Delimitations will be discussed, outlining what will not be included in the thesis. Abbreviations and definitions are set in the end of Chapter 1, to give the reader an improved understanding of what is discussed in the following chapters.

In Chapter 2 the theoretical background will be discussed, to give a clearer understanding of the topics discussed in the thesis. A brief introduction of Wärtsilä, and the products & services available will be given in Chapters 2.1 – 2.2. The current situation at Parts Coordination Management Centre Baltic & Black Sea will also be determined in Chapter 2.3, for the reader to understand the current issues that are met in day to day work. As Parts Quality Coordination plays a role in Parts Coordination Management daily processes, a brief introduction will be given for Parts Quality Coordination in chapter 2.4.

Chapter 3 will analyse current processes in use by coordinators in Parts Coordination Management Centre Baltic & Black Sea. Three coordinators were selected, based on their experience in the team, to consider the views of coordinators with varying experience. In Chapter 3, an on-going observation and interview will be conducted and summarized. At the end of Chapter 3, the issues found by the selected coordinators as well as the writer are gathered and explained.

In Chapter 4, the writer will propose a standard upon which coordinators should base their differing systems and processes for daily work. The standard is split into archiving, following up, and customer communications. Chapter 5 and 6 include both the implementation and the analysis of the standard set in Chapter 4.

Chapter 7 is a summary which includes the results of the implementation, the authors personal opinions on the subjects discussed, as well as general discussion around the thesis. A conclusion will be made at the end of Chapter 7, giving a summary of the analysis, process, and the results from the thesis.

1.3 Delimitations

This thesis will only analyse and discuss processes for coordinators in the Parts Coordination Management Centre Baltic & Black Sea team specifically. Other teams will not be included in this thesis, as their processes and current way of working may vary incrementally from the Parts Coordination Management Centre Baltic & Black Sea team.

Issues and solutions for other processes outside archiving and following up will not be included. The range of responsibilities for coordinators is very wide, and the investigation into these subjects is recommended for future research. Software and other program-specific changes, that are not under the responsibility of the coordinators are excluded from this thesis.

Theory revolving around the different programs used by coordinators in Parts Coordination Management Centre Baltic & Black Sea is not explained in further detail, as the use of these programs are wide and would result in large amounts of information not entirely relevant for coordinators in PCM BBS.

The theoretical background, abbreviations, and definitions for terms not relevant for the PCM BBS team will not be included or defined in detail. Wärtsilä has a wide range of products and services, and thus only products and services provided by the Parts Coordination Management Centre Baltic & Black Sea team will be included in this thesis.

1.4 Abbreviations & definitions

In this chapter abbreviations will be determined, and definitions will be set for concepts included in the thesis. The aim for stating abbreviations & definitions is for the reader to get a better understanding of what will be explained and discussed in the thesis, as well as improving ease of conducting further research.

AOQL	All Open Quotation Lines	Online tool for viewing on-going quotations
AOOL	All Open Order Lines	Online tool for viewing on-going orders
BBS	Baltic & Black Sea	Sales area
ETA	Estimated time of arrival	Logistical term
ETD	Estimated time of departure	Logistical term
GD	Global distribution	WGLS function
OS	Operations Support	WGLS function
PCM	Parts Coordination Management	WGLS function
PD	Parts Delivery	WGLS function
PO	Purchase Order	Official document for orders
PQC	Parts Quality Coordination	WGLS function
PS	Parts Supply	WGLS function
RFQ	Request for Quotation	Official document for quotations
SO	Sales Order	Official document for orders
VAT	Value added tax	Tax
WGLS	Wärtsilä Global Logistics Services	Wärtsilä Services entity

1.4.1 Quotation

In PCM specifically, a quotation is an offer for spare parts and/or service made to the customer, to provide stated lead times, prices, and possible spare part numbers. These quotations are sent to the customer, which the customer can later use to issue a purchase order for the offered parts and/or services. The customer can use quotations to compare delivery times and prices with other suppliers and can then choose the most suitable for their needs.

PCM BBS quotations typically include the following information:

- Sold-to address & shipping address
- Vessel name and IMO number
- Wärtsilä contact person and information
- Customer references
- Terms of delivery
- Payment terms
- VAT numbers
- Quotation validity date
- Product/part numbers
- Prices
- Quantities
- Location where the products are delivered from

Once PCM BBS creates a quotation, SAP produces a unique number for that specific quotation, which includes nearly all necessary information for the coordinator to convert the quotation into a sales order (personal communication with PCM BBS senior coordinator, 17.10.2018)

1.4.2 Sales order

A sales order is normally generated through the coordinator entering a quotation number into SAP but can also be generated without a quotation as a reference. The sales order contains the same information as a quotation, but once the sales order is done, the products are reserved for the customer. To create a sales order, the coordinator needs to receive an official purchase order (PO) from the customer, which contains sufficient information to proceed with the delivery of the goods ordered on the PO (personal communication with PCM BBS senior coordinator, 17.10).

When creating a sales order (SO) in SAP, a unique number is also assigned to the SO. The coordinator can use this number to see what other documents are referred to in the SO, such as the quotation number, delivery number, transfer order, and invoice numbers. The unique number given to each SO is important for the coordinator to keep track of and archive, as this number is used to help other coordinators process and investigate the SO. The unique number also directly references the customers' own PO (personal communication with PCM BBS senior coordinator, 17.10).

1.4.3 Delivery

Under normal circumstances, the delivery is the last step for PCM BBS in the ordering process. After a PO has been received from the customer, a sales order has been created and completed, and an order acknowledgement has been sent to the customer, a delivery with a unique number is created. This delivery is linked to the sales order, as well as the quote in case the products and/or services were quoted beforehand (personal communication with PCM BBS coordinator, 18.10.2018).

Before releasing the order for delivery, the PCM BBS coordinator needs to know the estimated time of dispatch, estimated time of arrival, shipping address, customer contact information, and mode of transport. The coordinator will inform the customer when the delivery has been created, along with sufficient information so that the customer knows when they can expect to receive the ordered goods (personal communication with PCM BBS coordinator, 18.10.2018).

A typical e-mail confirming that a delivery has been created can look like this:

"Hello,

Thank you for confirming. Delivery XXXXXX has been created for your purchase order XXXX/YY/XXXX. ETA 20.10.2018, DAP Helsinki by express courier.

Best regards,

Coordinator"

The confirmation of delivery creation should include the necessary information in a short and clear manner, so that the customer can quickly glance at the e-mail and instantly know when and where the ordered goods will be delivered. Additionally, when a delivery that is considered urgent, more information should be included such as the name of the forwarder, packing list with volume and dimensions, exact time of arrival, and contact information in case any additional information is required (personal communication with PCM coordinator, 18.10.2018).

1.4.4 XS Claim

An XS claim is typically a customer complaint due to a quality deviation in products, documentation, delivery date, or technical specification. An XS Notification is created for each customer complaint, for Wärtsilä to gain a better understanding and improvement of WGLS processes. The coordinator that created the sales order is typically the one to record

the claim by creating an XS notification for a nonconformity. The XS claims are given a unique number, not too different from quotations and sales order. These unique numbers are linked to both quotations and sales orders and will be referenced to when for example crediting or debiting an invoice (personal communication with nonconformity expert 16.10).

1.4.5 Nonconformity

A nonconformity is the non-fulfilment of a requirement in a product or service against a contract, specification, standard, or legitimate customer expectation. For WGLS, a non-conformity occurs when WGLS fails to meet the defined scope, agreed performance or a commitment that has been made towards the customer (XS Claim Handling internal, 2014).

A few examples of nonconformity are:

- Deviation from sales order/contract
- Product (different product)
- Quantity (different amount)
- Price (different price)
- Delivery date (too early/too late)
- Deviation from product specification
- Poor quality
- Poor performance
- Damaged product

There are several stakeholders in nonconformity. It starts by the customer expressing his concern, giving a complaint or claim. The originator, usually the network company or sales area (Wärtsilä Finland, Wärtsilä Sweden), registers the feedback for resolution. The customer responsible person then searches for and initiates improvement actions. WGLS

works as the resolution owner, plans and manages the resolution/correction of the problem and triggers corrective actions (personal communication with Nonconformity Expert, 16.10.2018).

2 Background

An introduction of Wärtsilä as a company, including examples of their products and services, will be given in this chapter to give the reader a better understanding of the products and services sold by the PCM BBS team. There will be no in-depth information regarding departments & teams other than PCM BBS at Wärtsilä, as the thesis focuses on the processes in PCM BBS. Further focus will be set on Wärtsilä Services, and Wärtsilä Global Logistics Services, as these businesses are relevant to PCM daily work.

This chapter consists of several topics which are necessary to understand, to gain an understanding of the thesis. General explanations will be given for quality, archiving, and follow-up as terms in and of themselves, as well as what these terms include as concepts when discussed in an exclusive setting for PCM BBS at Wärtsilä. The concepts defined in this chapter will be focused on what is relevant for the PCM BBS team. There are several uses for the concepts defined in this chapter, but there will be no further explanation given for uses outside of the relevancy for PCM BBS.

2.1 Wärtsilä

Wärtsilä was established year 1834 in Finland (Wärtsilä History, n.d.). Today, they are a global leader in technology and complete lifecycle solutions on the marine and energy market. Wärtsilä consists of three businesses; Marine Solutions, Energy Solutions, and Services (About Wärtsilä, n.d.).

Marine Solutions provides its customers in the marine and oil & gas industry with safe, environmentally sustainable, flexible products and integrated solutions. It is a technology leader in its industry, with many years of experience and dedication. Wärtsilä can customise its solutions and products for optimal benefit to its customers all around the world (About Wärtsilä, n.d.).

Energy Solutions is a global energy system integrator, offering a broad range of solutions for energy markets. Their products include flexible internal combustion engine-based power plants, utility-scale solar power plants, energy storage and integration solutions, as well as LNG (liquified natural gas) terminals and distribution systems. At the end of 2017, Wärtsilä had installed over 67 GW worth of power plant capacity in 177 countries all over the world (About Wärtsilä, n.d.).

