

TAMPERE POLYTECHNIC

BUSINESS SCHOOL

FINAL THESIS REPORT

Spare Parts Business Processes Product Commodity Management Process Book



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Degree Programme in International Business November 2005 Supervisor: Anasse Bouhlal

TAMPERE 2005

Bibliography

I would like to present this section of my Final Thesis Project to the readers to give a summarizing story how this work has been done.

As it will be mentioned in the "Research Method" section of this report, the document was created during my internship at CNH France S.A Parts Operations, Le Plessis Belleville.

During my internship, which stared on July 1st 2005 and lasted till the end of December 2005, I had a chance to: successfully complete the internship itself, learn almost everything about Parts Operations and make a first step forwards my professional carrier.

The knowledge I have received during my studies at Tampere Polytechnic University 2003 – 2005, helped me in the beginning of my work placement to maintain a two – way conversation with the experienced people working at CNH Parts Operations.

The knowledge I gained during my stay at CNH Parts Operations, helped me to create my Final Thesis Project and therefore to obtain the Bachelors Degree in International Business Administration.

As I had a rather unique position, according to my boss: Mr. Roberto Varetto (Processes and Program Manager Parts Operations), indeed I managed to get acquainted with all business processes performed at our location.

I would like to name my internship as a big challenge and an on – going learning phase, which I enjoyed very much.

To close:

I would like to THANK the personnel of Tampere Polytechnic who shared their knowledge with me, the personnel of CNH who offered the best internship position I could just dream about.

I sincerely hope that you will enjoy reading this report as I enjoyed writing it!

Student in International Business Administration (2003 – 2005)

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Abstract

The purpose of this Product Management Process Book is to provide a new employee hired for a Product Manager position with a complete set of self-study material. The content of this process book covers all the activities of the Product Manager in the areas of Product Marketing and Product Management within the Spare Parts Business.

This process book is composed by three main parts. In the first part, there is a brief introduction of the company. There are so many things to say about this company since throughout its history the company went through many changes and this makes it a real professional in its area of business.

The second part of the process book concentrates on the Spare Parts Business Processes and the procedures within the After Sales. In this section are described the major business processes, their work plans and output impacting the complete process flow.

The third and final part of the process book is a guideline to follow for any Product Manager working for a large or medium sized enterprise. It explains in detail all the activities of a performing Product Manager. The process book includes the exact daily procedures with pointing out the actions to be taken in managing the assigned product commodities in particular cases (depot stocked/direct ship programs).

To summarize the content of this Final Thesis Project it is necessary to understand the objective and target of this document.

After reading of this document reader should get a broad overview of the CNH as a company, get to know the After Sales in detail with the emphasis on Product Commodity Management as the main subject of the Final Thesis Project.

Keywords: After Sales Business Processes Procedures

Materials Management Order Fulfillment
Product Commodity Management
Product Marketing Action Plan Composition / Set up
Direct Ship / Depot – Stocked Program Set up
Wholesale / Retail Communication
Networking / Support to other company functions

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Part 1

Research Method

The path I have followed to complete my Final Thesis Project differs from the traditional way of conducting a research study usually used by students in writing their Final Thesis Projects.

Most of the students, according to my personal experience, since I am currently one of them, use plenty of reading material when writing their Final Thesis Projects. In my case, the process I went through was completely different.

By nature, I am more practice than theory oriented. This is the main reason; my thesis is mostly real – time practice business manual in the area of Product Commodity Management than a composed story regarding the chosen subject. Personally, I prefer to speak about the real things than about something really theoretical, which does have a good idea behind but at the end of the day it still remains as a theory on paper and not implemented in practice.

This Final Thesis Project has been conducted during my internship at CNH France SA Parts Operations. I worked in Process and Program Management function and my tasks were to develop Process Materials for the company personnel, especially for new employees joining the company who do not have enough background information about the working policies of CNH.

For completion of my Final Thesis Project I used live sources of information, which were the Managers of various Parts Operations Departments I had a chance to work with while completing the tasks that I was assigned to.

During my internship at CNH I was assigned to various tasks in almost all the departments listed below, which are represented at the Le Plessis Parts Operations location:

- Parts Marketing (Product Marketing & Operational Marketing);
- Planning;
- Procurement;
- Purchasing;
- After Sales Purchasing;
- Distribution:
- Human Resources:
- Information Systems Department;
- Transportation;

- New Product Launch;
- Materials Management;
- Expediting;
- Finance Control;
- Inventory Control....

From the list provided above you may see that our location more or less represents all the possible company functions. This indicates that I had a perfect opportunity to conduct my Final Thesis Project, since I was always welcomed to ask any type of question regarding the subject somehow related to my project.

As mentioned, the information used to conduct my Final Thesis Project was gathered during my meetings with the Management Team members of Parts Operations.

During my meetings with the Managers, I questioned them about their activities and major responsibilities when performing their daily routine tasks.

The main objective of my meetings was to get as much exact and most practical information from them as possible as it was the best source of information I was ever able to get close to.

In addition to my regular meetings with the Management Team, I had the access to the Intranet. From the Intranet I was able to find the historical information about the company, as it is important to understand the complexity of business processes since CNH is actually a merge of a large amount of brands of Constructional and Agricultural equipment.

Objective

The objective of this Final Thesis Project is to give an overview on Spare Parts Business Processes performed at CNH Parts Operations, taking Product Commodity Management as a focus subject for my project.

I have chosen this subject for my Final Thesis Project because of my personal willingness and curiosity to know as much as possible about the company that offered me a chance to pass my internship program.

During my internship I had a chance to learn by practicing all the functions of CNH in the area of Spare Parts Business that is normally called After Sales.

During the phase of composition of my Final Thesis Project I managed to satisfy my curiosity, significantly improve and expand my own educational background and experience as well as conclude the project itself, which is the last step to graduate from my University.

Additionally, in my opinion, the work I have done helped not only me in this case, since it is, and can be used for other peoples benefit.

This Final Thesis Project is a useful set of study material that can be used by different people for different purposes.

Firstly, this material is a useful set of information for new employees of the company who do not have a clear view on company working policies, especially new hired people for the Product Manager position. The Product Managers are the target group this project was completed for, since it describes all their activities and responsibilities in detail.

Secondly, it is a perfect self – study material for anyone who is interested in After Sales Business Processes as this document provides practical information with a minor part of theory and gives a reader a real – time picture from a Business Battlefield, proved and tested by the leading producer of Agricultural & Constructional Equipment as well as the After Sales Service Provider.

I would like to underline the paragraph above since this is the highest value of this Final Thesis Project. All the information used for the completion of this final thesis was gathered during my internship at CNH. Therefore, the information, presented in this document is a set of best practices aiming for more successful performance of the company.

CNH Identity

CNH represents a family of brands that have shaped the history of agricultural equipment. The CNH heritage includes the combined legacies of Braud, Case, Claeys, Fiat, Flexicoil, Ford, International Harvester, New Holland, Steyr, and many others. This rich heritage of leadership defines the organization today.

In the first years of mechanization in the agricultural industry, the companies were in their simple beginnings. Men like Cyrus Hall McCormick and his reaper, Jerome Increase Case and his thresher, Abe Zimmerman and his portable feed mill, Leon Claeys and his threshing machine, Alexandre Braud and his stationary thresher, and Henry Ford and his Fordson Tractor were literally dreaming the future of working machines.

The history of International Harvester began in the fields of Virginia during the 1830's on the farm of Robert McCormick. At the time, one of the most demanding, backbreaking jobs was reaping the standing grain. Between 1810 and 1830, Robert McCormick experimented with mechanizing this process. His son, Cyrus McCormick, continued his father's work and developed a working version of a mechanical reaper in 1831. This reaper would serve as the impetus for the McCormick Harvesting Machine Company, formed in 1848. This company, which led to the creation of International Harvester in 1902, would go on to pioneer the first dealer distribution channel, the first full-line product offering (implements, tractors, harvesting, hay, etc), the first diesel wheel tractor in the U.S., and the first axial flow combine. International Harvester's signature product, the famous Farmall tractor, was a pioneer for row-crop tractors.

A contemporary of Cyrus McCormick and just ten years his junior, Jerome Increase Case was also making his mark on agriculture in the mid-1800's. In 1842, Case founded his 'Racine Threshing Machine Works' on the strength of his innovative thresher. His wooden thresher greatly increased grain production during the busy harvest season, enabling 10 times more wheat per day than hand methods. This increased level of production was critical during the Civil War period when hands were short and demand for wheat was high. While the thresher was, quite literally, putting bread on the table for J.I. Case, his company expanded into the steam engine business in 1869. Using a locomotive type boiler to develop about 8 h.p. for driving threshers and sawmills by belt, farmers loved the steam engines because they could run all day. By 1886, Case was the world's largest manufacturer of steam engines, and by the late 1930's, threshing machine sales dropped to a level that accounted for only a fraction of Case business. The machine, upon which a company had been built had outlived its practical usefulness, but not before the 100,000th thresher came off the assembly line.

In 1864, Josef Werndl founded the Steyr Company with a vision for making bicycles. While he did eventually get into the bicycle business, for many years Steyr grew as a diversified industrial manufacturer. In 1915, the company first entered the tractor business, and grew in stature until their defining moment in 1947 – the introduction of the legendary model tractors. This marked the company's entry into large-scale tractor production and established Steyr as the market leader in the Austrian market. With the models, Steyr made a considerable contribution towards improving working conditions, profitability and productivity in the agricultural sector. In the sixties, Steyr went on to introduce the first Steyr crop loader and the first Steyr four-wheel drive tractor. Today the Steyr brand is known for its innovative and high-tech solutions for agricultural, forestry and municipal companies.

Braud is the oldest company of those united today under the blue leaf logo of New Holland. It was in 1875 that the stationary threshers constructed by Alexandre Braud started to earn a reputation throughout the Loire-Atlantique region of western France. A plant was set up at St.Mars-La-Jaille, France in 1898 and later transferred to Coex, France. Growth continued for over seventy years and the achievements were impressive. However, the harvester market entered a crisis period in the 1970s and Braud turned its attention to a new customer with vast potential: the vine grower. The work in vineyards was still done manually as in previous centuries. Introducing machinery into that magical process, full of tradition, which is the grape harvest, did not prove easy. Vine growers saw the need but maintained that it was impossible for a machine to gather a fruit as delicate as the grape. However, with the close cooperation of their customers, Braud introduced the model 1020 in 1975: the first Braud grape harvester. The 1020 was a commercial success, but as a pioneering product left room for improvement. In 1979, Braud unveiled its improved model, the famous Braud 1014, the best-selling grape harvester in the history of the vineyard. The French market rocketed closely followed by the German market. Four years later, there were over 2,000 Braud grape harvesters at work in France, Germany, Austria, Italy, Spain and Portugal.

