OPUS10 and MIL-std 1388

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First let us consider the fact that OPUS10 is a tool for making analysis and 1388-2B is a standard for storing and transferring information, and that 1388-2B for some type of information gives a number of alternatives to present the information. OPUS10 requires a more strict format than 1388-2B. 1388-2B does not contain any features for storing the results from an spares optimisation when it comes to selected assortment of spares. Though, OPUS10 can make use the documented result from the basic reliability, maintainability and logistic analysis performed. The 1388-2B database can support OPSU10.

Second; OPUS10 is much more detailed when it comes to the description of both the operational organisation and the support organisation, i.e. depots, stocks, workshops etc. They can all be addressed individually, with their actual numbers of deployed systems, operational profiles etc. Information to this depth is not available in 1388-2B.

However, what can be used from a 1388-2B data set is the information about the different operational systems, the maintenance tasks connected to them and the demands on spares defined by those tasks.

As the analysis documented in the 1388-2B data can be made with different methods and processes it is not possible to do a generic direct transfer of data from 1388-2B into OPUS. You need to know what rules the analysts have followed when they document the analysis. In general terms you can state that the useful information in a 1388-2B data set is found in the C-tables (task inventory with task analysis and support requirements) together with some item related information in the H-tables. The main steps in such a procedure are:

1
Identify the assortment (range) of spares to be considered in the OPUS10 optimisation. This can be made by help of the different classifications done for each part, but the method is dependent of what data elements you have in the 1388-2B database.

2
Identify the product structure. This is done by use of the information about the maintenance tasks, which parts are replaced and which parts are repaired. Once again, how this is done is dependent on the principles used in the documentation, e.g. how are task codes assigned.

3
Identify the maintenance concept. This can also be done by help of the task codes, if they are assigned in a stringent way.

4
Identify demand frequencies for the different spares at the different locations. This is done by help of the assigned task frequencies.

The consistency checks within OPUS10 are very helpful in this work. The information those presents gives all hints you need in order to understand the problem.

We have for a number of projects adopted this process and our main experience is that we it is possible to make use of the documented analysis results, but you need to understand the underlying analysis process and the quality of the OPUS10 optimisation is dependent on the quality of the RAM-analysis.