2.2 Wärtsilä Services

Wärtsilä Services provides internal and external lifecycle services, that enhance both customers' and Wärtsilä's own business. Wärtsilä Services has a broad range of services, that supports both shipping and power generation companies. As the markets are constantly changing, Wärtsilä Services needs to adapt and broaden their range of products, services, and solutions for both the marine and energy industries (About Wärtsilä, n.d.).

A few of these products, services, and solutions are:

- Engine services
- Propulsion services
- Service projects
- Seals & bearings services
- Hydro & industrial services
- Retrofit services

These services mentioned in the list above, cover everything from basic support with parts, field service, and technical support, to service agreements and condition-based maintenance. These services are flexible and efficient and can include services done from installation and commissioning of a new engine, performance optimisation, upgrades and conversions, to environmental solutions, technical information and online support (Wärtsilä Services product portfolio, 2016).

2.2.1 Wärtsilä Global Logistics Services

Wärtsilä Global Logistics Services manages the entire logistics chain of Wärtsilä Spare Parts, from order intake to customer delivery. They also have a crucial role in enabling sales by maximising availability and on-time delivery (Wärtsilä, WGLS Organisation internal, 2018b).

There are several different functions within the WGLS organisation:

- Parts Coordination Management (PCM)
- Parts Supply (PS)
- Parts Delivery (PD)
- Operations Support (OS)
- Finance and Business Control (F&BC)

As a more in-depth explanation will be given for PCM in the next Chapter, the other functions will be briefly introduced in this chapter (Wärtsilä, WGLS Organisation internal, 2018b).

The objective for the Parts Supply (PS) function is to serve their customers, mainly internal, by ensuring a high level of quality, the shortest delivery times possible, at the lowest cost of the required materials. PS consists of several main sub-functions; Quality Inspection, Vendor Claim Settling, Operative and Strategic Purchasing, and Inventory & Planning. Daily work for PS includes continuous improvement of the supply chain efficiency, material availability and logistic optimization (Wärtsilä, WGLS Organisation internal, 2018b).

Parts Delivery's main purpose is to provide high-quality logistics services, cost efficiently and on time. Warehousing, classification, tuning, inbound and outbound transportation, as well as invoicing, are some of their main tasks (Wärtsilä, WGLS Organisation internal, 2018b).

Operations Support main purpose is to prioritize, coordinate, and implement improvement projects. Analysis of customer claims, non-conformities, business reports, auditing and audit administration are their main tasks. They then use their collected data to develop solutions

for quality, on-time and cost in co-operation with other functions both within and outside of WGLS. The implementations of their solutions are made through system changes, trainings, and moderation of key user groups. OS works as the central contact point for WGLS strategy, environment health and safety, quality management, and training (Wärtsilä, WGLS Organisation internal, 2018b).

2.2.2 Parts Coordination Management North Europe

Parts Coordination Management (PCM) main responsibilities include creating spare parts offers, provide order confirmations, and follow-up spare parts delivery process for all product lines within Wärtsilä. Customers for PCM include both external and internal customers, including both Marine and Energy Solutions, as well as Services internal functions. The main goal of the PCM function, is to offer a high-quality service to their customers while providing the spare parts they need wherever, whenever (Wärtsilä, WGLS Organisation internal, 2018b).

In 2017, PCM had 182 employees in 14 locations. A few of these locations include Vaasa, Gdansk, Trieste, Genoa, Drunen, Ft. Lauderdale, Bogota, Sydney, and Singapore. PCM is in direct contact with the customers and handle customer spare part requests from quotations to orders as well as non-conformities. PCM product range includes the complete Wärtsilä product portfolio. PCM sends parts from 184 plants worldwide (PCM Parts Coordination Management internal, 2018a).

PCM, including but not limited to locations such as Vaasa, Gdansk, Ft. Lauderdale, Oslo, Tokyo, processes more than 135 000 orders annually, and supports around 1.6 million quotation lines per year (Wärtsilä, WGLS Organisation internal, 2018b).

Currently, PCM is split into two types of teams; PCM Traditional and PCM E2E. PCM Traditional has an indirect customer contact and handles quotes & orders from Service Unit

spare part coordinators, and their product range only contains WGLS products from WGLS plants in Kampen and Singapore. PCM E2E, or end-to-end, is in direct contact with the customer. The name is descriptive, as PCM E2E handles everything from customer spare part requests, quotations, orders, as well as non-conformities. PCM E2E product range includes the complete Wärtsilä product portfolio, and processes deliveries from 184 plants worldwide (PCM Parts Coordination Management internal, 2018a).

2.2.3 Parts Quality Coordination

The Parts Quality Coordination is part of Operational Support in Wärtsilä Global Logistics Services. The Parts Quality Coordination teams' main responsibilities include continuous improvement of WGLS processes through Quality Reviews, Non-conformity reporting and analysis, and corrective action follow-up (Wärtsilä, Nonconformity Management internal, 2016). Parts Quality Coordination will give their impressions of quality in PCM in Chapter 2.7.

2.3 Assessment of current situation at PCM BBS

This Chapter, the current processes in use by the PCM BBS team will be analysed. Focus is set on how PCM BBS identifies quality in their work, and the processes for archiving and following up on RFQ's, orders & deliveries. Quality in PCM BBS is defined by Jani Heinämäki, Team Leader for the NE team, and the processes for archiving and follow up is based on the qualitative interviews with three selected coordinators with varying degrees of experience.

2.3.1 Quality

According to Barsalou (2016, 172), quality is a subjective term for which each person or sector has its own definition. Barsalou (2016, 172) also refers to Ishikawa, who defines quality as "satisfying the requirements of customers". In daily work for the PCM BBS team, quality is mostly focused around quality of the service and of the internal process (personal communication 26.09.2018) so the definition set by Ishikawa (according to Barsalou 2016, 1) will be used for further reference in this thesis.

"The most important thing is that we always strive to do things 'first time right'. That means our customers and/or internal stakeholders would not have to come back to us requesting for changes/corrections/updates. Instead, we would always be on the top of every situation and having a proactive approach and mindset." (Jani Heinämäki, Team Leader PCM BBS, 2018)

According to Jani Heinämäki, Team Leader PCM BBS (personal communication, 25.10.2018), quality is something that should be present in many things within the work of PCM BBS. Most importantly, the coordinator should always strive for quality over quantity.

2.3.2 Archiving

The process of archiving for PCM BBS is in short to back-up data behind every quotation, sales order or delivery. This data can range from e-mails, requests for quotations, purchase orders, to agreements with the customer. Archiving is a way to make sure that all related information to the quotation, sales order, or delivery can easily be found, in case of another coordinator acting as a back-up, or for example when someone is on "24/7" duty during weekends. Having all relevant information available from the quotations, SO's and deliveries enables the coordinator and their colleagues to make the best decisions considering everything that the customer needs (Archiving presentation internal, 2018).

The coordinators will archive including, but not limited to, communications with customers, documents such as RFQ, PO, quotes, order acknowledgements, and VAT statements in SAP. These archived documents & communications can later be used as a reference to how customers should be treated, or if a customer has a question regarding an order or alike (Archiving presentation internal, 2018).

Generally, PCM BBS should archive all information that is deemed relevant for the order and/or quotation. Agreements with the customer, changes that were made, internal communication, and anything that is out of the ordinary is considered relevant and should be archived. As situations are never the same, there can be differences in what the coordinator should archive. However, it is important that the colleagues of the coordinator can find the last communication that happened between the customer and the coordinator (Wärtsilä, Archiving internal, 2018).

Archived information & documents in SAP and Fiori is used by Parts Quality Coordination to investigate orders with possible issues. Without archived information & documents, the nonconformity team would have no way of investigating outside of talking with the coordinator and in such cases the correct information might not be found. It is required that communications between the coordinator and the customer is archived, to protect all parties involved (personal communication with spare parts coordinator, 26.10.2018).

As communications between the customer and the coordinator happen through the coordinators' own e-mail address, not all communication is currently being archived correctly. Sometimes, this is due to human forgetfulness, and sometimes critical information was simply missed by the coordinator (Wärtsilä, Archiving internal, 2018).

Currently, the requests for quotations, purchase orders, quotations, and order acknowledgements are being archived through a common e-mail box system. This way, co-workers can investigate previous RFQ's & orders for a specific customer or coordinator, but as not all information is archived in outlook, some information might be missed (personal communication with spare parts coordinator, 26.10.2018).

2.3.3 Follow up

The act of following up on a quote, sales order, or delivery involves contacting the customer to provide an update on the situation, or investigating the current situation, without the customer necessarily asking for it. This is done to provide top quality service to the customer, even though it is not always expected by them (personal communication with PCM Team Leader, 17.10.2018).

Following up can involve communications with other departments, such as Parts Supply, to make sure that the requested parts are delivered to the right place at the right time. It can also mean that the coordinator investigates lead times, where improvements can be made, who is responsible for the next action to be taken, and what can be done to improve the quality of life for the customer. Following up can also mean that the coordinator contacts the customer and/or account manager regarding an open quotation, to discuss and customise the offer where possible, to make it more lucrative (personal communication with PCM Team Leader, 17.10.2018).

The coordinators in PCM BBS typically have a system of their own to keep track of and follow up on quotes, orders, and deliveries. These different systems will be investigated in Chapter 3, to give the reader a better understanding of what it means to follow up, and how it is done in practice. These systems are a core part of PCM BBS daily work, and should thus be investigated and where possible, improved upon.

2.4 Parts Quality Coordination view on quality in PCM

PQC, or Parts Quality Coordination that deals with continuous improvement of WGLS processes through Quality Reviews, Non-conformity reporting and analysis, and corrective action follow-up (Wärtsilä, Nonconformity Management internal, 2016) daily, have been interviewed by the writer. This was done to give coordinators in PCM BBS an impression of other departments views on quality in their work. As Quality is a large part of PQC daily work, their experiences and impressions matter to a large extent for PCM.

The questions that were asked during the interview were as follows:

- How would you define quality in PCM?
- What is something the PCM coordinator should focus on to keep quality on a high level?
- In investigating XS notifications, for example where the wrong part was delivered, how often do you find archived information lacking?
- What is your opinion on quality in PCM BBS specifically?