In October 1895, the opening of a one-man repair shop on the edge of New Holland, Pennsylvania drew little attention. Nevertheless, this tiny shop, and its 26-year-old machinist Abe Zimmerman, were the birth of a company that would one day sell its machines on every continent. Zimmerman's New Holland Machine Company would carve its niche in the 20th century as an innovator of agricultural equipment. Included among the company's early industry firsts are the portable feed mill in 1899, the freeze-proof cylinder tank engine in 1901, and the stone crusher in 1910. These machines and others like them propelled record growth for the company through the 1920's, but then came the Great Depression. Like

most companies during these difficult years, New Holland verged on the brink of failure, hammering out an existence with whatever foundry contract work could be found. Nevertheless, even as the company struggled to survive in the spring of 1937, a solution to its problems was pulled through a field of early cut rye almost within sight of the factory. In 1940, New Holland introduced the revolutionary Nolt mobile pickup hay bailer. This product re-established the company as a leader in agricultural equipment. What followed was a shift in direction towards hay and forage equipment, with improved forage harvesters, rakes, and spreaders. As the 1950's approached, New Holland was poised to become the industry leader in grassland farming.

Born in 1879, Leon Claeys began his career as a bicycle technician at the age of 18. Having spent some time in the world of agriculture, Claeys knew how labour intensive the job of harvesting and threshing was, a process then carried out entirely by hand. Setting out to improve upon this process, Claeys founded his own company, 'Werkhuizen Leon Claeys', in 1906. Three years later, he built his plant in Zedelgem, Belgium where operations remain today. His first threshing machine was stationary and powered by a horse in a treadmill. While very successful, Claeys immediately began work on a diesel engine to replace the horse, and in 1947, the stationary thresher was at the height of its success.

Henry Ford had something other than cars on his mind in 1883. A 20-year-old just off the farm, he was thinking about how fieldwork could be better done by machines. After he mastered the assembly line automobile in the early 1900's, Ford returned his attention to tractors with the 1917 formation of Henry Ford and Son. By the end of that year, Fordson tractors were coming off the assembly line, and an order for 7,000 was placed by Great Britain to boost wartime food production. During the 1920's, 75 percent of U.S. farms used a Fordson tractor. Henry Ford, had for a second time in his life, now dominated an industry, and he did not let up. The middle of the 20th century was filled with more tractor innovations, like the three-point hydraulic hitch, and the famous 9N Ford Tractor for only \$595. By 1966, Ford Tractors were number two in sales worldwide, and as more North American land went into production, Ford responded with more models and larger tractors.

The First World War was still raging when a group of influential industrialists and government members met in a field outside Turin with Giovanni Agnelli to see Fiat's very first agricultural tractor. This tractor, the Model 702, was the first agricultural tractor to be produced in Italy, and perhaps the whole of Europe. It went on sale in 1919 and was manufactured alongside cars and trucks in Fiat's original Turin factory. Built for plowing and powering stationary threshing machines, the Model 702 was rated one of the most efficient tractors in the world and enjoyed

very strong export sales. It played a major role in the farm mechanization revolution that took place in the early 20th century.

Flexicoil, founded in 1952 by Emerson and Kenneth Summach, began as a family owned and operated business based in Western Canada. The first product developed and marketed was the coil packer, used in the seeding process. While the simple perfection of coil packer technology makes the product as relevant today as it was then, Flexi-Coil's emphasis on research and development has since broadened the company's offerings to include seeding, planting, tillage and chemical application equipment that set industry standards. Over nearly 50 years, a focus on solving growers' problems with innovative technology allowed Flexi-Coil to expand from their base to markets around the globe.

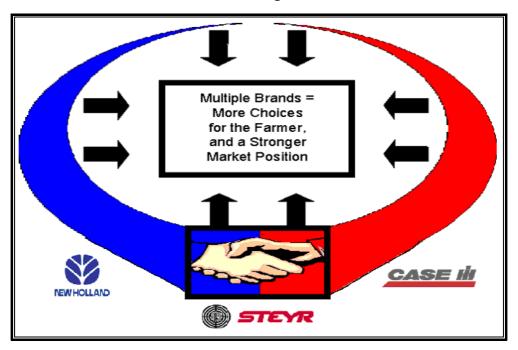


Figure 1: CNH marketing strategy (Source: CNH Process materials)

The tradition of innovation runs deep throughout the roots of all of the brands. Over the course of the last 170 years, people have been dreaming and creating the future of agricultural mechanization. This spirit of innovation has been a driving force behind the growth of all the companies over the years, and one of the common elements that has unified them today. This spirit is also very much a part of our ongoing strategy as the CNH continues to grow and define the future of mechanized farming.



Local Global Leader Committed, Successful

Figure 2: CNH evolution (Source: CNH Process materials)



Our Values - How we behave:

Integrity - We possess and steadfastly adhere to high moral principles and professional standards.

Teamwork - We work together cooperatively. **Diversity** - we value and build upon the collective power of our similarities and differences.

Open & Honest Communication - We listen to others. We are truthful and impartial. We actively communicate.

Trust & Respect - We are fair, considerate and thoughtful.

Fact-Based Decisions - W gather the facts before making decisions. We integrate different ideas and perspectives when making decisions.

Accountability - We exercise our authority to make decisions and we take responsibility for the consequences of those decisions. We meet our commitments.

Proactive Performance - We anticipate changes in business cycles and customer requirements. We initiate solutions to problems.

Passion for Excellence - We strive for outstanding results in all that we do.

Figure 3: CNH Value Creation (Source: CNH Process materials)

CNH Today

CNH is the power behind the Case and New Holland families of leading agricultural and construction equipment brands. Supported by more than 12,000 dealers in about 160 countries, CNH brings together the knowledge and heritage of the brands with the strength and resources of the worldwide product design, manufacturing, distribution, support and finance organizations.

CNH's global reach and deep local roots gives the company the unique ability to listen, understand and respond to customer needs. CNH manufacturing facilities, R&D centers and joint ventures located throughout the world put the employees, knowledge and resources closer to the people who use the equipment. The result of this strategy is a more flexible company, innovative new products and the ability to effectively focus on the customer, helping them overcome virtually any challenge.

Rooted in the strength and heritage of Case and New Holland, CNH is a leading producer of agricultural and construction equipment, as well as a leading provider of parts, service and financial service solutions to the customers around the world. By investing in innovative features that make each of the brands distinct, CNH deliver the quality product and service solutions the customers expect from some of the most recognizable and legendary names in the industry.

Signing a purchase or lease agreement at the dealership is only the beginning of the relationship between customers and CNH. Acting as a business partner with the customers, CNH and its dealers play an active role in providing the right after-sales parts, service and support needed to make every day a new opportunity for success. For CNH, success is helping the customers accomplish their goals.

CNH Capital

CNH Capital is one of the largest equipment finance organizations in the world with a total managed portfolio of more than \$12.4 billion. CNH Capital supports customers and dealers with customized solutions including a full range of wholesale and retail financing, leases, and revolving credit and insurance products.

A vital business partner, CNH Capital strengthens the bond between factory, dealer and customer and makes it easier than ever to buy, sell and own top-quality equipment.

CNH Original Parts

Through the complete line of CNH Original Parts, worldwide distribution network and technical support programs, CNH offers customers excellent service, competitive pricing and the most skilled personnel to diagnose and service their equipment.

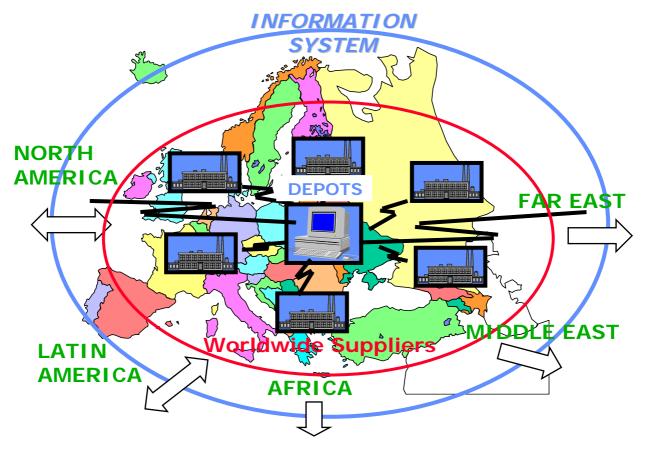
CNH helps dealers keep their businesses and those of their customers running smoothly.

The World of CNH

With 41 plants, 31 research and development centers, 16 joint ventures and 12,000 dealers located in about 160 countries around the world, CNH's global reach enables it to connect the right resources with the right people, projects and technologies to help customers overcome virtually any challenge.

Part 2

1. Introduction to Spare Parts Business Processes



The Spare Parts Business Processes are very complex and involve a high degree of networking among different departments inside the company as well as advanced communication with the suppliers, customers and other external service providers (e.g. freight service).

Spare Parts Business Processes are managed through Parts Logistics Information Systems integrating Markets, Depots, Suppliers and Processes, linking all the sub – activities into a one complete process flow.

In CNH, there are three Parts Logistics Information Systems currently being used, which are performing on a global level:

- \Rightarrow GPS for CASE parts;
- ⇒ SPES for New Holland parts;
- ⇒ WOS Warehouse Operating System (used for all brands).

Currently, the company is in progress of implementing the SAP/R3 Business Blueprint. Some departments have already been implemented and other major businesses will follow by the end of 2005 through 2006. The implemented SAP Business Platform will enable the company to operate within the single common Operating System. It gives the company an advantage in performing the daily business procedures with fewer data sorting and time spent.

The entire Logistics Process includes the following sub processes and they are:

- ⇒ Materials Management;
- ⇒ Order fulfillment;
- ⇒ Warehousing & Transport.

2. Material Management



Materials Management is a complex set of processes, which includes a number of different activities such as Product Definition, Forecasting and Distribution Requirements Planning, Procurement, Expediting and Purchasing. The components of the Material Management are closely linked and the operations are performed in close cooperation among the departments involved.

2.1 Product Definition

The parts to be managed have to be defined first. The parts are defined according to existing products, new products and substitutions. All the data regarding the available part numbers is stored in the Information Systems internally and distributed to the dealers using Electronic Cataloguing (CDROM). There are about 1.200.000 alive parts currently in CHN product offering.

These activities are performed by the Product definition department in conjunction with Engineering, Inventory Control and other company functions possibly involved in the process. The main activities of Product definition are:

- ⇒ Analysis of engineering technical documentation provided by Engineering Department daily;
- ⇒ Model data management: setup and maintenance of the model database and service life end dates for the models;
- ⇒ New part number setup and maintenance: daily activity consequence of commercial launches modifications to the bill of material, including parts forecasting;
- ⇒ Existing part number maintenance: daily activity due to modifications to the BOM;
- ⇒ Dealer initial stocking list setup: definition of the part numbers necessary for initial dealer stocking list;
- ⇒ Support to Parts Operations on technical inquiries and problems regarding the parts data in the system.

