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ENABLING THE SUPPLY CHAIN TO REGAIN OUR CREDIBILITY

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ENABLING THE SUPPLY CHAIN TO REGAIN OUR CREDIBILITY

AIM

1.   The issue of lack of clothing items is nothing new to the CAF. Whether it is a matter of having the right camouflage when we first deployed in Afghanistan with Canadian Camouflage Pattern (CADPAT) for temperate climate (green) in a desert situation, or simply having the right pair of boots when you do basic training. Several reasons can be used to highlight the fact that items are not available: the supply chain ran out of items, the producer of a specific item went bankruptcy, the contract didn't fulfill all the requirements, etc. This service paper intends to provide possible solutions to enable DGMSSC with sufficient data so they are able to provide proper information to the Treasury Board (TB) and Public Service and Procurement Canada (PSPC) to procure the right equipment, in the right time, for the right purpose and for the right people.

INTRODUCTION

2.   For several years, there were issues with items as various as combat shirts, trouser, ballistic helmets, rain jackets and gloves, to name a few. In fact, this problem was highlighted more than 20 years ago with the Clothe the Soldier (CTS) Program to address those issues[1]. One of the procurement issue that was ongoing for temperate climate boots was partially addressed with a Canadian Forces General message (CANFORGEN 127-18) last year that allowed the Land Forces to acquire their own pair of boots, but the other types of boots are still procured as a supply clothing item. We have had shortages that pushed us (logisticians) to find ''solution'' by buying commercial off-the-shelves (COTS) items to issue to the recruits. Even though I'm not an

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[1] Department of National Defence, Clothe the Soldier program, 1999.

expert in the procurement intricacies, I do believe, as a Logistician, that's pretty embarrassing, and we have been bad at finding solutions to this issue so far.

3.   The following service paper will first highlight what are the known facts and what information can be made available with little staff effort to help us plan and forecast procurement. The second section of the paper will highlight what are the information gaps, and how they can be filled using mostly available technologies and future knowledge (through training). We will cover the option of sending more to the private sector too, as a potential solution for our failures. Finally, we will highlight how can these changes be implemented to better our procurement system.

DISCUSSION

The Knowns

4.   Over the years, the supply chain system as used a number of different systems to enable itself to understand and manage the different supply items owned by troops, as well as units, and their specific supply customer accounts (SCA). These systems, mostly computer and networked based, have somewhat given us a better understanding of what is at hand, at a certain period, and who is responsible for the items in this list. However, the accuracy of data in those systems is (and will be for the near future) reliant on the fact that human beings are entering information themselves in those systems. There is a risk of mistakes, but as long as we don't automatize our processes, this will remain a fact. There is already a project trying to solve this problem, which is not the topic of this service paper.

5.   When we specifically address the personal clothing items, there is a number of different data that can be extracted with a very high percentage of precision. At this time, here is a list of

information that can provide the procurement chain useful data that can help the forecasting of clothing items, using actual available data from softwares in use in the CAF :

a. <u>The Number of Persons in the CAF</u>. Whether Regular Forces, Reserve Forces, Rangers, etc, this is a fairly well known fact, using available tools that are already known and in service at this time like GUARDIAN 8.9, or MASS Monitor. It must be said however that, like other information systems, the accuracy of data is still dependent on human beings, but the chances of mistakes are fairly low. This might sound simple, but it's not data that is actually accurate to 100%.

b. <u>The Number of Recruits that Are Joining the Forces, at Any Given Year, Using the Strategic Intake Plan (SIP)</u>. This data provided by the Strategic Joint Staff (SJS) is usually known months or years in advance, but, depending on the operational requirement, can change (not drastically) from year to year. This information is mostly an estimation of the people entering the system, at any given time, and it does identify which trades will be filled in the next years or so. However, until the recruits are actually in the system, and trained (and decide to stay in the CAF), this number can fluctuate from year to year, depending on the short term retention. There are sometimes periods that there is a large intake planned for a number of reasons, and this can be problematic to forecast requirements well in advance.

c. <u>The Number of Entitled Items per Person</u>. Depending on the trade/rank and posting, this information can be obtained whenever a CAF member is trained after all his/her basic courses. From this information, found in GUARDIAN 8.9, and

comparing information using tools like Military Command Software (MCS)

Establishment, we can then know what equipment is required from who,

depending what position is filled or not. This software, not used at its maximum

yet, can allow a very precise requirement number of different types of items, per

person, per position, per rank, etc. It must be said that, as of now, MCS

Establishment and GUARDIAN 8.9 don't interact entirely with each other. As

well, MCS Establishment main focus is mostly about the actual planned and

current establishments in the CAF, and not necessarily the actual number of

human beings in those positions, so there is a bit more analysis that needs to

happen to get accurate results.

    d.   <u>Required Equipment for the Persons that Have to Go on Missions</u>. This fact is

known usually some weeks or months in advance, but we also know that missions

evolve, get bigger, get smaller, change countries, so this fact can be a moving

target, but it's not such an immense number. Using information about current

missions that employ people can provide a good quality of information.

6.   To conclude this portion, it must be understood that, by properly using our computer-

based softwares, and by using them for what they were designed, we can have access to a wide

variety of data that can enable the procurement process. This of course requires good

understanding of the systems, and also use of different subject matter experts (SME) for those

different softwares. It must be outlined that, even if we do have good quality and world renown

resources management softwares, it doesn't necessarily mean we maximize their use.