According the Nonconformity expert, quality in PCM is when the product and/or service is delivered to the end customer within the agreed scope of the contract, which refers to the quantity, quality, lead time, delivery conditions etc. leading to fulfilling customer expectations. Quality also refers to the process or environment in which the sales are performed. Thus, both PCM and PQC needs to take care of the associated tasks and make sure the quality is upheld throughout the whole process. Stakeholders of these processes relating to PCM, i.e. Purchasing, DHL, Technical Identification, Global Distribution, have a direct impact on the perceived quality of PCM from the customers perspective (personal communication with Nonconformity expert, PQC, 19.10.2018).

PQC wants PCM to focus on matching the customer requirements with their quotations and order acknowledgements. As there are many different criteria to focus on, such as correct spare parts, price, VAT, and shipping conditions, it is recommended by PQC to take the time needed to make sure everything is correct. Co-operation with other internal departments to ensure correct materials, shipping conditions, documentations, and on-time delivery should

also be utilized if necessary for a specific order (personal communication with Nonconformity expert, PQC, 19.10.2018).

PQC emphasises that proper and timely communication with the customer is key, to meet the agreed standard KPI's (key performance indicator) within PCM, and to make sure that a certain quality is upheld in the PCM process. However, it is important for PCM to not compromise quality for quantity to reach a certain KPI level. PCQ does not want PCM to strive to complete "X" amount of quotations/sales orders, but instead focus on upholding the quality in each quotation/sales order. It is important for PCM to understand the processes performed by the internal stakeholders in the various stages of the whole process, to be able to translate it to the customer and by not creating unrealistic expectations (personal communication with Nonconformity expert, PQC, 19.10.2018).

When PQC handles XS notifications, they do so by specific types of "tasks". For lacking information, PQC has two tasks: 331-1 and 331-2. The "1" means that PQC does not have sufficient information to start the investigation whilst "2" means that they were able to start the handling but got to a point where they could not continue without more information (personal communication with Nonconformity expert, PQC, 19.10.2018).

A Nonconformity Expert states the following regarding XS claims in PCM BBS:

"In the whole area we are working with there are approximately 18% of all claims opened having 331 -1 tasks, meaning lacking information to start off with. The number becomes less of course when splitting it up and I can comfortably say that Vaasa is one of the areas with the lowest 331-1 number as the information and pictures is enough. Some of the reasons is that the PQC team is sitting in the office and we are open for discussions about cases and, we have put certain actions in place to remind everyone about quality i.e. the quality chats. So, it is a constant reminder to perform good quality work. The PCM Centre Vaasa also knows that if they do not understand the claim from the customer, neither will the PQC team and it will only lead to more questions about the claim."

(Written statement by Nonconformity Expert, PQC, 23.10.2018)

Quality is a mindset, says PQC. The more people are reminded about it, the better outcomes in quality will be seen. At the end of the day, it is the responsibility of all departments to uphold quality. If there are weak links in the chain, it will affect the others. Quality is something that is never really done, but more of a goal to be worked towards (personal communication with Nonconformity expert, PQC, 19.10.2018).

3 Analysis of the current process

Analysis of the current process includes the thesis writer's own interpretation of the answers given by the selected coordinators. The writer will be utilizing a qualitative analysis to establish the result of the interviews, by having an on-going discussion under observation with direct questions asked throughout the observation. The analysis is divided into three sections; archiving, following up, and quality.

After reviewing and summarizing the answers from the qualitative interviews with the selected coordinators, the writer will identify the issues with the current processes and possible inconsistencies with the way of working. These issues will be considered in Chapter 3.2, where a standard will be proposed. The interview will be held in one session.

The writer has prepared the interviewees by stating the subjects which will be discussed, as follows:

- Archiving
    - SAP
    - Outlook
    - For yourself

- Follow-up
    - System for follow-up
    - Internal & External Communication
- Quality
    - Quality definition in PCM BBS
    - What PCM BBS should focus on with regards to quality

3.1 Interview methodology

In this chapter, theory for the qualitative, personal interview will be established. As there are many ways of constructing a qualitative interview, the theory in this thesis will be restricted to qualitative, personal, one-on-one interviews (Ekström, 2010, 54). First and foremost, the methodology for the qualitative interview will be set, to give the reader an understanding of how the interviews are constructed, and to explain the reasoning behind the chosen form of data analysis.

According to Ekström (2010, 55) the subjects and purpose of the research should dictate what kind of methodology should be used in gathering data. In cases where general data and knowledge needs to be gathered, quantitative methodology is recommended. In this thesis, where the issues can be more complicated, and processes differ from one another to a substantial degree, Ekström (2010, 55) recommends utilizing a qualitative approach to gathering data.

Ekström (2010, 55) mentions that for investigating and gathering data from the interviewee's work environment or processes used in their work, an on-going observation is recommended. This way, the writer will gain an understanding of how the interviewee's process and communications work on a day-to-day basis.

The writer of this thesis has chosen to gather data by a semi-structured interview combined with an on-going observation, where the writer acts as the interviewer and asks questions throughout the on-going observation. Utilizing this methodology, an understanding of the different processes in practice was gained, and the opinions of the interviewees were taken into consideration. Utilizing a semi-structured interview combined with an on-going observation, the quality of the interview can be considered stronger, as the interview does not only rely on the answers of the interviewees, but rather also their actions and behaviours (Ekström, 2010, 78-79).

The interview will be constructed according to the theory set by Ekström (2010, 55), as three different stages: an introduction to the interview itself, the on-going observation and discussion, and some questions directed at the interviewee. The goal behind this interview is to create discussion around the topics of archiving, follow-up, and quality in Parts Coordination Management, therefore the writer will continuously ask questions to create discussion. This discussion will then be interpreted and later analysed by the writer.

The choice of interviewees and an introduction of said employees will be explained and discussed in Chapter 3. Each interviewee will be given a short introduction, for the reader to gain an idea of how experienced the interviewee in question is. The questions included in this thesis are stated at the beginning of Chapter 3, and the answers will be interpreted, analysed, and summarized by the writer acting as interviewer. The questions have been constructed in such a way to include both the opinions of the interviewee, as well as for the writer to gain an understanding of the different processes in use by coordinators in Parts Coordination Management Centre Baltic & Black Sea.

3.1.1 Interview structure

In each subchapter for the coordinators, an introduction of the coordinator is given to give the reader an impression of how the interviewees differ from one another. As their experience in PCM BBS varies to a certain degree, the writer expects their processes to be different to a certain extent. However, it is important to note that PCM BBS has guidelines for how archiving should be done. These guidelines are explained in Chapter 2.5.

The direct questions asked by the writer in the interviews are as follows:

- How would you define quality for PCM BBS?
- What do you archive?
- How often do you utilize archived information?
- How often do you find archived information lacking?
- Describe what kinds of issues you have encountered personally if/when needed information/document has not been archived.
- Do you keep a system for yourself for following up?
- What way of following up are you using?
- Do you find that the quality of your work is improved when keeping track of RFQ's/orders by using this system?
- Are your customers generally satisfied with your follow-up?
- Are your ETA's provided to the customer generally met?
- What should PCM BBS focus on with regards to quality in the future?

Starting off the interview, the writer will be introducing each topic and what will be discussed. In the beginning, the writer will ask the interviewee how they define quality so that the writer can put the interviewees answers to the other questions into perspective.

3.2 Coordinator 1

Coordinator 1 has the least experience in PCM BBS team, having worked in the team for close to 6 months. Their title is Spare Part Coordinator, Parts Coordination Management Centre Baltic & Black Sea. Coordinator 1 also has previous experience in the marine industry for over 1 year as a coordinator (personal communication with Coordinator 1, 22.10.2018).

3.2.1 Archiving

Coordinator 1 usually archives the customer communications and documents, such as PO, OA, RFQ and quotation, in one e-mail archived in SAP. On-going cases are kept in a folder in Outlook that co-workers have access to until they are resolved, after which they are archived in Outlook in a separate folder that co-workers also have access to. Documents and customer communications are also archived behind the order related to the XS claim. They do not have a separate system for archiving outside of SAP and Outlook (personal communication with Coordinator 1, 23.10.2018).

When Coordinator 1 is met with a customer that is unfamiliar to them, they utilize the SAP transaction "Z_10001J – Order list Join". This transaction gives a list with previous quotations and sales orders. The results contained in this list can be restricted to for example vessel, customer, sales organization, order type. The list can also be sorted according to several different variables, such as creation date. Generally, Coordinator 1 checks the 5 latest orders to gain an understanding of the customer, how they are treated, what needs to be included in the order, or how to communicate with them. The communication between the coordinator and the customer is the most important part of using past orders as a source of information (personal communication with Coordinator 1, 23.10.2018).

Cases where archived information is lacking happen too often according to Coordinator 1. When archived e-mails or other documents are missing from the sales order or quotation, the order acknowledgement can still be found as this is automatically added as an attachment when printing it. Even though this is better than nothing, it does not give any other information other than what is found in the sales order itself in SAP. This results in a hard time finding out what the customer has ordered. In these cases, where the responsible coordinator that has created the sales order is out of the office and unreachable, coordinator sees the first step to be asking co-workers if they have any additional information. If not, the only solution would be to contact the customer and ask for the purchase order. This is of course to be avoided at all costs, as it makes Wärtsilä seem unprofessional and unorganized (personal communication with Coordinator 1, 23.10.2018).

3.2.2 Following up

Coordinator 1 does not use a separate system for following up on quotations, orders, and deliveries outside of Outlook and SAP. However, they do use the tool "AOOL" (All Open Order Lines) in Fiori to check for spare part availability. In outlook, the coordinator keeps a separate folder where all on-going cases are kept and marked with categories. Even though AOOL has recently been introduced, the coordinator does not feel like it has improved the quality of their work. This might partly be because of AOOL still being in its early stages of implementation (personal communication with Coordinator 1, 23.10.2018).