2.2 Forecasting

The Planning Department has the responsibility to decide what to buy and when. They need to ensure the availability of the right stock at the right time, following the historical demand patterns.

Forecasting is performed differently for new parts and existing parts. The main difference between both categories is that for new parts, there is no historical data available, which is one of the key measurements needed for forecast calculation.

Sophisticated algorithms of the information systems are the skeleton of forecasting. The algorithms compute the forecast – future demand based on the analysis of the past five years sales trends and seasonality.

The Forecast Planning as a process is very complex. When preparing a forecast, both the LOCAL and the VIRTUAL demand has to be taken into account in order to balance the demand variations and to compute whether & where & how much TO STOCK optimizing inventory levels.

Forecasts are calculated for each Warehouse, whether it is first or second level, and for the global demand, defined as the sum of demands of each warehouse.

2.3 (DRP) Distribution Requirements Planning

- ⇒ DRP is an automatic procedure that processes the supply plan of the items.
- ⇒ Based on the needs and on the stock available in all the warehouses of the distribution network, DRP schedules time wise and quantity wise supply order proposals.
- ⇒ The needs of the 2nd level are time wise netted with the local stock available and assigned to the 1st level. The same is done at the 1st level and the total remaining needs are proposed for purchase from supplier.

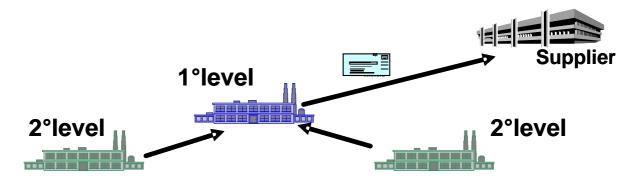


Figure 4: CNH Stock allocation (Source: CNH Process materials)

Considering what is in stock to be sold to the customer over a set period of time, usually one year, is the planning phase. The DRP or Distribution Requirements Planning, as it will be used as a term, covers rather a broad area. The DRP is done by part, by depot, by month for the next 12 months rolling. The ERP system that is named GPS that is used for CASE parts and stands for Global Parts System is the main tool in the DRP planning phase since it does all the calculations. It calculates the quantities and time per part and proposes extraordinary trends and values to be checked. Same logic applies to SPES that is used for New Holland parts as well to SAP, which will gradually replace the existing ones. It is very important to carefully plan the distribution and pay attention to all the factors that may have an impact on the overall inventory turn. Otherwise the company may have the wrong stock at the wrong depot, etc. This can destroy the inventory turn and result in high value expense for the company as a carrying cost.

To summarize: The inputs and the outputs of the DRP are:

- ⇒ The planning is done on a time horizon which is subdivided in periods;
- ⇒ For each period and for each warehouse DRP considers (input):
 - Forecast;
 - Actual demand (sales orders) (maximum between the forecast and the actual demand is used);
 - Dependent demand;
 - Transfer orders;
 - Stock level:
 - Scheduled receipts;
 - Supply/transfer lead time of each item;
 - Safety stock;
 - Economic order quantity/transfer lot;
 - Other supply parameters.
- ⇒ Outputs are proposals of:
 - Procurement orders from suppliers to first level warehouse per period;
 - Under stocks and overstocks.

The illustration given below describes the DRP outputs in greater detail:

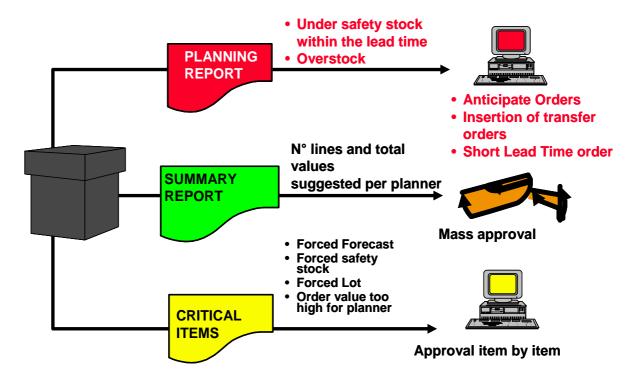


Figure 5: DRP outputs (Source: CNH Process materials)

2.4 Deployment

In short, deployment is the procedure to balance the stock in the various depots to avoid over and under stock, better serve the customer, maintain the customer satisfaction and bring the back order situations to minimum.

- ⇒ The deployment procedure handles daily the transfer of goods between the various warehouses in the distribution network.
- ⇒ The quantities to be transferred to the single warehouses are calculated taking into account the priority requirements (classified as high and low) and the availability of the entire distribution network.
- ⇒ The transfer is done from 1st level warehouses to 2nd level warehouses automatically.
- ⇒ Deployment balances the stock available at 1st level warehouses with the needs of the 2nd level warehouses and generates Transfer Orders.

2.4.1 Deployment Priority

The priority requirements are classified as high and low and filled based on their urgency class that determines its actual status:

- ⇒ Pegged orders (panic or special urgency);
- ⇒ Unit Down backorders (when Referral in the Virtual Warehouse is not allowed, or there is partial quantity in the local depot or no quantity even in the Virtual Warehouse); PRIORITY
- ⇒ UD reserve:
- ⇒ Fill in back orders;
- ⇒ Fill-in orders;
- ⇒ Stock back orders:
- ⇒ Stock orders;
- ⇒ Other orders:
- ⇒ Safety stock;
- ⇒ Forecast;⇒ EOQ.

LOWEST PRIORITY

A transfer from 2nd level warehouses is proposed when the 1st level is in stock out and a 2nd level is in overstock. Generally speaking this transfer is automatically carried out for the Unit Down Orders and other Backorders (according to a material status/sending warehouse/receiving warehouse/order class table, which shows the status of the UDO).

2.4.2 The input of Deployment

Deployment runs daily and it collects the following information for each warehouse within the distribution network:

- ⇒ Forecast;
- ⇒ Customer orders;
- ⇒ Back-orders;
- ⇒ Stock level;
- ⇒ Transfer orders;
- ⇒ UD reserve;
- ⇒ Safety stock;
- \Rightarrow Other parameters.

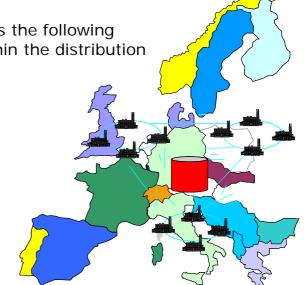


Figure 6: Deployment map (Source: CNH Process materials)

2.4.3 The outputs of deployment

The replenishment quantities are the outputs of the deployment procedure. The system has a cyclic approach to refill the depots:

- ⇒ It tries to fill existing BO considering their type and age;
- ⇒ It tries to cover the forecast over lead time;
- \Rightarrow It tries to fill the depot's Safety Stock (SS).

2.5 Procurement

After the demand forecasting and the distribution requirements planning have been concluded. The suppliers need to be informed of which parts and when the company will need them. Timely Procurement is a specialized science. The information system does a large portion of work for the users but here the problems may occur. The system sends the requirements to the suppliers automatically but it does not indicate which part number and when and if the part number is be past due. In this case the Expediting action is required. In case the part is no more common to production the supplier has to be manually selected and issued a purchase order.

2.6 Expediting

In every company backorders and other urgencies are the main concern. The forecast is done, all is set and planned but there are difficulties as delivery delays and other occurring cases that may result as a problem in customer service as the customer satisfaction will go down. These cases have a negative impact on the overall company functioning and the sales projections may not be met and there will be a loss for the company.

This is the job for the Expediting Department as it is its duty to solve the discrepancies that may cause difficulties and put the sales under danger. Described further in this section basic work plan structure, supportive actions to the other company functions and networking required to manage the discrepancies.

2.6.1 Basic work plan structure

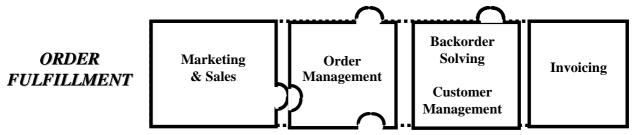
- ⇒ Open orders review: the Open Order Report is sent regularly (minimum once a month) by the expediter to the suppliers under his responsibility. After sending the report, a consistent follow up should be guaranteed.
- ⇒ Promise update: this activity is done each week by checking all open orders with a missing promise date and giving priority to the biggest orders (in terms of value) and to the most important suppliers.
- ⇒ Analysis by gravity: this activity is performed in the beginning of every week on the most critical top movers. These parts are very important for inventory level, order fill and customer satisfaction.
- ⇒ Discrepancy in receiving analysis: the expediter has to get and analyze each day a report of the problems occurred in the receiving phase.
- ⇒ Special Purchasing follow-up: the relevant reports are downloaded and forwarded on a weekly basis. On top on these reports, there are daily contacts to update the information transmitted.
- ⇒ Special warehouse follow-up: the activity is performed with daily contacts and checking a weekly report.
- ⇒ Supplier performance follow-up: this activity is performed checking both weekly and monthly reports.

There are several other activities that can not be scheduled exactly as they depend on unexpected inputs or events that can not be planned in advance:

- ⇒ Orders maintenance: this involves a team work with the Planning to check the amendments required on the orders placed.
- ⇒ General communications: this activity depends on unexpected events, like changes in the standard procurement process or any other variation that needs to be communicated to the supplier.
- ⇒ Return to vendor/scrap: this exception requires an input from Planning or from Parts Inspector.
- ⇒ Meeting with suppliers: the schedule of these meetings depends on several factors. It's up to the expediter to arrange them with the final goal to update the relationship with the supplier and manage all the relative problems.
- ⇒ New launches, campaigns, invoicing query: this tasks are performed based on an external input coming to the expediter.

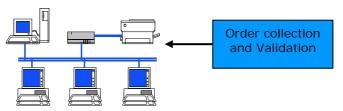
The activities of Forecast, Distribution Requirement Planning (DRP), and Deployment are usually called Inventory Management. The Inventory Management is a knowledge intensive process based upon Logistics and Information System expertise and networking.

3. Order Fulfillment



3.1 Marketing & Sales

Marketing defines the Parts prices and discounts and Sales defines commercial conditions and specials: promotions and campaigns. All the data concerning the prices, discount level and timing, special promotions and campaigns is organized and maintained within the database of the information system.



3.2 Order Management

About 80% of the Orders, both normal and the urgent ones are collected electronically via Dealer Communication Systems and other customer interface. These orders are validated automatically by the system. Special orders and Contracts require manual management, service and tailored commercial conditions to be processed.

3.2.1 Backorder solving

One of the most complex and important feature is the allocation and the fulfillment itself of the order received from the customer.