The Data Needed to Be Known

7.   When we have access to all the hard data of clothing items required, then comes the actual evaluation of what are the unknowns, and how they can affect the procurement of items. Here are the facts that we need to get data on:

    a.   <u>The Usage of Clothing Items or Planning Using Calculated Consumption Rates</u>. This information is not readily available at this time, but would comprises data including (but not limited to): which items are being worn, meaning how many years, or months, can we expect a combat shirt or a trouser to last on normal use condition, and for specific sizes, etc. This is data that cannot yet be easily extracted from our information systems, but it's not something too complicated to analyze once we have it, we simply have to leverage the tools that are actually available. One of the issue there is right now is the overall formatting of the information inputted in our Defence Resources Management and Information System (DRMIS), which doesn't use the same standard across all the CAF, meaning there is no central database that contains all this formatted, ready-to-use, data. One of the capacities that DRMIS has is the consumption-based planning (CBP)[2] capacity, and it does precisely this, meaning it can plan the requirement, using previous consumption rates inputted in the system. With the proper data entered, it will determine the requirement, automatically. This type of platform provides an automatic resupply of items wherever they are required, but it is not yet used at neither tactical, nor institutional levels. It must be outlined however that we cannot, at this time, segregate the usage rates

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[2] SAP Blog, https://erproof.com/mm/free-training/sap-mrp-vs-cbp/

between combat units, and other units that tend to keep their clothing for a longer period of time. The system can calculate an average, which will be a good starting point.

b.   <u>The Various Sizes of Clothing Required for the Person Serving.</u> One of the factor that plays a lot in the procurement of items is the fact that not all military members have the same size. It sounds pretty silly, but not so long ago, the procurement of boots didn't entirely take into account the fact that there are more people using size 9, then there are people using size 13, meaning that there were plenty of oversized, or undersized, boots left on the shelves, without any left of the right size for most people. Factors that need to be taken into account, to name a few, are the length of arms, the length of legs, the waist size, the size of hands/gloves, the collar size, etc. That information, using the material management (MM) module in DRMIS, can save a lot of time to identify trends for the sizes of different clothing items. This will then support the procurement of the right quantity of items with the right measurements, for the right people. This information need to be inputted as soon as someone joins the CAF, and must be updated throughout the career of the member.

Implementation and The Way Ahead

8.   <u>Training</u>. Of course, these tools require a fairly good amount of training from the troops that are using such tools. Part of this training is currently occurring at our Canadian Forces Logistics Training Center (CFLTC), at a certain degree. A review of the different course programs would need to confirm that these formations are actually, and accurately, taught. As well, this is a combined effort, mostly lead by the supply technician community, but also needs a cooperation from the clerk (Human Resources Administration) community to help better define

the picture of the accurate quantity of personnel. Both those trades are among the Royal Canadian Logistics Service, meaning we can better orient the training.

9.   <u>Technologies and Resource Management Tools</u>. Today's multiple information tools, like any enterprise resources planning (ERP) tools, namely DRMIS for the CAF, can provide a wide array of information that can be made useful for whoever procures any equipment. We are all aware that TB and PSPC have to follow strict and restraining rules and regulations in terms of where does this contract can be tenderer, who can bid on it, what must be the percentage of funds coming back in the national/local economy, etc. What we can do to support the decision making process however is to provide accurate requests we formulate to those departments so we are as precise as we can be. The proper use of computer-based softwares, that have been used for the last 6 years in the supply chain world (for the CAF, and even longer for private companies), can be a very close solution to what we need in order for us to have that credibility aspect when we present projects at higher levels.

Private Sector Service Contract

10.   <u>Private Solution</u>. Is the answer in the Logistik Unicorps™ private company managing non-operational clothing model? May be so. But if it's the case, we need to make sure we produce such a statement of requirements (SOR) for this service contract, that it will fulfill the need to provide clothing items at a cost that tax-payers, or the government, will not consider prohibitive. The application of in-service supports for some of our mobile platform fleets is an example of using the private sector as an enabler for our operational requirements. It has obviously drawback, like the fact that we are outsourcing a capacity, meaning we can lose the expertise on this specific domain. In the same time, we have been doing it for decades with

ammunitions and ordnance from companies within Canada, and it works. And I would argue that munition is of more strategic importance that clothing items can be.

11.   <u>The Importance of Precision</u>. So many time in the past, and for major procurement contracts, we didn't produce a proper SOR, and only to find out later that it wasn't the required equipment, or it didn't fulfill the operational requirement. Anyone who ever was in a Light Support Vehicle Wheeled (LSVW) can appreciate what I mean. By finding accurate data, our chances of having results (good kit at a good price in good time at the right place) should increase. But by not identifying an accurate requirement previously to tenderers is the first step towards explosion of costs.

CONCLUSION

12.   The above solutions identified are viable, fairly reliable and can be used without much training nor efforts to implement. The use of GUARDIAN 8.9, MCS Establishment and DRMIS wide range of modules can surely help us find better answers to provide to our procurement experts. The interaction of all these softwares must be looked at in details to automatize the process. As new technologies are rapidly catching up on most of our requirements for accurate support, we must not let this opportunity slip through our hands. In order for us to do so, we must take the time to properly train our soldiers to be the best providers of information, enabling the system to help us plan ahead, and forecast appropriate requirements, helping support the decision making process at all levels. Before automatized solutions are put in place, there is still a need for humans to be in the process to confirm accuracy of data among those softwares. And if the solution lays in the hands of the private sector, then we need the best SOR we can provide, or we will pay too much for what we get.

RECOMMENDATION

13.   We must use all currently available technologies to their full potential, and leverage them

as soon as possible to enable the procurement processes for the supply chain appropriately. Our

credibility depends on it.

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