

## **Project Background and Purpose**

A major Cable and Wireless Network Services company in Canada identified an need for NTG Clarity to develop a replacement for their existing complex and cumbersome procurement process for obtaining approved parts from approved vendors. The existing system used a combination of manual forms generation by a variety of personnel and semi-automated processes in a multi-department organization. To maintain the approved parts and associated Vendors, the Cable and Wireless Network Services company procurement department was using a database catalogue of approximately 10,000 parts in correlation with the main company financial system and warehouse system for managing of inventory.

The solution proposed and developed by NTG Clarity was a Web enabled e-business interactive solution known as VPMS (Vendor Parts Management System). VPMS automates many of the manual portions of the current company process for Parts Management and Purchasing. Specifically, the system mechanizes the selection of existing approved vendors for parts procurement, the approval of Vendor Profile modifications and parts prices as submitted by vendors, the updating of Vendor score cards and the Vendor submission of new parts for approval. It controls the system access of users and provides a full parts catalogue. VPMS also allows for online requisitioning and Vendor selection. In addition, VPMS generates vendor information for the main company financial system.

## **Main System Features:**

One of the main feature of VPMS is the development of the Best and Final Offer (BAFO) requisition and ordering process to be used by Vendors and the company Purchasing, Buyers and Administration departments. The intent of Best and Final Offer is that all approved vendors must ensure that their pricing as submitted reflects their Best and Final Offer price at all times on each individual approved part. All orders for parts will be issued using the Vendor Parts Management System (VPMS). Orders will be awarded based on a combination of the prices reflected in the system and the Vendor Score cards ratings that will be maintained on the VPMS system.

The VPMS system allows for the enhancement of data provided by the parts catalog database and the main purchasing system to allow for vendor selection and lowest price to work. Additional enhancements include the grouping of similar part numbers under one company part number against which the RFQ (Request For Quotation) would be tagged. Capabilities are also provided to further sub-categorize the parts catalog to allow for easier searching and navigation.

□  
**The main functional capabilities of VPMS are contained □  
in the Vendor, Purchasing, Buyer and Administration sub-systems:**

## **Vendor sub-system:**

- Approved vendors are allowed to view and submit for approval changes to their Vendor Profile and parts pricing. The concept is that each vendor price in VPMS must at all times represent their Best and Final Offer (BAFO) for each individual price profiled.
- Vendors are able to view and edit the list of Approved parts that they are authorized to sell to the company. All edits will be submitted to the company purchasing department for approval.
- Vendors are allowed to view their entire score card. The score card is the company perception of the vendor based on criteria established by the company.
- Vendors are able to submit for approval new parts that they wish to start selling to the company.
- Vendors are able to view a list of parts that are currently in demand at the company.

## **Purchasing sub-system:**

- Purchasing is able to view, edit, approve or deny Vendor profile modifications that have been submitted by the various vendors for approval. Once approved, VPMS will automatically initiate an e-mail to AP administration to key in the changes to the main financial system. A fully automated interface is also available.
- Purchasing is able to view, edit, approve or deny vendor part price changes. Once approved, VPMS will automatically upload the price change to the price catalog database.
- Purchasing is responsible for the administration of the score card.
- Purchasing is able to use the system to receive vendor requests for new parts approvals.

## **Buyer sub-system:**

- Buyers are able to enter on-line purchases.
- Buyers are responsible for the maintenance of the Order report for warehouse replenishment.
- Buyers use the system to award purchase orders to the lowest priced vendors. Or, they may elect to spread the order across multiple vendors based on other criteria such as stock on hand, delivery capabilities etc.



**Administration sub-system:**

- Administration controls the user id's and module access.
- Administration is responsible for establishing and maintaining the vendor score card criteria

VPMS will automatically present the lowest priced vendor for each part on each requisition. This will be presented to the buyers via the list of all open requisitions. Buyers are able to view a list of all approved vendors for each part requisition. The list will be sorted from the lowest to the highest price. The buyers will use VPMS to select which vendor will be selected to provide the parts detailed in each requisition. In doing so, VPMS will automatically generate an e-mail to the buyer, containing the pertinent information to be used to populate the main purchasing system requisition. A fully automated interface is also available on request. VPMS management reports are provided via a Crystal report generation sub-system.

**Accomplishments and Results:**

The VPMS system has been successfully developed and implemented for a major Canadian Cable and Wireless Network Services company. Further work is continuing on enhancements to the VPMS system. A management reporting system (using Crystal) and a GUI interface for automatic on-line report generation available on request. Consideration is being given to extend the capabilities of the VPMS system to provide an on-line auction for vendor RFP proposals similar to that done by companies like E-Bay.