Different orders as they are with different value and priority are managed differently:

- ⇒ Urgent orders are allocated "on-line" and shipped the same day.
- ⇒ Normal orders are allocated "at latest" and shipped within the promise date, to allow priorities of urgencies.
- ⇒ An order received in a Customer Service can be allocated to any distribution center depending upon Urgency, Product Line, Market, and Master Depot, allowing one customer to be served by one Customer Service and to recover Backorders from any depot shipping them directly by air or indirectly by truck.
- ⇒ Remaining urgent Backorders are solved on line as soon as the material is received from the supplier.

3.2.2 Customer Management

Dealers and Importers are assisted by the Customer Service that gives technical information, enters special manual orders, provides sales and order progress status, manages claims and returns, solves backorders and panic orders strictly interacting with Expediting Department.

At the right moment the Information System sends to the right distribution center the command to ship the order with the right transport path and mode.

3.3 Invoicing

The invoicing is performed differently, depending if it is a depot – stocked or direct ship. In case of depot – stoked parts the invoicing is done directly to the customer. In case the parts are direct ship there is a double invoicing: to the local branch and to the customer.

4. Warehousing and Transport



4.1 Warehousing

Warehousing has three major activities that are:

- ⇒ Inbound: This is the activity of receiving, inspection, packaging, putaway of the parts coming from supplier according to the requirements issued by Material Management.
- ⇒ Outbound: This is the activity of picking, packing, loading, shipping according to the commands given by the Order Fulfillment.



⇒ Internal: These are the activities of Cycle Counting, Planographing (e.g.: optimization of locations, space, movements), Replenishment from reserve to primary location.

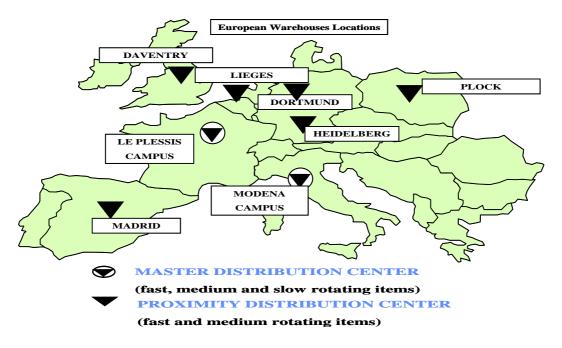


Figure 7: CNH EU warehouse locations (Source: CNH Process materials)

The information System, in this case it is WOS (Warehouse Operating System) optimizes the workload, records all the physical transactions, and informs about the progress of the operations and the status of the stock.

4.2 Transport

The transport or transportation is divided into three categories based on the activities it is used for:

- ⇒ Freight in: This is the transportation of the parts coming from the supplier to the depots according to the requirements issued by the Material Management.
- ⇒ Freight out: This is the transportation of the parts coming from the Facing Depots to the Customer according to the commands given by the Order Fulfillment.
- ⇒ Interdepot Shuttles: This is the transportation of the parts coming from Master Depots to Facing Depots according to the indications of Deployment.

The delivery lead – time for the normal orders is two – three days by road transportation. The emergency orders are managed in a special way and are delivered to the customer within twenty four hours by air or by road, depending on the cargo and distance.

In case of CNH, the company has its own carriers as well as external service providers as TNT, DHL, SCHENKER, etc.

4.3 Network Management

The Network Management is a very important function for any company and has a high impact on every one of them. It is even more crucial for the large enterprises since it is not so easy to observe and link the company functions in one single smooth process flow forwards the overall superior performance and the increase of the company margin as a result.

The Network Management has a high integration with:

- ⇒ Inventory Management that decides where and when and how much to stock.
- ⇒ Order Fulfillment that decides which is the best depot to serve the customer from.
- ⇒ It drives the utilization of Warehouse activities and Transportation routes and determines the efficiency of the system.

INFORMATION SYSTEM Network MATE**M**AL Procure. Product Inventory Purchase MANAGEMENT Definition **Ianagement** Expediting Backorder ORDER Marketing Solving Order Invoicing & Sales Management FULFILLMENT Customer Management WAREHOUSING & TRANSPORT Warehousing **Transport** PROGRAM **MANAGEMENT**

Spare Parts Business Processes

Figure 8: CNH Spare Parts Business Processes Map (Source: CNH Process materials)

This is the complete scenario of the Spare Parts Business Processes descibed in detail in this section of the report. It is visible from both the illustrations and the description itself that the Operations within the After Sales are very complex and require careful and detailed planning from each company function involved in the processes alligned and linked into a single complete functional network.

Part 3

1. General

The CNH Original Parts Commercial and Logistic Processes require networking and are performed in close cooperation among the departments within the company and external participants as customers and service providers.

The emphasis of this Product Management Process Book is concentrated on the CNH Original Parts. The activities and responsibilities described further in this document is the guideline to follow for the Product Managers performing at CNH Original Parts.

1.1 Objective

The objective of this Process Book is to detail the activities performed by Product Marketing as Product Commodity Management. The actions are concentrated on: logistic / purchasing / pricing strategies definition, promotions decision and development, technical and sales support materials development, wholesale and retail communication development and support to other company functions.

Every large or medium sized company has normally a very wide selection of items or products available to its customers. CNH for example, has about 1.200.000 different "alive" parts numbers. The complexity of the product offering require very careful and detailed planning considering all the possible issues that may occur regarding the organization of the smooth product flow from the suppliers to the end users.

1.2 Application Fields

The application fields of this Process Book are:

- ⇒ Product Marketing;
- ⇒ Operational Marketing;
- ⇒ Pricing, Materials Management;
- ⇒ Distribution:
- ⇒ Customer Service.

The role of Product Marketing and Operational Marketing has a very large impact on the overall Product Management within the organization. The activities of these departments define the Product Marketing strategy and develop all the communication tools to efficiently approach the customer and offer the expected world – class service and support.

The activities of Product Marketing Manager cover rather a broad area within the overall business development of the company. The Product Marketing major responsibilities are to:

- ⇒ Define and implement the Product Marketing Strategies identified in the official yearly Central After Sales Marketing Plan;
- ⇒ Evaluate new sales channels and business opportunities;
- ⇒ Define product role and positioning;
- ⇒ Analyze market trends and competition on managed products;
- ⇒ Expand product offering (widespread product offering) at item level, program level, geographical level;
- ⇒ Develop wholesale technical and sales support materials;
- ⇒ Develop retail Marketing activities in coordination with Operational Marketing.

The Product Marketing actions aim to increase the company revenue and margin.

In this Product Commodity Management Process Book, the emphasis is concentrated on the CNH Agricultural Equipment process.

2. Activities Description

Described in this section are the activities and major responsibilities of the Product Managers performing at a European level.

Every Product Manager is responsible, at European level, for the management of the product commodities assigned to him for all the brands. The product commodities are assigned to the Product Manager on the basis of his personal knowledge, experience and interest. The commodities represent a family of products. It could be batteries, filters, radios or any other, but the products inside the commodity always belong to a single product category.

All product commodities including technical parts, attachments (Front Loader), DIA's (Dealer Installed Accessories Catalogues), direct ship products are divided among the different Product Managers.

The definition of the Product Marketing Strategic Plan is based on his proposed initiatives and implementation with the objectives to increase sales and profits on his assigned product commodities.

The Product Managers main activities are:

- ⇒ Product Marketing Strategic Plan definition and implementation;
- ⇒ Parts Logistic Strategy definition;
- ⇒ Purchasing Strategy definition on direct ship product commodities and share purchasing strategies for other lines;
- ⇒ Pricing Strategy definition (repositioning);
- ⇒ Implementation of the After Sales strategy on branding and packaging;
- ⇒ Promotions decision and development (in conjunction with Operational Marketing);
- ⇒ Technical and Sales support materials development;
- ⇒ Wholesale and Retail Communication development (in conjunction with Operational Marketing);
- ⇒ Support to Customer Service and Wholegoods Product Marketing.

The activities of the Product Manager, assigned to product commodities, are performed in close cooperation with the other departments and require teamwork. The assigned Product Manager has the most knowledge on the managed product commodity and his responsibility is to provide all the necessary support to the other departments to achieve common goals, which is the improvement of the overall business of the entire enterprise. The Product Manager participates in all the activities that have any

relation to his assigned product commodities. He provides the requested information as well as receives the updates from the After Sales Business Managers for his proper actions considering the Market trends and competition.

<u>Sample Product Manger Responsibility List by Managed Product</u> <u>Commodity</u>

Product Manager Reponsibility List						
Name	Name	Name	Name	Name	Name	
Location	Location	Location	Location	Location	Location	
Batteries	Harvesting DIA's	Filters	Hydraulic Hoses	Tractor DIA's	Toys	
Engines	Belts	Bearings	Starters & Alternators	Standard Tools	Clothing	
Engines Reman	Chains	Clutches	Starters & Alternators Reman	Sealant Products	Promo Items	
Engine Parts	Harvesting Parts	Clutches Reman	Cab Glass	Twine and Balewrap	Footwear	
Pistons & Sleeves	Undercarriage	Brakes	Cab Parts	Sparex	Tyres	
Injectors & Nozzles	Centralised Greasing	Electrical	Hardware	Front Lifts	Cleaning Products	
Engine Bearings		Electrical Reman	Seats	Front Weight Fenders	Soap Products	
Water Pumps		Air Con	Hydraulic Pumps	Front Loader	Retail Display Eqt	
Crankshafts		AFS	Hydraulic Cylinders		Fencing Eqt	
Turbochargers		Transmissions	Ag Ground Wearing Parts		Animal Drinking Systems	
Mufflers		Transmissions Reman	Lubricants		Gardening Tools	
Gaskets		Instrument Clusters Reman	Seals and Seal Kits		Lighting	
Injection Pumps		Linkage/Top Links	Other Hydraulics		Radios	
			Radiators		HP Washers	
			Radiators Reman		Air Compressors	
			Paint		Fire Estinguishers	
			Fuel additives and treatements		Lube Eqt	
					Safety Products	
					Environmental Pdcts	

Table 1: Product Manager Responsibility split (Source: CNH Process materials)

3. Product Marketing Action Plan

The Product Marketing Action Plan is prepared on a yearly basis in order to boost parts sales. All the Product Marketing activities for the coming year are considered within the plan preparation stage. The plan composition is performed with the involvement of different Management Team members with a fixed set of revision and approval stages before its actual launch and implementation.

The Product Marketing Action plan is prepared in order to boost parts sales indicating:

- ⇒ Actions by commodity;
- ⇒ Responsible Product Manager;
- ⇒ Brands and countries impacted;
- ⇒ Implementation timeframe;
- ⇒ Estimation of the expected revenue.