Coordinator 1 prefers using e-mails over direct calls. This varies depending on what the problem/reason for following up is. In case something is delayed by a couple of days, the coordinator generally does not follow up. When delays are nearing weeks, the coordinator will contact the customer to inform them of the situation. If the delivery is urgent, the coordinator will follow the delivery closely and call the customer when necessary (personal communication with Coordinator 1, 23.10.2018).

In Coordinator 1's experience, customers are generally happy with updates regarding their orders even though they have not asked for it specifically. ETA's given to the customer are also under normal circumstances kept. The coordinator has however experienced customer dissatisfaction regarding XS claim handling speeds by Wärtsilä. On the software side of things, the coordinator has often experienced that deliveries are not automatically created after releasing the sales order. Further investigation is recommended as to why this is happening, as this can cause long delays in case it is not caught in time (personal communication with Coordinator 1, 23.10.2018).

3.2.3 Quality

Coordinator 1's perception of quality in PCM BBS does not differ much from that of PQC, stated in Chapter 2.7. Making sure that the correct parts are included on quotations and sales orders, dimensions are correct, delivery will be on time, and making sure that the fault does not lie with the coordinator. Mistakes have and will happen, but through improved quality, PCM BBS can minimize the number of claims by making sure everything is according to agreements with the customer (personal communication with Coordinator 1, 23.10.2018).

For the future, Coordinator 1 would like to see a more proactive approach towards the customer. By this, they mean that the coordinators should think from the customer's perspective, to get an understanding of what the customer expects from Wärtsilä. Increase customer satisfaction by providing services above their expectations. Keeping a customer satisfied with the service provided should lead to an increase in sales. Coordinator 1 also emphasises that in the future, PCM should continue to focus on doing this right the first time (personal communication with Coordinator 1, 23.10.2018).

3.3 Coordinator 2

Coordinator 2 has more experience than Coordinator 1, and less than Coordinator 3. Coordinator 2 has worked in PCM BBS as a spare part coordinator for 1,5 years and has 4 years of previous experience in Wärtsilä. However, this experience is only relevant for software/process relevant tasks and not as much for specifically PCM related tasks (personal communication with Coordinator 2, 01.11.2018).

3.3.1 Archiving

Coordinator 2 archives all official documents, and generally the last bit of communication that happened between the coordinator and the external customer. For internal sales orders, Coordinator 2 finds archiving to not be as necessary as external SO's. In Outlook, Coordinator 2 archives everything in one folder, available to the whole PCM BBS team. The specific e-mails are marked with the "follow-up" flag, with SO number added. Utilizing this method, the customer can easily see what orders are to be released, and the relevant SO number needed for the order. The coordinator also has a folder for on-going cases, which also have the follow-up flag added with SO number. Coordinator 2 does not keep a separate system for archiving for themselves. They do however keep a list in Excel for everything they have sold in the past month, which they update once a week (personal communication with Coordinator 2, 01.11.2018).

Coordinator 2 uses archived information in both SAP and Outlook quite often. In cases where customers have a question regarding a previous order, or a specific spare part that they have ordered, SAP order list joined in used. When backing up a co-worker, coordinator 2 uses archived information mostly for reference on how to handle specific customers. However, they have noticed that archived information is lacking, and in some cases only the customer PO is archived in SAP. Coordinator 2 would like to see that at least the latest bit of communication between coordinators and customers are attached in SAP. When

information is missing either from SAP or Outlook, and the responsible coordinator is unavailable, Coordinator 2 contacts the Account Manager for that specific customer. If necessary, the coordinator will also contact the customer to ask who they have been in contact with, or if they have any document numbers available (personal communication with Coordinator 2, 01.11.2018).

3.3.2 Following up

As previously stated, Coordinator 2 uses the "follow up" flag feature in Outlook to follow up on orders, quotations, and XS claims. For deliveries, the coordinator keeps "sticky notes" (feature in Windows 10) separately. At the end of each work day, the coordinator goes through these sticky notes, to check that everything looks OK and that the delivery process has started like it should. Unlike Coordinator 1 & 3, Coordinator 2 does not use AOOL consistently. In their opinion, they feel that AOOL slows down the work process, as it is not sufficiently user friendly or efficient in terms of communication to be used as an alternative way of communicating with PS (personal communication with Coordinator 2, 01.11.2018).

Utilizing the "follow up" flag system that they are using, the coordinator finds that the quality of their work has improved significantly. They stated that they simply have too much to keep track of, to be able to do it without this system. An example of the "follow up"-flag creation can be found in figure 1 (personal communication with Coordinator 2, 01.11.2018).

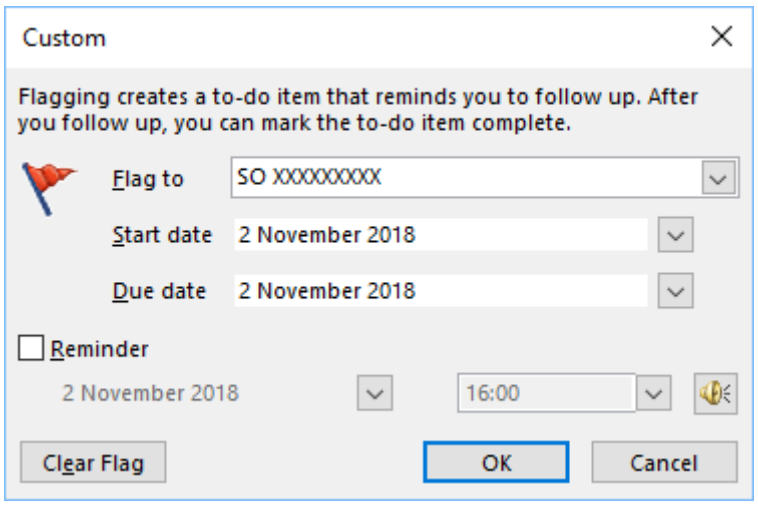

Figure 1. "Follow up"-flag creation

Generally, Coordinator 2 does not follow up on deliveries that are a few days delayed. This depends on the urgency of the order, but they only follow up on a delivery if it is delayed by 4+ days. In their experience, information to PCM about delays are not sufficiently communicated, and that PCM often receive information about said delay after it is already too late. When informing a customer of a delay, the coordinator does not expect an answer. In their experience, an answer from a follow-up e-mail is rare. If there is an answer, it is a positive one. According to Coordinator 2, they cannot remember the last time a negative answer was received from following up on a quotation, an order, or a delivery (personal communication with Coordinator 2, 01.11.2018).

Coordinator 2 has found that most ETA's promised to the customers are kept. Most delays happen when an order contains DGR goods. When delays happen and PCM BBS is informed, it is often too late. Further investigation as to why PCM is not informed in time is recommended (personal communication with Coordinator 2, 01.11.2018).

3.3.3 Quality

Coordinator 2 wants PCM BBS to fulfil the customers' expectations, but not too much more. Should the coordinator give more than the customer expects, they might expect the same treatment in the future. It is a fine line between being helpful enough, and too helpful. Coordinator 2 mentioned that "managing expectations is an important part of PCM BBS work". Quick replies, good explanations, clear communications, delivering what was promised, and on-time deliveries, are the core part of quality in PCM BBS according to Coordinator 2 (personal communication with Coordinator 2, 01.11.2018).

In the future, the coordinator would like to see it made possible for PCM BBS to handle XS claims themselves, up to a certain value. They would also like to see that PCM BBS coordinators would be able to find necessary information themselves, without going through too many other departments. For example, access to CRM for tech requests, or attachments in TKB by technical services. The coordinator would prefer this, as contacting technical services can cause delays and extra work for the many parties involved in the process. In general, the coordinator sees that there is too much information being shared from one place to the other. This can cause delays, and loss of said information (personal communication with Coordinator 2, 01.11.2018).

Coordinator 2 would like to see that PCM BBS are more direct with feedback to the customer both internally and externally. It is a fine balance to keep. Customer contact should be good, and the coordinators should adapt to the customer (personal communication with Coordinator 2, 01.11.2018).

3.4 Coordinator 3

Coordinator 3 is by far the most experienced coordinator in PCM BBS. This coordinator has worked in the PCM BBS team as a coordinator for 5 years. Their official title is Senior Spare Part Coordinator, Parts Coordination Management, North Europe Baltic & Black Sea. Before working in PCM BBS, they have experience in the Wärtsilä factory as a material handler, material coordinator, and other various tasks (personal communication with Coordinator 3, 23.10.2018).

3.4.1 Archiving

Coordinator 3 considers archiving to be a crucial part of PCM BBS daily work. Not only does it help co-workers investigate past orders and deliveries, but also confirms what has been agreed upon for a specific order. The coordinator considers everything that is relevant to an order to be archived in SAP, as once the agreements with the customer has been archived, they can be used as evidence as to what has been stated (personal communication with Coordinator 3, 23.10.2018).

Coordinator 3 primarily uses SAP to archive information, as this information can also easily be found by co-workers. Generally, in sales orders, the coordinator archives the order acknowledgement e-mail together with all attachments included in the communication, as well as a separately attached e-mail for when the delivery has been issued. XS claim numbers are archived in the sales order, not as an attachment, but rather in the “Additional data B” tab of the sales order (personal communication with Coordinator 3, 23.10.2018).

Should the coordinator be absent from work, they will use the tool "AOOL" (All Open Order Lines) in Fiori. They will export the list of open order lines to an excel file and make that available to the co-worker working as their back-up while the coordinator themselves are out of the office (personal communication with Coordinator 3, 23.10.2018).

They stated that archived information has gotten better over time, as more and more information can be found, archived in orders. However, there are still cases where archived information is either lacking enough to not be sufficient, or not existent at all. When investigating an order or how a customer should be treated, the coordinator uses the SAP transaction "Z_10001J – Order list Join" to see what has been previously ordered, offered, or delivered (personal communication with Coordinator 3, 23.10.2018).

In cases where the archived information is missing, big delays might occur. As the coordinator themselves need to "dig up" information from SAP or Outlook, it can be time consuming and might cause delays in delivery times for the end customer. Asking for more information from the original order handler might not be possible, if they are out of the office, and that makes some cases very uncertain and hard to process further (personal communication with Coordinator 3, 23.10.2018).