3.1 Product Marketing Action Plan Elaboration Steps

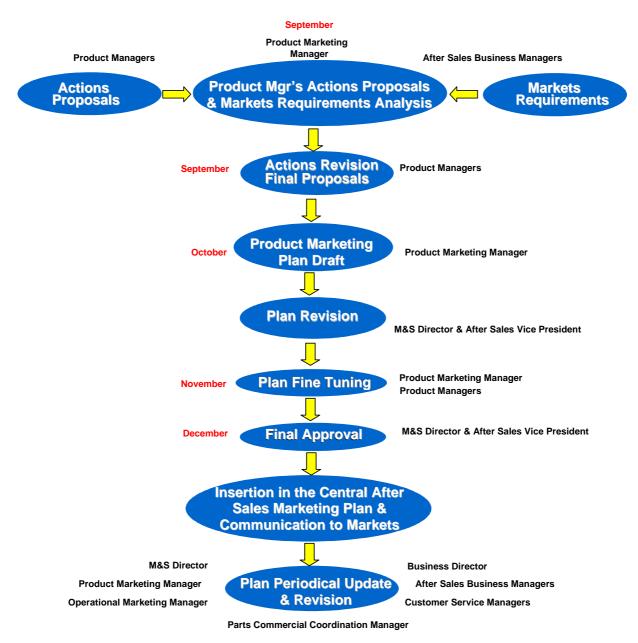


Figure 9: Marketing Action Plan elaboration steps (Source: CNH Process materials)

⇒ Product Managers proposals (September).

Every Product Manager proposes actions on the commodities assigned to him on the basis of his personal knowledge and initiatives, Markets information, suppliers information and new product launches. The proposal is made by filling a dedicated form reporting for each assigned product commodity, indicating:

- o Detailed actions;
- o Impacted brands and countries;
- o Implementation timeframe;
- Expected incremental revenue (12 months basis and current year).

The filled form is sent by each Product Manager to the Product Marketing Manager.

Sample Form: Product Manager's Proposals

AG AfterSales Marketing 2005 Product Marketing Plan	Product Manager					
Hardware, Hydraulic Cylinders, Seats Action]					Expected Revenue
Hardware	Brands	Countries	Priority	Market	K€) 12 month	(K€) 2005
Launch Berner programme (OPP - 50)	STEYR, CIH, NH	AUSTRIA	1		?	?
Launch Wurth Programm	NH CIH	Italy	1	asap	?	?
Launch Wurth Programm	NH CIH	Spain	1	asap	?	?
Launch Wurth Programm	NH CIH	CNH Benelux	1	asap	?	?
Hydraulic Cylinders						
Extend the FPT/WYKO program to NH (OPP = 60)	NH	U.K.	1	system O	?	?
Support and push current program	NH	FR	1		?	?
Seats	Ctaur	Could to IF to out	4	Q1	?	?
Introduction of a Steyr Seat Cover Range	Steyr	Ger/Aus/Export	1	QT	?	?
Update of the CIH Seat Cover Range	CIH	WER/EEAA	1	Q1	?	?
Update of the NH Seat Cover Range	NH	WER/EEAA	1	Q1	?	?
Launch Promo programme to maintain sales volume	CIH, NH	WER/EEAA	1	Q2/Q4	?	?
Update the NH seat catalogue	NH	WER/EEAA	1	Q2		
expand range of seats	all	Germany + Scandinavia	2	Q4	?	?

Table 2: Product Manager's proposals (Source: CNH Process materials)

⇒ After Sales Business Managers proposals (September).

The After Sales Business Managers provide the Product Marketing Manager with the requirements for their Markets by brand per product commodity specifying the implementation timing.

The Product Marketing Manager transfers the After Sales Business Managers proposals to the Product Managers for the revision and update of their actions.

The initial incremental sales volume is identified to be inserted in the Growth Action of the After Sales strategic Business Plan.

⇒ Actions consolidation (mid October).

The Product Marketing Manager collects the final Product Managers proposals, revises, prioritizes them and prepares a plan draft that is then submitted to the Marketing & Sales Director.

⇒ Action Plan fine-tuning (November - December).

The Product Marketing Manager fine tunes the action plan on the basis of the inputs from the Product Managers and After Sales Business Managers and submits it to the Marketing & Sales Director and After Sales Vice President for the final review and approval.

The final, approved, consolidated Product Marketing Action Plan is communicated to the After Sales Marketing and Sales team before the end of December and is considered as the focus document of the Central Product Marketing initiatives for the year to come.

The first three steps within the Product Marketing Action Plan preparation require teamwork performed close cooperation among the After Sales Business Managers and the Product Managers. Each group compliments each other constantly and provides support.

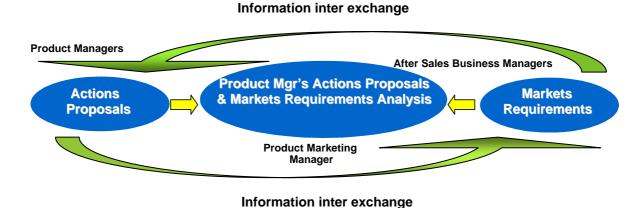


Figure 10: Information flow (Source: CNH Process materials)

GOOD teamwork among the After Sales Business Managers and the Product Managers is necessary to come up with the most correct and relevant proposals for the Product Marketing Action Plan composition, taking into account the competition and rapidly changing market trends.

The After Sales group has the most detailed and up to date competitive information about the Market and by Market. They are aware about the changing Market trends, change in competition, changing customer needs and expectations.

The assigned Product Managers have the most detailed information about their managed product commodities. The Product Managers, when performing their responsibilities are in contact with the suppliers and customers. In addition, Product Managers cooperate with Parts Engineering, Packaging and Labeling departments and are able to provide the necessary information about their managed commodities in greater detail.

3.2 Product Marketing Action Plan Content

The actions detailed in the Product Marketing Plan consist of:

- ⇒ Product range expansion (Products and Markets);
- ⇒ Price positioning improvement based on competitors benchmarking and market trends;
- ⇒ New direct ship program introduction;
- ⇒ Direct ship program maintenance:
- ⇒ Range rationalization (depot);
- ⇒ Sales promotions and retail communications (seasonal);
- ⇒ Marketing materials development such as catalogues, quick reference guides, leaflets, posters, ...;
- ⇒ Specific projects (Gold Value Line, QRG linked to CNH technical Parts Systems, DIA's database ...);
- ⇒ Other specific projects.

3.3 Plan Revision

The Product Marketing Manager and each Product Manager according to his respective assigned product commodities, in terms of actions and timing, review the Product Marketing Plan on a monthly basis.

It is revised in periodic meetings by Market with the presence of Marketing & Sales Director, Product Marketing Manager, Operational Marketing Manager, Parts Commercial Coordination Manager, Local Customer Service Manager, Business Director and After Sales Business Managers. The revision involves the action plan status, update, corrective actions and issues by commodity.

The periodic review and revision is crucial for the company to follow and adjust to the dynamically changing Market. Not only the Market Trends are the subject for the plan review, there are internal reasons for the plan update. For example, there might be a new product launch, promotions and other campaigns during the year. That is why the periodic review is performed for the most efficient performance and customer approach to increase the company sales and profits.

3.4 Budget Definition for Marketing needs

The budget for all Marketing activities is defined centrally in September – October by Marketing Management, to be finalized and approved by the After Sales Marketing Director before beginning of the new year.

The Product Marketing Manager therefore manages the allocated budget in coordination with the Operational Marketing Manager as far as Marketing Materials expenses are concerned.

The Product Marketing Manager defines the Product Marketing budget in terms of:

- ⇒ Headcount;
- ⇒ Salaries;
- ⇒ Travel costs:
- ⇒ Communication tools expenses;
- ⇒ Other expenses (specific project launches, etc.)

For Marketing Materials expenses and other expenses, each Product Manager is asked to determine his estimated budget per product commodity per project (e.g.: brochures, catalogues, leaflets, posters, systems development).

The Product Marketing Manager analyses and consolidates the Product Manager requirements in accordance with the projects listed in the yearly Product Marketing Plan.

The Product Marketing Manager submits the Product Marketing budget to the After Sales Marketing Director who is the decision maker in Marketing Budget Definition.

The Product Marketing Manager is authorized to sign the invoices up to \$ 5,000. If the amount is higher than \$ 5,000, it has to be validated by the After Sales Marketing Director.

Throughout the year, the Product Manager needs approval from the Product Marketing Manager and Operational Marketing Manager regarding his Marketing Materials expenses.

The information for the budget follow – up is provided by the Finance Department. This is reviewed quarterly.

4. Product Commodity Management

4.1 Activities Description

The Product Manager is responsible for the development and maintenance of his assigned Product Commodities, managed on the basis of depot – stocked or direct ship logistic strategies. The Product Manager's decision between direct ship / depot stocked for the new parts / programs is based on the company policy indicated on the Product Cards by commodity.

The Product Manager activities could vary depending on the particularity of his assigned product commodities (depot, direct ship, attachments, DIA's, engineering, Remanufacturing orientated).

4.2 Depot Stocked Items Management

The processes within the Depot Stocked parts environment require teamwork with the dynamic inter exchange of information among the assigned Product Manager and the following Parts Operations activities:

- ⇒ Product definition:
- ⇒ Purchasing;
- ⇒ Planning and Expediting;
- ⇒ Inventory and Materials Management, etc.;
- ⇒ Depot, Branding & Packaging;
- ⇒ Transport;
- ⇒ Customer Service.

The Product Manager is granted the necessary access to the CNH parts operating systems: SAP, SPES, GPS, and Pal & Support Pro II ...

4.2.1 Existing Parts

Within the Existing Parts Depot processing, each assigned Product Manager performs in coordination with the above mentioned departments.

The Product Manager responsibility is to provide supportive actions as to:

⇒ Work with Product Definition to complete the Parts Product Card per main commodity (distribution depot/direct ship, image and product offer ...).

- ⇒ Review with Inventory and Materials Management for stock check up and periodic review of minimum stock requirements, based on the market requirements and forecast.
- ⇒ Inform Inventory Management about any promotional campaigns to ensure the item availability (right stock at the right timing at the right location).
- ⇒ Liaise with Inventory Management to resolve and bring to minimum the BO (Back Order) situations.
- ⇒ Recommend alternative substitutions for non existing parts and components.
- ⇒ Work on the component supply issues to support Materials Management and Purchasing.
- ⇒ Implement the After Sales Branding and Packaging strategy in coordination with Product Definition, Purchasing and Packaging in controlling and branding check up's.
- ⇒ Analyze price competitive information from the Markets and forward it to the Purchasing for cost revision purposes.
- ⇒ Work in conjunction with the Parts Engineering Department to ensure the quality standards of the parts based on the competitive information on the markets.
- ⇒ Work in conjunction with Depot Operations and Transport by supplying part numbers and sales volumes to recommend alternative storage/logistics solution on selected product commodities (from stock to direct ship).
- ⇒ Support the SLED committee.

4.2.2 Service Life End Date Committee

The SLED committee is composed by the following members: Inventory Control Manager, Sales & Marketing Director, Product Marketing Manager and Product Definition Manager. The Committee is called together once a month. The Committee therefore decides to withdraw the parts "In Phase Out" when the following conditions are met:

- ⇒ When parts are not direct ship in any continent, unless no demand in last 3 years;
- ⇒ When last production < Current year -10;</p>
- ⇒ When creation date <= Current year -5;
- ⇒ When WW (worldwide) demand in pieces of last 3 years <=30;
- ⇒ When WW demand in pieces of last year <=30;
- ⇒ When WW demand value of last <=200 \$ at a standard cost;
- ⇒ When parts are not safety related (SLED=last year of production +20).

4.2.3 New Part Launch

The Product Managers can propose the launch of new parts providing the following details:

- ⇒ Nature and reasons for the project;
- ⇒ Financial justification (expected yearly turnover and margin by country and total Europe, current yearly turnover and gross margin by country and total Europe, incremental turnover and gross margin total Europe);
- ⇒ New part numbers/current part numbers with instructions for current part numbers;
- ⇒ Initial stock proposal by part number/month.

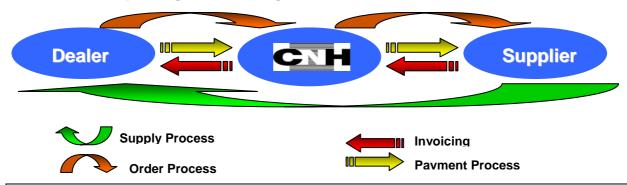
The project is submitted for the approval to:

- ⇒ Marketing & Sales Director;
- ⇒ Product Marketing Manager;
- ⇒ Materials Management Director;
- ⇒ Planning & Expediting Manager;
- ⇒ Distribution Director;
- ⇒ Finance Controller.

If approved, the Product Manager requests:

- ⇒ Product Definition to create the new parts;
- ⇒ Purchasing to load the costs in the system;
- ⇒ Pricing to load the prices in the system on the basis of the price list provided by the Product Manager;
- ⇒ Inventory Management Planning to order the parts from the suppliers based on the predefined initial stock proposal.

4.3 Direct Ship Program Management



Note: exceptionally, for transportation cost rationalization on some voluminous or heavy parts, indirect ship process could be set up with delivery forwarded to Dealers through CNH parts depot (s).

Figure 11: Direct Ship program process map (Source: CNH Process materials)

The development and setup of any European Direct Ship program is performed by the assigned Product Manager, depending on the managed product commodities particularity.

The development and set up of a Local Direct Ship program is performed by Local Operational Marketing in conjunction with the Product Manager assigned to the product commodity.

In general, Direct Ship Programs are developed with the aim to boost Parts Sales and increase company revenues.

4.3.2 Direct Ship Strategy

The reasons for a direct ship program development on selected Product Commodities come from the following decision factors:

- ⇒ Market requirements;
- ⇒ Supplier advice;
- ⇒ Wholegoods request;
- ⇒ Legal requirements.

The direct ship strategy decision is driven by:

- ⇒ Product offering expansion;
- ⇒ Types of product (e.g.: voluminous parts, seasonal parts);
- ⇒ Cost (keep price competitive, avoid inventory carrying costs);
- ⇒ Storage restrictions (e.g.: tires, hazardous parts).

4.3.3 Direct Ship Types

From a system point of view, Direct Ship Programs could be managed in the following ways:

- ⇒ Depot Enter process: Part number creation within CNH parts operating system (SPES for New Holland and GPS for CASE IH) and maintenance of all the transactions by CNH. This business model is used for restricted range of product, requiring compliance to the depot part numbers rules (product definition, purchasing costs, pricing...).
- ⇒ Dealer Direct process: No part number creation within CNH parts operating system but monitoring and maintenance by CNH centrally of all the invoicing process by applying a factor on the supplier's invoice. This business model is used for large and complex product range, allowing more flexibility in term of implementation and maintenance.
- ⇒ Royalties process: Monitoring and invoicing per supplier with the royalties reversal to CNH. In this case, the Product Manager will coordinate with Commercial and Finance Reporting.

4.4 Direct Ship Program Development

The Product Manager plays a key role in the direct ship program development and maintenance, supplier selection and supplier negotiations and performs in conjunction with the support of the following departments:

- ⇒ Marketing (Central and Local Operational, Pricing, ...);
- ⇒ Product definition;
- ⇒ Purchasing;
- ⇒ Planning and Expediting;
- ⇒ Inventory and Materials Management;
- ⇒ Accounting;
- \Rightarrow Legal;
- ⇒ Brand Communications, etc.

The establishment of any Parts Direct Ship program tends to be performed at the European level. For market, supplier or product specificity reasons, direct ship program can be developed locally. In this case, local direct ship program is managed by the Local Marketing Manager, ensuring the support of the assigned Product Manager.

The Product Marketing Manager approves Product Managers' initiatives and ensures each Direct Ship program (either European or Local) in accordance with the required minimum Company Direct Ship Profit rules (15 % minimum gross margin as an average).

The processes behind the establishment of any direct ship program are:

- ⇒ Market Analysis (competitive environment analysis, market needs and expectations);
- ⇒ Potential supplier identification and selection;
- ⇒ Supplier meetings for suppliers capability evaluation and visits to the supplier premises;
- ⇒ Supplier negotiations (in coordination with Purchasing for cost saving purpose);
- ⇒ Final supplier selection;
- ⇒ Contract issuance and legal approval;
- ⇒ Product Range selection and offer terms finalization (commercial services, transport, warranty, etc);
- ⇒ Vendor Code creation;
- ⇒ Direct ship process selection;
- ⇒ Part Number creation;
- ⇒ Purchase costs load;
- ⇒ Marketing Materials development (catalogues, posters, etc.);
- ⇒ Price list preparation and validation (both dealer and customer level);
- ⇒ Logistics (service availability);
- ⇒ Program launch through Parts Marketing Bulletins;
- ⇒ Program maintenance:
- ⇒ Accounting follow-up;
- ⇒ Sales and progression monitoring.

4.5 Pricing Strategy Definition

The Pricing Strategy is defined by the After Sales Marketing Director and the European Pricing Manager acting at global parts level, according to the agreed CNH terms and conditions:

- ⇒ Customer type;
- ⇒ Order type;
- ⇒ Discount Code, etc...

The Product Manager responsibility is to follow the predefined pricing strategy at global parts level. The Product Manager acts on at Part number level or Product Commodity level with the responsibility to perform the pricing analysis and price repositioning proposal taking into account CNH financial expected impacts.

The Product Manager performs the pricing analysis simulation identifying competition and market trends, competitive pricing structure and distribution channel level. The Product Manager recommends pricing and discount modifications to the Pricing Manager with the estimation of the CNH financial expected impacts.

The final approval for any price repositioning proposal comes after the co – agreement, if necessary, of:

- ⇒ After Sales Marketing Director;
- ⇒ Pricing Manager;
- ⇒ Product Marketing Manager.

Where and when it is possible, it is decided to perform based on a testing approach with temporary special focused actions (promotion/campaign) during a limited timing to evaluate the impact on sales and margin). If the test is positive, the price repositioning is officially approved and therefore loaded in the Parts Price List (PPL).

5. Promotions & Campaigns Implementation

The objective of the Promotions and Campaigns is to boost Parts Sales and increase the company revenues.

The Promotions and Campaigns are established to face the competition and to offer to the dealers better conditions in addition to their original terms and conditions. Any promotion and/or campaign have to be evaluated in terms of revenues and margin.

It is a shared responsibility of the After Sales Business Manager, the Local Marketing Manager and the Product Manager to ensure the safety margin; otherwise, the Promotion and/or Campaign will not be approved by the After Sales Marketing Management.

The Annual Promotion Plan is established centrally by Operational Marketing in liaison with Product Marketing per product family/month and revised by Local Operational Marketing. Loading and monitoring is under the Operational Marketing responsibility.

Extra Promotions and Campaigns could be initiated by the Product Managers in conjunction with the After Sales Business Managers or initiated by their proposals based on the market and supplier competitive information.

There are different types of promotions & campaigns developed at part number level or at functional/commodity code level:

- ⇒ Pre Seasonal/Seasonal Promotion/Campaign (annual promotion plan);
- ⇒ Promotion/Campaign resulting from better terms and conditions obtained from suppliers;
- ⇒ Trade fairs and exhibitions specific pricing actions;
- ⇒ Volume discounting;
- ⇒ Stock surplus, obsolete parts clean up;
- ⇒ Promotion/Campaign linked to Retail Communication

(e.g.: "Advantage" for NH, "Reference" for CIH, and "Actual" for STEYR).

In case of Promotion & Campaign initiative, the Product Managers responsibility is to complete the Campaign Request Form, indicating the:

- ⇒ Nature of the project (number, requestor, project description);
- ⇒ Validity timeframe;
- ⇒ Part numbers or Functional Code or Commodity Code;

- ⇒ Volume basis;
- ⇒ Discount level;
- \Rightarrow Geographical coverage (central or local).

CAMPAIGN REQUEST FORM											
		LOCAL CAMPAIGN		CENTRAL CAMPAIGN Yes			NEWHOLLAND				
0. Campaign	Number (Nos. ob	tained when cam	npaign inserte	ed onto the SI	PES system)		ı				
Promotion:	Prom N°			Deal No							
Deal:	Group Name			Date Activation		Status :	Active		Inactive		
1. Requestor											
NAME:			MARKET:				DATE OF R	EQUEST:			
2. Descriptio		•	-	-			-		-		
NAME OF THE CA					(Limitation at 38 ch	aracters)					
7.0.00	•										
	-										
Aim:	1										
3. Validity da						-					
FROM:			то:			1					
4. Discount Currency:	Euro			Please select fro	om dropdown menu						
		Allowance (RA)		Triedse serect in			Additive F	ercentage (P)	~		
Standard disco	unt.	of these column as	criteria to select	the group)	Allowance Meth			additive % (P)	applied)		
Division	Prod Line	Agg Code	Comm code	Funct Code	Part Number	UDO	FIO	NSO	ASO		
4	CHOOSE ONLY ONE				*		Enter %	or R where I	needed		
Note: additive dis	scount from the list pr	ice: i.e.: 46% + 5%	= 51% from lis	st		_	•	•	•		
5. Customer					_						
Cust Discount table (e.g.:D1A)	Discount Cust Price List Country code Country name (e.g.:D1A) (e.g.:12) (e.g.:001) (e.g.:France)		ry name France)	Depot code if neccesary (e.g.:U1) Customer (E)xcluded Customer name (Doctored (Doctored)							
	file are available, ask Va					code if necessary	(I)ncluded		-		
								ļ			
6. Analysis	.1	L	L			J	l	I			
Is there any analy	sis done to verify the		?			Ī					
Is the campaign p Similar campaign	part of any Product Ma n last year ?	arketing Plan ?									
Analysis Summar Calcul done for Re	ry for the proposed Pe	riod Vs the same	period last yea	r (+1month to	allow invoicing aft	er closing da	ate):				
Allowance (RA) ar		Same period @	Campaign period + 1	Growth							
percentage (P) or Replacement pi	rice (R)	Year-1+ 1 month	month		Automatic grid if an	alysis worksh	eet filled				
VOLUME NET REVENUE		0	0	0		Incrementa	al Revenue) 1			
STANDARD MAR	GIN	0.00 #DIV/0!	0.00 #DIV/0!	0.00		this value s	hould be >				
% margin		#DIV/0!	#DIV/0!			for self-fina	ncing prom	otions			
7. Stock avai	lability										
	ified by Parts Opera			n ?			I				
	ing addressed by Pr	oduct Manager(s) r				L				
8. Communio Are responsible	e Product Manager(s	s) aware ?			1						
Are participing Country(ies)/ASBM's aware ?					_				•		
Medium:	Letter/Bulletin		Poster		Press		Other		I		
9. Approval (According level of a		Cimpature	D-1-	CENTRAL CAMPAIG	-N	Name	Signature	Date		
LOCAL CAMPAIGN Name Signature Date Parts Mktg											
rep's/mgr				Administration							
Controller				Sales Coord Mgr							
Central				Controller							