3.4.2 Following up

Coordinator 3 expects the system to work and thus does not keep a separate system for tracking on-going deliveries but pays extra attention to DGR (dangerous goods regulation) deliveries, as these tend to cause delays in an automated system. Quotations and sales orders are however kept in a separate folder in Outlook, to give the coordinator a list of what is currently on-going. After an on-going case has been resolved, the coordinator will archive the information in SAP, and move the e-mail from the folder. The coordinator utilizes the "AOOL" tool to follow up on lead times both internally and externally. Using this tool, the coordinator can instantly see when a specific spare part will arrive in stock, and when it can

be dispatched. This can be communicated towards the customer, to sufficiently inform them when their ordered spare parts will be available for dispatch. (personal communication with Coordinator 3, 23.10.2018).

The coordinator stated that they are following up on an RFQ, purchase order, or delivery in cases where issues occur, such as delays in identifying the correct spare part or receiving the spare part to stock. Generally, the customer is satisfied with the information provided to them, as the customer can adapt to delays if they are well informed about them. In cases where the delivery of the order is urgent, the coordinator prefers to call the customer regarding the issues instead of communicating via e-mail. When talking over the phone, customer wishes, and feedback are immediate, and the information reaches the correct person much faster. However, in direct contact with the customer, some information might get lost in the discussion, so it is a good idea to send an e-mail after the call to summarize what has been discussed and agreed upon (personal communication with Coordinator 3, 23.10.2018).

According to the Coordinator, customer meetings in person are paramount to the satisfaction of the customer. In customer meetings, the customer and coordinator shares experiences and processes, and thus gain and understanding of what the other part needs in terms of information. Considering the human factor, the customer meetings are also beneficial for putting a face behind the communication via e-mails or calls (personal communication with Coordinator 3, 23.10.2018).

Coordinator 3 has found that deliveries from Kampen (GLS1) generally keep the ETA promised to the customer. They mentioned that DGR deliveries are hard to follow and tend to get stuck somewhere along the way of the automated system, but other than that they have not found any larger issues with the deliveries going from Kampen. Factors such as the shipping address of the goods affect the lead times, and sometimes it can be hard to tell if the ETA can be kept. In cases where deliveries are done to an island, such as Gotland in Sweden or Ahvenanmaa in Finland, there can be delays because of the logistics involved in delivering to an island (personal communication with Coordinator 3, 23.10.2018).

3.4.3 Quality

Coordinator 3 defines quality in PCM BBS as such: “Confirm the order as you intend to deliver”. By this, the coordinator means that PCM BBS should be sure that the spare parts included in the order should be what the customer is asking for, the delivery should be done according to what is stated on the order acknowledgement, and the prices should be kept the same. The coordinator recommends to double check the order, so that everything is correct. Issues caused by mistakes done by the coordinator are costly and time consuming for the many parties involved (personal communication with Coordinator 3, 23.10.2018).

The coordinator wants PCM BBS to focus on internal communication in the future, as it is not sufficient with certain departments. Internal and external communication should be kept separate, to exclude the customer where the coordinator deems fit. The coordinator also wants PCM BBS to be able to directly contact purchasers responsible of a certain material directly, as general inboxes are in some cases too slow when the coordinator requires a rapid answer (personal communication with Coordinator 3, 23.10.2018).

3.5 Issues

In this chapter the issues, if there are any, with the different processes for archiving and following up will be explained. Any conflicting, different, or specific process will be considered as a potential issue, as differing processes can result in problems for other Coordinators in both archiving and following up. Should one coordinator be out of the office, and a customer requires a status update, or other general follow up, different ways of archiving can result in difficulties when trying to find specific information. The customer might also require a certain treatment, with information that cannot be found by a coordinator other than the coordinator specifically responsible for that customer. Archiving and following up will be split into different subchapters, to separate the issues and make it easier to follow for the reader.

3.5.1 Archiving issues

When a Coordinator has an on-going case, be it quotation, sales order, delivery, or even XS claim, information might be missing. Coordinators tend to archive information after the quotation or sales order has been completed and sent to the customer. For example, this means that if coordinator X has an on-going case where technical identification is required but goes on sick leave, and technical identification requires more information, there might not be any information archived behind the quotation. This is because often, no information, e-mails, pictures, or other communication, is archived in cases that are on-going.

When PQC are handling XS claims, through Fiori, there might be missing archived information. When this happens, two types of tasks will be created; “331-1” and “331-2”. Without sufficient information from PCM, PQC cannot proceed in handling the XS, and PCM cannot proceed with the solution for the customer. From the customer perspective, this ultimately falls on the first point of contact, PCM. Significant backlog of XS claims in PQC can also cause delays in claim handling speeds. When there more claims than normal, the process of creating an XS claim, processing it, finding a solution, implementing the solution, possible crediting and debiting, and free of charge orders, can take upwards to a month. Even though the fault does not lie in either PCM or PQC, the customer sees this as PCM being slow, which can lead to further complaints to PCM.

Once a claim has been created, Coordinator 1 archives the relevant communication behind the sales order as attachments. Coordinator 3 on the other hand, only adds the XS notification number in the “Additional data B”-tab. When a coordinator is unfamiliar with a customer, they might be checking previous orders for that customer. Should something have gone wrong with a sales order for a specific customer, there is no easy way of telling if an XS claim has been created for that sales order. This can only be done by checking the attachments, or checking the “Additional data B”-tab. Upon reviewing the selected three coordinators’ ways of archiving XS claims behind sales orders, the different ways can be confusing and hard to find for a newly hired coordinator. Further investigation is recommended into how the rest of the coordinators in PCM BBS are handling archiving XS information behind sales orders.

Archiving in Outlook differs from the selected three coordinators. Coordinator 1 archives the different cases in separate folders, named according to customer name, quote or sales order, SO/quote number and customer purchase order number. The folders are also sorted according to the date they were created. Coordinator 2 archives only relevant e-mails in one folder, such as e-mails containing RFQ, PO, quotation, and OA. Coordinator 3 does not archive completed cases in Outlook but claims and orders pending are kept in separate folders. Coordinator 3 finds that the information only needs to be attached in the SAP transactions. These different ways of archiving in Outlook might make it complicated for other coordinators to find a specific mail, containing valuable information for a specific case. Should a coordinator be trying to find information, they will have to search every possible place where the information might be archived. For example, in finding information for a customer of Coordinator 3, the information can be found archived in the SAP transaction for the SO, but not in Outlook.

All selected coordinators stated that archived information is not always found in SAP. This varies from coordinator to coordinator, but it seems that archiving communications in SAP is too easy to forget. Further investigation into solving this is recommended. When it comes to an order that went wrong, for example when an XS claim is created for it, it should be clearly visible. Investigation into solving this is also recommended.

3.5.2 Follow-up issues

The selected three coordinators have a varying idea of when it is necessary to follow up with a customer. In the experience of Coordinator 1, customers see the ETA date that PCM provides them with as a confirmed delivery date, while in reality, it is an estimated date of delivery. Because it is an estimation, Coordinator 1 does not usually follow up on orders and deliveries if they are delayed by one or two days. This of course depends on the urgency of the order, or if the customer has specifically requested an ETA. Coordinator 2 generally, depending on the urgency of the order, allows up to 5 days for the actual delivery date to deviate from the ETA provided to the customer. Coordinator 3 generally follows up on cases

where issues occur, to make sure that the issues are resolved. In all the three selected coordinators' experience, the customer appreciates the follow-up, as they can then adapt to the issues to minimize further problems, such as expecting a delivery one day but receiving it the next. This is especially relevant when the delivery is made directly on-board the vessel, and service engineers are waiting for the shipment. Coordinator 3 also follows up internally on technical identification tasks that are taking longer than expected to complete. This is done utilizing a simple system of sticky notes (feature in Windows 10) outside of SAP and Outlook.

When to follow up on quotations, orders and deliveries, differs to some extent in PCM BBS. This might cause the customer to expect a follow-up, as they are used to the treatment. Should the order be handled by a coordinator that does not generally follow up, the customer might experience the service as sub-par. Other customers that are not used to follow-up communication might not even want it and can see follow-up communication as unnecessary. As the Coordinators in PCM BBS have customers assigned to themselves, it is crucial that information is sufficiently provided to the other coordinators, in cases where the assigned coordinator is unavailable or out of the office. This ties into archived information, especially in SAP as it is the primary source of information regarding the customer.

In communicating with the customer, they might expect the coordinator to be more technical than they are. Communications with customers vary to a certain extent, where the coordinator might be talking to the chief engineer on-board the vessel, a first engineer, an agent, or simply a purchaser. Because the customers can be different in terms of technical knowledge, the coordinator needs to adapt their way of communicating technical information. If a coordinator is unfamiliar with the customer, they might not know what to expect in terms of technical information.

All three selected coordinators are keeping on-going cases in a folder in Outlook that they check daily. This system differs to some extent but is generally easy to understand and find. Both Coordinator 1 & 3 are utilizing the new tool "AOOL" (all open order lines). In this tool, the coordinator can find including, but not limited to, availability dates, SO numbers, customer names, and communications with Parts Supply. In AOOL, the coordinator can and

should also leave a comment if necessary to communicate with PS. Further communication regarding a material, spare part, or whole sales orders, happen through AOOL between PS and PCM. This is done to minimize the amount of e-mails sent internally, and the order lines are also visible for every coordinator (with comments from PS and PCM).

4 Establishing a standard

In this chapter, the current processes used by the three selected coordinators will be analysed, to propose a possible standard that will be implemented for improving quality within the daily work of PCM BBS. The analysis of the current process is divided into two sections; archiving and following up. This is to sufficiently separate the current state of these two processes, as these processes differ to a certain extent.

Archiving mainly focuses on improving the ease of archiving, harmonizing the way of archiving, and what technical difficulties may arise. The process of following up, however, mainly relies on the communication skills of the coordinator and their ability to keep a system for themselves to keep track of several RFQ's, purchase orders and deliveries.