Figure 12: Marketing Action Plan elaboration steps (Source: CNH Process materials)

The approved Promotion & Campaign Form is sent by the Product Manager to the Pricing and Marketing Service Departments for affecting Promotion/Campaign reference number and uploading of the information into the CNH Parts Operating System. Details are communicated to Material Management for adequate stock planning and to the Markets.

In this case, the assigned Product Manager maintains the follow-up and close-up of the promotion/campaign and monitors the reporting.

6. Support Materials and Communication Development

The development of any kind of support materials and communication tools is performed Brand specifically based on the predefined guidelines provided centrally by Operational Marketing and approved by Central Brand Communication in order to apply the Brand Differentiation instructions. The Marketing Materials are therefore developed by the assigned Product Manager in conjunction with Operational Marketing.

6.1 Wholesale Technical Support Material

Marketing Support Materials are developed to provide the dealers with the most precise and easy access information source for better service and final customer satisfaction purposes.

For the above-mentioned reasons such information sources as QRG (Quick Reference Guide) and DIA's (Dealer Installed Accessories Catalogues) are produced.

For Direct Ship Programs, the support materials are developed in conjunction with suppliers:

- ⇒ Brand Specific Catalogues;
- ⇒ Brochures;
- ⇒ Posters, flyers, etc.

6.1.1 Quick Reference Guide

It is the Product Manger responsibility to develop the QRG introducing his knowledge and experience on the assigned product commodity with the support of Product Definition and Engineering, using all the information available in CNH Parts Operating System:

- \Rightarrow SAP:
- \Rightarrow SPES;
- \Rightarrow GPS;
- ⇒ PAL/Support Pro II.

The reason for the QRG development is to have a complete and easy to use set of information in line with the parts evolution (substitution, new part launches, etc.). This is driven by:

- ⇒ Important demand from European Markets to have an easy and quick view for the key wearing parts of the machines;
- ⇒ Competition (fierce + some competitors) have already developed user friendly tools;
- ⇒ Clarity/speed of access to information is as important as price for some commodities;
- ⇒ Very useful for new Dealers who discover the range and do not have the expertise on the CNH products.

The QRG, initially developed on hard copy or CD ROM format, is now inserted into PAL/Support Pro II. It is a benefit for CNH, using the existing database and therefore enabling automatic updates.

⇒ QRG Content

The QRG contains all the part numbers related to the selected major Product Commodity per machine, per product, per brand and fast moving parts.



PARTS QUICK REFERENCE GUIDE

Please click the NEW HOLLAND Logo to continue











⇒ QRG Usability

The search of a Part number can be done per product commodity, per part number, per model, per series of models.

⇒ Preparation/Adaptation/Printing/Distribution

The QRG is developed centrally by the assigned Product Manager. Translation, printing and distribution are handled by Operational Marketing and possible involvement of external agencies.

With the insertion into Pal/Support Pro II, QRG release will follow the same schedule release plan.

6.1.2 DIA Catalogue

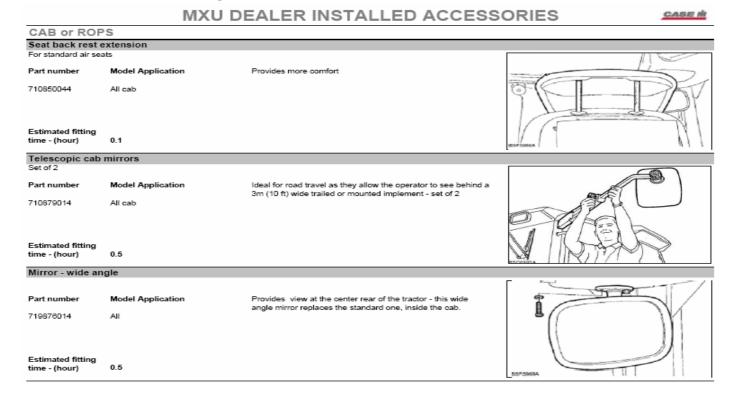


Figure 13 DIA page sample (Source: CNH Process materials)

DIA's or Dealer Installed Accessories Catalogues are developed for both: Tractors and Harvesters Brand specifically. DIA's catalogues are developed centrally by the Product Manager in liaison with:

- ⇒ Product Definition;
- ⇒ Engineering;
- ⇒ Technical Support Services;
- ⇒ Materials management.

The sources of information for composition of a DIA catalogue are compiled from:

- ⇒ Wholegoods Marketing product offering;
- ⇒ Material Management DIA lists ;
- ⇒ Operator manuals;
- ⇒ Assembly instructions.

The content of a DIA catalogue includes:

- ⇒ Part number;
- ⇒ Model application;
- ⇒ Estimated fitting time;
- ⇒ Benefit summary;
- \Rightarrow Line drawing illustration.

The DIA catalogue is initially developed as a hard copy or PDF version available through DMS (Document Maintenance System). In future, it will be released on CD ROM format.

For DIA's Harvester, catalogues are updated and released on a yearly basis. For DIA's Tractor, the release frequency depends on the new product launches and updates.

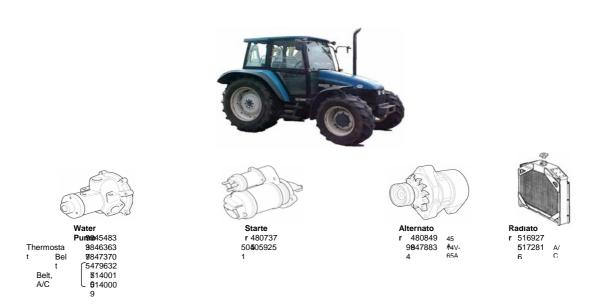
6.1.3 Specific Product Catalogue

The objective for the development of any Specific Product Catalogue is to enable the dealers to access the technical and commercial information on selected products.

The Product Manager is responsible for the development of a Specific Product Catalogue for his assigned Product Commodity (e.g.: seats, harvester upgrade kits, front loaders, toys, clothing and gifts ...) for Depot and Direct Ship products.

For Depot – Stocked products, Marketing Materials costs are budgeted and absorbed by CNH. For Direct Ship products, Marketing Materials are globally or partially (minimum 50 %) absorbed by the Direct Ship Suppliers, catalogues being in this case the only product information source to the Dealers.

The format of the Marketing Material may vary depending on the product offering. Therefore it could be released as a catalogue (hard copy and/or CD format), flyer or poster.



7. Wholesale and Retail Communication

7.1 Wholesale Communication

The Product Manager responsibility is to produce and release the "Parts Marketing Bulletins" related to his assigned product commodity to inform the dealers about any possible news or changes:

- ⇒ New product/part launches;
- ⇒ New programs;
- ⇒ Range rationalization, range updates;
- ⇒ Documentation updates;
- ⇒ Promotions & Campaigns;
- ⇒ Pricing, offer terms modifications, etc.

The Parts Marketing Bulletins are produced strictly following the guidelines provided by the Operational Marketing Manager and approved by Central Brand Communication. The frequency depends on the occurring changes. The Parts Marketing Bulletins are archived centrally.

7.2 Retail Communication

The Product Manager participates in the Retail Package (Retail Magazines, posters, flyers) developed under the responsibility of Operational Marketing.

The product selection is done by Operational Marketing Manager based on the markets requirements. Depending on his assigned product commodities, the Product Manager provides and validates information on product description, characteristics, and prices of the products part of the communication.

Products could be inserted in the Retail Package based on the initiative of the Product Manager resulting from new products or programs launch, improved conditions obtained from the suppliers.

The Product Manager supports Operational Marketing in case of special event organization (trade fairs & exhibitions) by taking part in the product selection and liaising with the suppliers on his assigned product commodities.

8. Support to Customer Service and Wholegoods Product Marketing

8.1 Customer Service

The necessity of cross – functionality within the company functions is the key driver for success in concurring customer's loyalty. The customer is very dependent on the After Sales support availability. The company has to do its best to be able to provide all the necessary for the customer information.

People working in the Customer Service know what they need to do but they just can't be aware about all the possible issues regarding the equipment or spare parts being sold. This is the job for networking and sharing the sources of information across the departments within the company as well as externally with dealers.

The Product Manager is an important figurant in this case, as he has the most information on his assigned product commodities. In this process book it was clearly visible that in After Sales there are two main ways of distributing: Depot Stocked or Direct Ship. In any case, it is very important that the assigned Product Manager cooperates with other departments to maintain a high level of competence and awareness among all the employees to offer a superior service to the customers.

8.1.1 Depot - Stocked Parts

The Product Manager supports Customer service in coordination with other Parts Operations Departments by providing the required information on his assigned product commodities.

8.1.2 Direct Ship Programs

The Product Manager is the main information source. The Product Manager is responsible for providing all the requested information (technical, commercial, etc...), available through the Parts Marketing Bulletins, on his assigned product commodities.

The information given may vary depending on the product commodity specificity.

8.2 Wholegoods Product Marketing

It is a responsibility of the Product Manager to support the Wholegoods Product Marketing in relation with his assigned product commodities. This results from the fact that those product commodities that are managed by the assigned Product Managers are very often the actual components of the Wholegoods.

8.2.1 New product launch

The Product Manager supports Wholegoods Product Marketing when there is a new product launch. In this case, the Product Manager is part of the Machine Launch Plan. He supports Parts Operations Organization to ensure adequate dedicated parts/accessories are available at the right time. The Product Manager supports Brand Communication by organizing and ensuring the availability of supportive and complimentary dedicated products.