4.1 Standard proposal

In this chapter, the writer will suggest a standard for archiving and following up. A harmonized way of working will be proposed to later be used in the implementation stage of this thesis. The suggested standard will take the current processes and issues into account, to solve and/or compromise on the different processes for the three selected coordinators. Indicative information regarding customer communications with stakeholders will also be

included, in Chapter 4.1.3, as it is crucial for the coordinator to be able to properly communicate important information.

4.1.1 Archiving

Archiving in SAP is mandatory for all coordinators in PCM BBS. As this is sometimes forgotten, it is suggested that a reminder of sorts be added to SAP, in cases where sales orders contain no attachments. In sales orders with an XS claim linked to them, it is suggested that coordinators add the XS number into the “Spare Part/Product sales claim” in SAP, the “Additional data B”-tab. In adding the XS number in the sales order to the SO, the coordinator opening the sales order can be immediately notified of the XS Claim linked to the sales order. If necessary, the coordinator checking the SO can also investigate the XS claim using the XS number, to see what went wrong in the order and avoid such issues in the future. If possible, a pop-up screen should be added into SAP that notifies the coordinator checking the SO of the existence of said XS claim. Further investigation for adding a pop-up screen with XS claim information is recommended but will not be included in this thesis.

An option of automatically archiving e-mail communication in Outlook will be suggested. By automatically archiving e-mails in Outlook, the coordinator can focus on other tasks, while the archiving is done correctly by itself. On top of the automated system, the quotation and/or sales order number is to be added to the subject line of the e-mails. This way, other coordinators can easily find what has been discussed regarding specific cases, by entering the quote/sales order number into the search field in Outlook. Further investigation into whether the infrastructure of the Outlook servers support this, if other coordinators choose to opt into automatically archiving e-mails as well.

To automatically archive sent e-mails, a rule will be applied in Outlook:

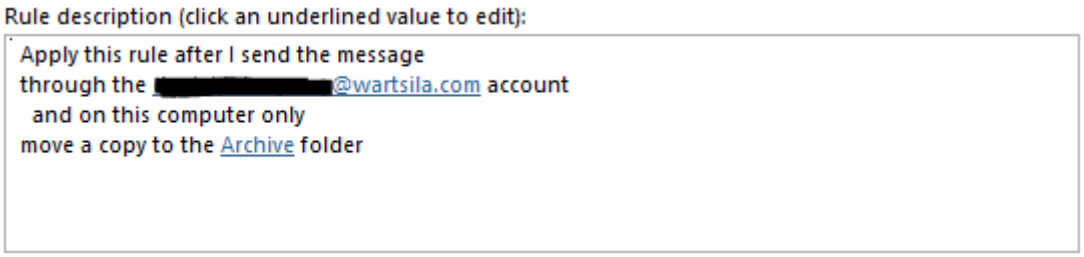

Figure 2. Archiving rule in Outlook

The coordinator can assign the e-mails to be moved to a folder of their choosing. Exceptions can also be added to this rule, should the coordinator choose to not want to move everything. For example, e-mails only containing an attachment, sent to a specific receiver, can be archived.

The coordinator can also add a rule to exclude certain e-mails:

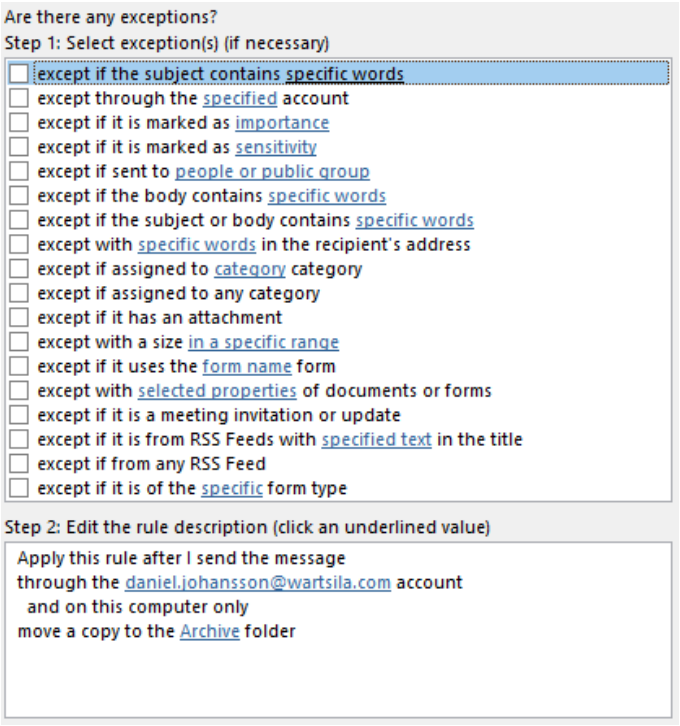

Figure 3. Exceptions in Outlook rule

When a coordinator sends an e-mail, the same e-mail is archived in both their own "sent items" folder, as well as in a folder that everyone has access to, under the common e-mail box for PCM BBS. As the coordinator sends an e-mail, with the quotation and/or sales order number added to the subject line, other coordinators can find all communication by searching for said quotation/sales order number in Outlook. Finding one e-mail with the sales order number added is enough in most cases, as one can then find all related e-mails by right-clicking the e-mail and choosing *"Find related → Messages in this conversation".*

The search function in Outlook can also be helpful in finding certain e-mails, by using it to its full potential. Operators such as AND, NOT, OR, <, >, =, can be used to define the search in further detail. By using quotation marks in the search field, one can search for an exact phrase. Several search conditions can be used in a single search function, separated by a space in between each search condition. For example, if the coordinator is searching for an attachment that was included in an e-mail that was sent last week, by a person named Daniel Johansson, the search function would look as follows: "*received:last week hasattachment:yes from:"Daniel Johansson*" (Microsoft, Outlook / Manage and organize, n.d.)

4.1.2 Following up

In this chapter, the standard for following up will be proposed. General information such as how to clearly communicate a follow-up question or message will be discussed later in Chapter 4.1.3, after the standard for systems, decisions & processes have been set in this chapter. In the on-going observation of the three selected coordinators, the writer can conclude that the different systems in use work well for the coordinators.

According to Jani Heinämäki, Team Leader PCM BBS (personal communication, 05.11.2018), it ultimately falls under the responsibility of each coordinator to establish what system to use in following up on quotations, orders, and deliveries. The coordinators are responsible of customers which have been assigned to them. The coordinators know their

customers best and can adapt to their customer according to their wishes. Getting to know their own customers is paramount to customer satisfaction, as coordinators change their way of communication, processing of quotations and orders, and following up. The standard mentioned in this chapter is to be considered for new hires and can influence other coordinators to a certain degree.

When coordinators follow up on a request for quotation, sales order, or delivery, the communication often happens using e-mails. Should the matter be urgent, the coordinator will if possible call the customer or stakeholder, such as an agent or internal handler (personal communication with Team Leader PCM Jani Heinämäki, 02.10.2018).

The "AOOL"-tool, All Open Order Lines, has been purposely built for following up on sales orders. In this tool the coordinators can see, including but not limited to, sales order number, sales organization, when an item is available in stock, comments from Parts Supply, item category, sales type, spare parts description, and even leave comments of their own for PS to read. Using this tool, PCM can minimize the amount of e-mails going between PCM & PS and communicate information for each spare part included in an order (personal communication with Key User, PCM BBS, 02.10.2018).

In the AOOL tool, the coordinators can see all sales order lines which has not yet been dispatched from the warehouse. The AOOL tool is highly customizable, with several filters for both including and excluding specific sales orders. The columns are movable, scalable, and removable. Each coordinator can save their own layout of AOOL, to be used later so that the customization is saved. It is important to note that the AOOL tool is still in development, and that more feedback is required to make it more effective on a daily basis. There is also another version of the tool, called AOQL, all open quotation lines. The idea behind this tool is the same, but for quotations. These tools can effectively be used to follow up either quotation lines or sales order lines, both internally and externally (personal communication with Key User, PCM BBS, 02.10.2018).

In the AOOL tool, changes in delivery date are marked with colour to make it easier for the user to distinguish when an item will be delivered earlier or later than promised to the customer. No colour indicates that the current ETA is still the same as the ETA promised to the customer. Orange colour indicates that the sales order item is delayed and will be delivered later than what was promised to the customer. Lastly, green colour indicates that the item will be delivered earlier than estimated (personal communication with Key User, PCM BBS, 02.10.2018).

To see all on-going deliveries that a specific coordinator has released, the coordinator can use the SAP transaction "ZWGLS_INBOX". This transaction has many uses but for seeing all on-going deliveries, that have been packed but not yet delivered, the following parameters are to be used (marked in yellow):

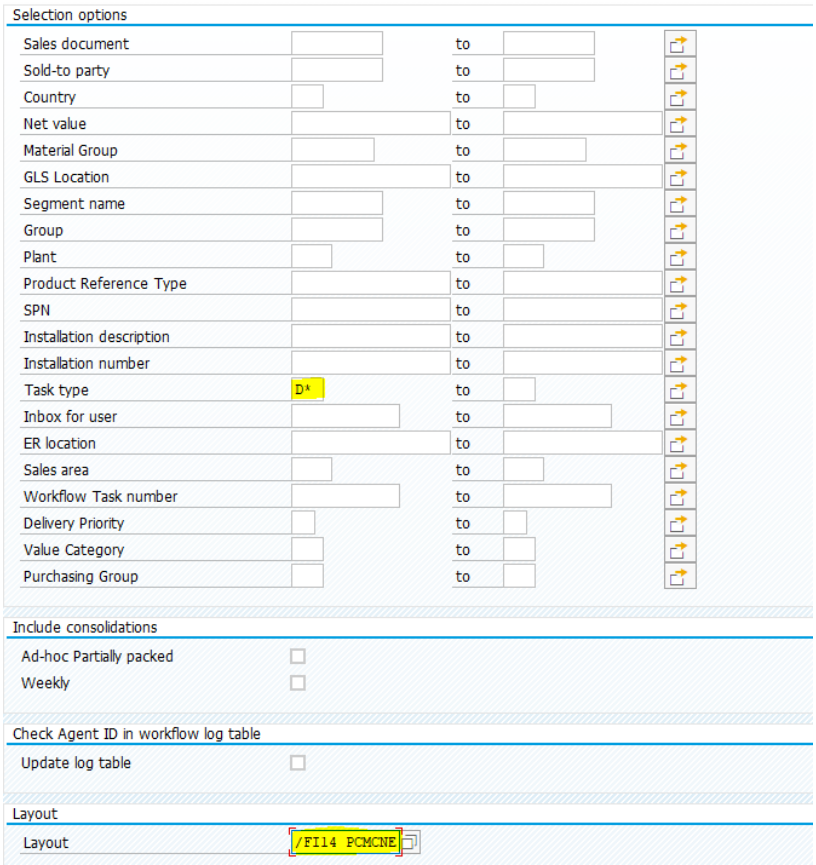

Figure 4. ZWGLS_INBOX parameters

By entering the “D*” parameter into “Task type”, all tasks starting with D are listed. These “D”-tasks range from D10 to D21.