8.3 Accessories/Attachments/DIA's

In case of Company decision to handle specific attachments or accessories through After Sales, for logistic purposes (e.g. Front Loaders, Front Lifts), the Product Manager is involved in all the processes and manages the attachments or accessories as Parts, taking into account the product particularity.

To ensure product range development and availability, the Product Manager works, in addition to the already listed After Sales Departments, in close cooperation with:

- ⇒ Wholegoods Engineering;
- ⇒ Wholegoods Product Marketing;
- \Rightarrow Global Purchasing.

As far as DIA's are concerned, the Product Manager liaises with Wholegoods Product Marketing, Engineering and Wholegoods Pricing Departments to understand the complete product offering for development of the comprehensive communication tools.

Please refer to paragraph 6.1.2 for more details.

8.3.1 Communications Tools

The Product Manager is responsible to provide all After Sales requested information on his assigned product commodity to Wholegoods Product Marketing in case of any Wholegoods initiative to release a new communication tool gathering machines and After Sales managed attachments.



Conclusion:

At this point I have reached the point when I need to summarize the whole work I have done and come up with a conclusion of my Final Thesis Project.

Firstly, I would like to state that upon the completion of the actual composition of this project by personally observing all the activities mentioned and described throughout the document, my main point is that I have learned so much regarding the chosen topic. It is more as an outcome of the work that I have done than just conclusion that you as a reader should refer to at the end section of any case study or a particular report dedicated to a specific subject. As I already mentioned, I consider the final step of my report as the final receipt of all the knowledge I gained while working on my report. This is the main value for me.

Secondly, of course, there is a conclusion as there is an end in every story. It is often said: "Every Story has to have an end". So, this is the end of my story:

If you have read carefully the above provided text, you should have at least some sort of a conclusion of your own.

In this document you had a chance to get acquainted with the main principles of Product Commodity Management as the core subject, as well as get to know the Leading Producer of Agricultural and Constructional Equipment all over the World.

For my last remarks, I just would like to underline the core value of this document. This report is the true source of information, composed based on the real – time practical information, proved in the competition in the real business environment.

All what was mentioned in this document is 100% reality. The activities are real; the sources of information used for composition are the people managing such a large multinational enterprise. The proposed steps to be followed come for only one reason: To improve the performance, to remain competitive, to remain a leader.

In my opinion, it is worth of at least considering the information offered to the readers and even follow if it somehow relates to your personal activities: if you are still a student, use for learning purposes; if you are somehow involved in business, use it to for your own benefit.

Anyone can gain at least something from this report!

Recommendations

I, as the author of this Final Thesis Project would propose the following usage of the presented material.

In my opinion, it is a complete set of information that is useful for anyone who is interested in the After Sales Business Processes. As it was mentioned in the beginning and throughout the entire document, the multinational leading producer of Agricultural & Constructional Equipment was taken as an example for the completion of this project.

Such a large enterprise has many functions and even a larger number of activities performed in its daily business life, which is a perfect study material that offers more practical than theoretical knowledge background, which is even more useful.

Any business student and any other may use this material to expand his knowledge base regarding standard business processes, especially in Product Commodity Management, which was the main focus of this Final Thesis.

In addition to above written, this material may be adopted by any Product Manager working in a large or medium – sized enterprise and used as a manual to follow while performing his daily routines.

Annexes: References and Information sources

Annex 1: Interview with the Processes and Program Manager at CNH Parts Operations:

- 1. What are the business processes within the After Sales and how are they managed at CNH?
- 2. Who are involved in the After Sales Business Process?
- 3. What are the Logistics Information Systems used at CNH? If there are a few, do they have a common interface to share the data among different company functions as well as locations?
- 4. How would you classify the main After Sales Business Processes?
- 5. What are the components of Materials Management? (Sub Processes, company functions involved, activities performed)
- 6. What are the components of Order Fulfillment? (Sub Processes, company functions involved, activities performed)
- 7. What are the components of Transport & Warehousing? (Sub Processes, company functions involved, activities performed)
- 8. What do you mean by Network Management?
- 9. What are activities of Network Management?
- 10. Is there any integration with the other company functions? If yes, with which company functions and how it is performed? (How it is managed through?)

Annex 2: Interview with the Material Manager (Europe) at CNH Parts Operations:

- 1. Could you please describe me the main activities performed by the European Materials Management team you are in charge of?
- 2. How do you perform forecasting?
- 3. Is there any difference when forecasting the demand for existing parts and new parts? (If yes, what are the differences)?
- 4. What do you use to compute the forecast? (Algorithms, parameters, ect.)
- 5. What types of demands have to be considered for the forecast calculations?
- 6. How do you balance the stock? CNH has many locations (depots).
- 7. Could you emphasize, what is Deployment and what it is used for?
- 8. What are the inputs and outputs of deployment and how do you use deployment for stock balance and replenishment?

Annex 3: Interview with the Expeditor Le Plessis - Supervisor

- 1. Could you please describe the basic work plan of the Expeditor?
- 2. What are main issues the Expeditor has to deal with in performing his daily routines?
- 3. Are there any supportive activities to other company functions that have to be performed by the Expeditor?
- 4. What are the so-called not scheduled activities performed by the Expeditor in liaison with other company function?

Annex 4: Interview with the Product Definition Manager at CNH Parts Operations:

- 1. Could you please tell me who is responsible for definition of the parts to be managed within After Sales and therefore offered to the CNH customers?
- 2. How do you store the part number data (operating systems, other format used for distribution to the customers)?
- 3. How many live part numbers do CNH have on offer to its customers?
- 4. What are the company functions you work with the most?
- 5. What are your major responsibilities, could you please list them?

Annex 5: Interview with the Product Marketing Manager at CNH Parts Operations:

- 1. What are the major activities and responsibilities in performing your daily routines?
- 2. When we will speak about Product Commodity Management, what are the company functions you mainly interact with on the basis of your work plan structure?
- 3. How would you classify the role of Product Marketing within the organization?
- 4. How do your responsibilities integrate with the Product Management team that reports to you?
- 5. How do you coordinate the activities of the Product Managers?
- 6. What are the criteria for the assignment of a Product Manager to a specific commodity (product family)?
- 7. Where and how do you state your objectives and work plan?
- 8. What is the Product Marketing Action Plan and how it is composed?
- 9. What are the elaboration steps of the Product Marketing Action Plan?
- 10. What is the content of the Product Marketing Action Plan?
- 11. Do you have any specific schedule?
- 12. Who has to approve the Product Marketing Action Plan, if there is any approval needed?
- 13. Is the approved Product Marketing Action Plan the focus plan for all the activities?
- 14. Is the approved Product Marketing Action Plan always the final one or you do revise it from time to time?
- 15. Do you take part in the budget definition for Product Marketing activities?

- 16. Who approves and allocates the defined budget?
- 17. Who has the authority to sign the invoices and are there any limits when it has to be approved by somebody from the Top Management?
- 18. Who defines the pricing strategy for products to be offered to the customer?
- 19. What are the criteria or the terms and conditions that are taken into account in case of pricing of your products?
- 20. What is the role of the Product Managers within the implementation of a defined pricing strategy?
- 21. Do you somehow test the pricing strategy to see it is acceptable (competition, market trends, special promotions, etc.)?
- 22. Who approves the defined pricing strategy?
- 23. Could you please tell me the main reasons for the establishment of any Promotions & Campaigns?
- 24. Do you establish any promotional plan that you may use as a guideline as well as advice your dealers to maintain better sales volumes?
- 25. Who normally initiates the promotions/campaigns?
- 26. Who takes part in the development, setup and maintenance of the established initiative?
- 27. Could you please list the different promotions/campaigns?
- 28. Do you use any specific format for the promotion/campaign request?
- 29. If yes, what are the main entries that must be indicated in a request form?
- 30. Who has the authority to approve/reject the requested promotion?
- 31. Do you take part in any communication materials development?

- 32. What are the preparation processes and who are the people involved?
- 33. What are the components of the Wholesale Technical Support Material?
- 34. How would you split the responsibilities within the Communication development Tools?
- 35. What is a Quick Reference Guide? What are the reasons for its development? What are the content, usability, and format?
- 36. What is a DIA Catalogue? What are the reasons for its development? What are the content, usability, and format?
- 37. What are the subjects you communicate on with your dealers and end users?
- 38. Who initiates the development of any Communication Tools?

Annex 6: Interview with the Operational Marketing Manager at CNH Parts Operations:

- 1. Could you please describe your main activities and responsibilities?
- 2. What is your role within Parts Operations at CNH?
- 3. What are your activities in Communication Tools development and setup?
- 4. How the communication is performed and with whom do you communicate?
- 5. What are the subjects of Retail and Wholesale Communication? (What is the difference?)

Annex 7: Interview with the Product Managers at CNH Parts Operations based in Le Plessis:

(This interview was done with all of the Product Managers in Le Plessis, since every one of them is assigned to a specific product family).

- 1. Could you please describe your activities?
- 2. Is there any difference in your activities depending on the logistics strategies (depot stocked or direct ship, attachments, DIA's Engineering, Remanufacturing oriented)?
- 3. Do you support other company functions as well as use their support? How?
- 4. What are the company functions you liaise with in performing your daily work?
- 5. Is there any difference in liaison with the other company functions depending on the logistics strategy you have chosen as a focus for the commodity you are assigned to?
- 6. What are the company functions you liaise with in case of Depot Stocked Items Management?
- 7. How do you interact with the other company functions (Operating Systems, Common Interface, Phone, Fax, e-mails...)?
- 8. What are your "do's" in supporting other company functions in case of Existing Parts Management? (Please name the departments and concrete functions)
- 9. What is a SLED committee? Who are the members? What function does it perform?
- 10. What are the conditions for the withdrawal of a part?
- 11. What are your "do's" in supporting other company functions in case of New Part Launch? (Please name the departments and concrete functions)?
- 12. Who approves the proposed launch?

- 13. If the launch is approved, what are your next steps? Do you liaise with such functions as: Product Definition, Engineering, Purchasing, Pricing, etc.?
- 14. What are the reasons for direct ship strategy implementation?
- 15. What are the drivers for setting up any direct ship program?
- 16. How could you describe a standard Direct Ship process?
- 17. Do you somehow classify direct ship programs, nature wise, size wise?
- 18. Is there any difference in the development and set up of a direct ship program (geographical area coverage)?
- 19. Who plays a key role in any direct ship program development?
- 20. What are the other company functions Product Manager liaises with in case of any direct ship program development?
- 21. Could you please list all the processes behind any direct ship program development?

Case IH Genuine Heritage Parts

Products shown are for illustrative purposes only. Photographs are not legally binding



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