A short description of the “D”-tasks are listed below:

- D10 – Delivery packed
- D11 – Shipment creation
- D12 – Carrier selection
- D13 – Proforma invoice
- D14 – Customs process
- D15 – Shipment finalization
- D16 – Departure
- D17 – POD
- D18 – Freight costs
- D19 – POD Final invoice
- D20 – FCA pre-notification
- D21 – FCA Pickup info

(Wärtsilä, GD presentation internal, 2018).

Many of these tasks are automated, and thus not all these tasks are visible in the ZWGLS_INBOX transaction. Tasks such D10, D12, D17, and D21, are the most relevant for PCM BBS. Should a task get stuck, the coordinator can see this and inform or enquire about it with the Global Distribution team (Wärtsilä, GD presentation internal, 2018).

Deciding on when to contact the customer with a follow up on a quotation, sales order, or delivery, is in the hands of the coordinator themselves. The coordinators know the customers that have been assigned to them and should understand when to contact them, when not to, and what type of communication is preferred by the customer. By handling orders for their assigned customers, through customer meetings, calls, and simply experience, the

coordinator can get to know their customer and thus improve the service provided to them (personal communication with Jani Heinämäki, PCM BBS, 05.11.2018).

4.1.3 Customer communications

According to Dignen and McMaster (2013, 119), there are three major writing styles:

- Formal, which is more elaborate and impersonal way of communicating
- Neutral professional, which includes more direct sentences and is closer to spoken English
- Informal, which uses everyday words and sentences structured like everyday conversation

Depending on the customer, and the relationship the coordinator has with said customer, the writing style should differ. As a coordinator handling a new customer, that the coordinator is unfamiliar with, the e-mail should be structured in a neutral professional way, bordering on formal. Should the coordinator be familiar with the customer, having met at times, and the customer is used to a certain way of communicating, the coordinator should use an informal way of writing.

The way of communication is dependent on how familiar the coordinator and the customer are, and typically, the customer is used to a certain way of communication with a certain coordinator. Because of this, the coordinator should have the ability to adapt their way of communicating through e-mails with a certain customer or stakeholder.

In writing clear and understandable e-mail, Dignen and McMaster (2013, 119-120) state the following aspects:

- Greet the reader
- Explain your reason for writing
- State further actions
- Polite close

Coordinators can utilize these aspects of writing clear and understandable e-mails for following up on a quotation, sales order or delivery. Opening the e-mail, the reader should immediately know to whom the message is addressed, reading the greeting.

Following the greeting to the reader, the explanation for writing should be given in a clear way so that the reader is instantly aware of to which quotation, sales order or delivery, the e-mail is about. For example, the first sentence could be: "Regarding the delivery for your order reference XXXX/YY/XX". Once the reader has been given an understanding of which quotation, sales order or delivery the communication references to, the further actions should be stated by the coordinator. This could be a question regarding one of the materials sold to the customer, or tuning information necessary for proceeding with tuning for a spare part included in the order.

As most customers for PCM BBS are European, English is not usually their first language. This Chapter will include information on how coordinators should effectively communicate potentially complex information with stakeholders that might not speak fluent English. Coordinators should refrain from using overly complicated language when communicating with customers, that they know do not speak fluent English. As some coordinators also have more technical knowledge about the products or services they are offering than the customer, coordinators should also take the customers understanding of technical terms and concepts into account, when communicating directly with them.

Hartley and Chatterton (2015, 127) refer to Alan Barker for three golden rules of effective writing, in his book *Writing at Work: how to create successful business documents*, published by the British Industrial Society:

- Use words your reader will recognize easily
- Construct straightforward sentences
- Make your point, then support it

Hartley and Chatterton (2015, 130) have constructed a table for agreements on using plain English in business communications. The table will be summarized in the next section, to give the reader an outline of what Hartley defines as plain English.

To effectively communicate with the customer using plain English, the coordinator should use short sentences. The coordinator should look for ways to combine shorter and longer sentences, as longer sentences are harder to read and difficult to understand as a customer speaking a foreign language. These sentences should average 15-20 words and should commonly start with the subject (Hartley & Chatterton, 2015, 130-133).

An example of a common sentence used by coordinators in PCM, with a good structure, is:

"Thank you for your order, please see our order acknowledgement attached."

This sentence emphasises that the customer has placed an order and urges the customer to look at the attached order acknowledgement, which formally acknowledges that PCM BBS has received and processed their order.

Punctuation is an important aspect of constructing sentences, as it can change the meaning or emphasis of the sentence in question. According to Hartley, writers should familiarize themselves with the conventional uses of punctuation marks, use those punctuation marks consistently, and recognise that punctuation marks are important for the reader to know when to pause and which parts of the sentence belong together (Hartley & Chatterton, 2015, 135).

5 Implementation

In this chapter, the implementation will be explained. The methodology will be specified, and the process will be explained in further detail. In Chapters 6.1 – 6.2, the writer will analyse and results of the implementation. In Chapter 6.3, the writer will determine based on the results of the analysis, if the overall quality has improved for the selected coordinators. Should the results be positive, the writer will also consider the positive and negative outcomes from implementing the standard for other coordinators.

5.1 Method of implementation

Parts of the suggested standard are already in use by coordinators, and thus the suggested standard will be tailored to a certain degree, to fit the respective coordinators' current processes. The implementation will be discussed in detail with the subject coordinators to make sure that they have sufficient information of what changes are to be made. After roughly one week after the implementation, the writer will proceed with a short observation to determine if the suggested solutions are being used, and to what extent. The writer will then follow up the observation with a short discussion with the respective coordinator, to determine the results of the implementation.

In Chapter 5.2 suggestions for improvements and changes will be made. The changes will be tailored according to the respective coordinators' current processes in use. It is important to note that the possible improvements and changes are suggestions by the writer, based on the answers from the interviews conducted in Chapter 3. The opinions of the coordinators are important, as to not disrupt their daily work. The suggested improvements and changes can also be applicable for new hires, to give them the grounds to establish a solid base of processes for different tasks.

5.2 Suggested improvements

The core aspect of archiving in PCM BBS, is to make it easier for other coordinators to find the communication between a specific coordinator and the customer. By adding a document number to the subject line of an e-mail after processing the task, be it quotation number, sales order number, XS claim number, or delivery number, other coordinators can search for communication related to that specific task. The different ways of sorting on-going and completed cases will stay the same for the selected coordinators. However, it is suggested that the coordinators apply automatic archiving of sent e-mails to their processes as described in Chapter 4.1.1. Through automatic archiving of sent e-mails, it is guaranteed that past communication is found in Outlook by other coordinators in PCM BBS when required.

It is important for coordinators to archive on-going cases in SAP as well, especially if they know that they will be unavailable. By adding attachments behind quotations and sales orders, co-workers can with ease see what the customer requires, what has been communicated both internally and externally, and what needs to be done next. When other coordinators are investigating an on-going or past case, the first thing they will generally check is the archived attachments in SAP. After a case has been completed, at the bare minimum, the last communication between PCM and the customer needs to be archived. By attaching the last communication, other coordinators should be able to see the whole chain of communication in one e-mail. If several people were involved in the communication in

different e-mail chains, those chains should also be attached separately (personal communication with senior spare part coordinator, 02.11.2018).

To speed up the XS claim handling process, the coordinators need to make sure that all relevant information is added into Fiori, the interface for creating XS notifications. Without all necessary information, PQC might not be able to process the claim, and different tasks will be created. These tasks lead to delays for the end-customer, which should be avoided at all costs. It is also possible for PCM to add additional information to the claim through the SAP transaction "QM02", after the claim has been created in the Fiori interface (personal communication with Nonconformity expert, 25.10.2018).

When an XS claim is created for a specific sales order, it is suggested that the XS claim number is added to that sales order. This is done to make it visible for other coordinators that the sales order was incorrectly done. The coordinator investigating the previous sales order can use that XS claim number, to see what went wrong. However, without the XS claim number added to the sales order, the same types of issues that happened in the previous sales order can appear in the new one.

As stated previously in Chapter 4.1.2, each coordinator in PCM BBS are responsible for their own customers, and therefore need to adapt their way of following up accordingly. A suggested system for following up for coordinators in PCM BBS is encouraged to be used as a basis for developing a system of their own. In general, customers appreciate updates on changes in the delivery of their order. By providing the customer with an accurate ETA, the closer the current date is to the ETA, the customer can adapt their following operations and processes according to the latest ETA provided by PCM BBS. The writer suggests that confirming the receipt of a request for quotation or purchase order from the customer, is mandatory in almost all cases. Exceptions include cases where the coordinator is sure that the processing time will not take longer than 48 hours for quotations, and 24 hours for sales orders. Should the processing time exceed these time limits, for example due to technical identification, credit limit issues, lead times and sales prices missing, the coordinator should confirm that the e-mail was received and being processed. In doing this, the customer is

informed sufficiently that the e-mail was received and will not need to be sending unnecessary reminders to PCM BBS.

An example of confirmation of receipt is:

"Hello,

Thank you for your inquiry. Technical identification is required for spare part number XXX YYY. Any additional information provided will help in speeding up the process, such as images of the nameplate and dimensions of the part. Once we have identified the part, I will revert with our quotation.

Please contact me by responding to this e-mail with any additional information or questions regarding the process.

Best regards,

Coordinator"

AOOL, "all open order lines"-tool should be used in following up on spare part availability for sales orders. Whether the follow up is needed internally with Parts Supply, or externally to customers, the tool will provide the coordinator with sufficient information to inform the stakeholder of when the specified spare parts can be shipped out. Internally, AOOL provides the coordinator with an alternative way of communicating customer needs and wishes to Parts Supply. With PCM BBS comments on specific needed spare parts, PS can plan accordingly to make sure that required spare parts are available in stock when the end-customer needs them.

6 Analysis and results

In this chapter, the writer will analyse the complete implementation process. First, the methods used for gathering data and implementation will be analysed including how the methods suited the selected coordinators, and what could have been done differently. Secondly, the implementation itself will be analysed including possible issues, the coordinators' opinion of the implementation, as well as if anything was necessary to leave out of the implementation. Lastly, in Chapters 6.1-6.3, the results of the implementation will be analysed.

In the on-going observation of the selected coordinators, it was clear that they each have their own way of both archiving and following up. The systems for archiving the coordinators have in use are organized and clearly structured, even for someone not familiar with their specific systems. The interview gave the writer a clear picture of the systems they are using, and how to complement their already structured systems. As the interviews were semi-structured, it allowed the writer to keep the discussion on-going throughout the whole interview, thus finding the answers the writer was looking for. The questions were broad enough for the answers to include general information, while keeping necessary detail where needed.

6.1 Archiving

The implementation should have been gradually introduced, as a sudden change in the way of working can to an extent disrupt the coordinators' daily work. After implementing the suggestions, some steps in the process are either lost or forgotten in the hectic daily work of a coordinator. The process of automatically archiving e-mails in Outlook was not included in the improvements for any of the selected coordinators, as they did not deem it necessary for their work. Automatic archiving would also flood their folders with e-mails unnecessary

for archiving purposes, as the Outlook list of variables is not sufficient in filtering out unwanted e-mails. All three selected coordinators were informed of the different ways of searching for e-mails in Outlook, described in Chapter 4.1.1. This information has given the coordinators a way to more efficiently use Outlook for archiving purposes.

Coordinator 1 archives all their communication regarding specific quotations and sales orders in separate folders, available to all coordinators in PCM BBS. These archived e-mails are labelled by adding the quotation/sales order number to the subject line and are therefore easy to find for other coordinators (personal communication with Coordinator 1, 23.10.2018). The writer suggests that no changes are made to the archiving process in Outlook for Coordinator 1, as it can be disruptive to their daily work. However, in the implementation process, Coordinator 1 will focus on archiving more information to on-going cases in SAP, in case they will be out of the office.

Coordinator 2 archives all their communication with the quotation/sales order number added to the subject line, and thus the writer does not deem it necessary for Coordinator 2 to change their way of archiving. Important information in the communication between Coordinator 2 and the customer can be found, archived in Outlook, by other coordinators in PCM BBS (personal communication with Coordinator 2, 01.11.2018). The coordinator will put focus on archiving XS claim information in sales order, to indicate where issues have occurred in past sales orders for specific spare parts. The writer suggests that Coordinator 2 focuses more on archiving documents in SAP, especially in internal sales orders. This way, other coordinators in PCM BBS can investigate past orders when required, or handle cases that are on-going in case Coordinator 2 is unavailable and out of the office.

Coordinator 3 archives documents in SAP in such detail, that the writer deems it unnecessary to improve or change. All information needed can be found in SAP, should the quotation/sales order have been handled by Coordinator 3 (personal communication with Coordinator 3, 23.10.2018). However, as with the other coordinators, Coordinator 3 will focus on archiving documents in on-going cases, as well as making sure to add XS claim information in the sales order.

6.2 Following up

As suggested earlier, the process of following up should be kept separate for each coordinator, so that they can adapt their system for following up on a quotation, sales order, or delivery, according to the customers assigned to themselves. In the on-going observation and the interview, the writer noticed that it is paramount for the coordinators to have freedom in their way of working. The foundation for the way of working should be established, but for coordinators to be able to provide a high-quality customer service, resulting in increased customer satisfaction and a boost in sales, the coordinators need to have the freedom of customizing that service according to their customers' needs.

Coordinator 1 will focus on the AOOL-tool, and a more in-depth discussion will be held to give further information on how to successfully use it in their daily work. They will also increase their pro-active communication with the customer, to determine if it influences customer satisfaction. According to Coordinator 2, they have not had any negative feedback from customers for a long time. In conclusion, their process of following up is deemed sufficient in the eyes of their assigned customers and does not require further improvements or changes (personal communication with Coordinator 2, 01.11.2018). Coordinator 3 already uses the AOOL-tool to its full extent, and thus no change is needed in that area. However, Coordinator 3 is suggested to adding quotation/sales order numbers to the subject line of communication between them and the customer. Adding the sales order number to the subject line, other coordinators can find communications in Outlook with ease, should Coordinator 3 be unavailable.

6.3 Quality

As coordinators are reminded of the importance in archiving and following up, quality will improve. Through proper archiving, especially in on-going cases and XS claim information, PCM can improve on the work for other departments and co-workers, and thus improve their own quality indirectly. By minimizing human forgetfulness and utilizing different types of systems to help with that, the writer sees the suggested improvements having a positive effect on quality in PCM BBS daily work. Changes are still required, especially in the software in use by the coordinators, such as a solution for reminding the coordinator to archive a document in cases where archived documents are missing from the sales order. A proper way of archiving in Outlook is also recommended for further research, as it will not be included in this thesis. In the end, quality comes with experience. As stated by PQC in Chapter 2.7, PCM can minimize the number of mistakes by archiving information properly for PQC to investigate. The coordinators can help increase quality for their co-workers by archiving properly in both SAP and Outlook.

7 Summary

In this chapter, the writer will summarize the entirety of this thesis. The purpose of this summarization is for the reader to get an understanding of what was researched, how the data was gathered, the suggested implementations, as well as the results of the implementation.

Chapter 7.1 will include the conclusions drawn by the writer from the entirety of this thesis. In concluding the results of the thesis, the issues brought up from the interviews with selected coordinators (Chapter 3.5) and the results of the implementation of the standard (Chapter 5) will be summarized. Important to note, is that the results of the interviews are the writer's own interpretation of the coordinators' answers. In Chapter 7.2 the writer will discuss the thesis, including the choice of subject, methods used, results, and their own interpretation of the success of the research.

7.1 Conclusion

The purpose of this thesis was to determine the possibility to improve quality in the Parts Coordination Management Centre Baltic & Black Sea team, by setting standards for archiving communication and follow-up on quotations and sales orders. In conclusion, the writer finds that the quality can indeed be improved through proper archiving and follow-up. Proper archiving will result in more information available for other coordinators, that are handling cases for unfamiliar customers. It is important to highlight that to improve quality in archiving, proactive checking of past quotations and sales orders is necessary by other coordinators. Following up on quotations, sales orders, and deliveries, might result in improved customer communications, and thus lead to improved quality. Determining the level of follow-up to be used with certain customers are for the respective coordinators to decide, as each coordinator know the customers assigned to themselves best.

Issues in archiving are mostly found in on-going cases, as coordinators tend to attach documents to SAP quotations and sales orders only after the cases are completed. This can cause issues in handling these on-going cases, should the responsible coordinator be out of the office or otherwise unavailable. In cases where PQC investigate an XS claim and the information is not sufficiently provided or not archived, delays will occur. Issues brought up in this thesis are highlighted for the Team Leader of PCM BBS and are recommended for further investigation. Finding a solution for these issues is recommended, to further increase the quality in PCM BBS.

In following up with customers regarding quotations, sales orders, deliveries, or claims, it is proven difficult to determine when it is beneficial to do so. In most cases, the three selected coordinators had found that customers are satisfied with some level of follow-up. Completely neglecting following up in cases of delays, or unclear communication, is not recommended. Rarely, the customer sees information provided by PCM BBS as redundant.

Each coordinator uses different processes for both archiving and following up, and harmonizing those processes are important to ensure the quality in handling orders for customers unfamiliar to a specific coordinator.

7.2 Discussion

By bringing forth processes and systems in use by different coordinators has been an educational and worthwhile process. In doing so, both issues and effective solutions are found, thus making harmonization of the processes and systems in use easier to achieve. In gathering data, it became apparent that processes differ to a certain degree for each coordinator in PCM BBS. Each coordinator has customized their way of working to an extent, where the processes fit the respective coordinator, while still being understandable for other coordinators in the team. Some necessary standards need to be set, such as the way

of linking communication to quotations and sales orders by adding relevant numbers to the subject line and archiving necessary documents in SAP. However, if the processes are similar enough while still being effective for each coordinator, those processes should not be altered.

More time should have been considered for the implementation process, to gain a much broader understanding of the processes and to better tailor the standard to fit the needs of the coordinators in PCM BBS. When one is used to their routines, drastic changes in the way of working can be disruptive for the daily tasks. In the implementation process, it was also noticed that the software in use by PCM BBS does currently not support what the coordinators would have required of it. The software in use was not in-depth analysed or discussed in this thesis but is recommended for future research.

In conclusion, the writer sees this thesis as a successful analysis of the current situation in PCM BBS. Issues were brought up, and suggestions for improvements were discussed and suggested. Without finding issues in the daily work of the coordinators, improvements are conclusively hard to find as well. With the suggested standard, it should result in an easier transition into the work of coordinators for new hires. The standard creates the foundation of the processes, and the responsibility of further altering those processes to fit each specific coordinator falls on themselves. This thesis has been incredibly educational, and the writer would like to express his gratitude towards the Parts Coordination Management Centre Baltic & Black Sea team, Parts Quality Coordination, the selected coordinators that took part in the interviews, and the Team Leader for PCM BBS.

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