

**Question 1: Several recent revisions of SD-22 have incorporated Software Obsolescence, but we mostly hear the experts talk about hardware obsolescence; how do you see software obsolescence managed/resolved alongside hardware obsolescence, especially in light of the capability levels/maturity model?**

Response: Hardware and software obsolescence management go hand-in-hand. In the COTS world, hardware and software have developed a symbiotic supply chain relationship where hardware improvements drive software manufacturers to obsolete software, which in turn cause older hardware to become obsolete.

A program that implements COTS based systems must keep pace with the market through vendor surveillance and ensure that solutions are proactively managed on both the technical and financial fronts for both hardware and software.

Just like hardware obsolescence, software obsolescence must be implemented in phases at Program Offices and additional activities added as the capability level increases. Starting slow and working up to robust software obsolescence management is the best approach. The following factors should be considered when determining the appropriate target capability level for a program office:

- Obtaining program buy-in
- Determining what systems will be tracked (all or a subset)
- Determining what items will be tracked and by whom (Government, Prime, or both)
- Determining hardware and software interdependencies
- Agreement on what questions should be asked during research
- Determining how reports will be formatted and frequency
- Identifying who will research the information

As with hardware obsolescence programs, adding the infrastructure to manage software obsolescence will be dependent upon the amount of funding that is available.

Software should be considered in a couple of ways. It should be considered from a proactive approach similar to hardware items as software changes/DMSMS do happen and can have a direct impact on the availability and sustainment of systems. The other consideration is that when identifying impact and viable solutions, software impacts should also be considered, especially with the increased usage of virtualized systems. Hardware changes can often drive the need to update software and vice versa. Software changes can often drive the need to update hardware due to compatibility issues. I'm

starting to see Engineering Change Proposals are now including this dependency as part of the approval process, which is a good thing. Much of this is explained in the SD-22 as best practice.

**Question 2: What is the relationship between DMSMS and component reliability? A component might be readily available but not reliable ... or safe. I realize DMSMS stands for Diminishing Manufacturing Sources and Material Shortages, but is DMSMS stove-piped from reliability or safety considerations? If not, where are the intersections?**

DMSMS and Parts Management are certainly related. Component reliability is part of Parts Management. A program should have a Parts Management Plan (PMP), similar to their DMP. The PMP should state what type of parts are acceptable to use for that particular program/application. Cyber Security should also be part of the PMP. Parts selection is key to ensuring you have reliable parts. The designer/EE should know which parts are more reliable and which parts to not select. They should always work with the Obsolescence Engineer to check on availability of parts being considered in the design.

Reliability has a close tie to DMSMS and should be included in consideration of viable solutions. Reliability has direct impact on which viable solutions would be best to implement and should always be considered. Safety should also be a consideration, but has less direct impact on what solutions should be recommended. Safety concerns often has more to do with setting the priority of an issue that needs to be addressed.

**Question 3: Is there cross-Agency collaboration in DMSMS survey and management...similar to DMI (organic Depot Repair) infrastructure? Always easier to influence industry when you can demonstrate the true DoD customer population...helps OEM justify End of Production/End of Support planning & decisions.**

There are opportunities; however, those opportunities are usually limited to only the most severe of circumstances and impact across all services. The issue of Tungsten comes to mind. But due to the differing acquisition lifecycles and timelines associated with most DMSMS issues, there is often not time or a good method currently facilitate a lot of cross service collaboration. The Enterprise Parts Management System may allow for easier collaboration and opportunities in the future though.

**Question 4: What was the policy document Mr. Alcorn just mentioned (before the portion about WCF funding for DMSMS)?**

DoDI 4245.15.

**Question 5, for Mike Graham: On the sustainment side, since the supply chain units own the parts, what is the role of the DMT in the SPO to resolve these issues?**

The SPO should have a DMT stood up that has all the right players, which would include their supply chain units. This should mitigate gaps in what the supply chain is working vs what the SPO is working. This is the reason there has to be leadership support at a high enough level to support the activities that will take place to build a robust DMSMS program, which includes reaching across organizational lines for support.

**Question 6: Does DMSMS (including Level 4 - robust management) really only about identifying what is/what is going to become obsolete, or also find and execute resolution through integration/installation in affected systems/platforms?**

Jason Voeltz answered in chat during the webinar.

**Question 7: What type of predictive models are the panel members utilizing for real-time and updated consumption burndown after a DMSMS mitigation solution has been identified for a life time buy especially with sustainment programs?**

We refer to our Technology Roadmaps and work with the Item Managers for the AMD “burndown” rates. This allows for the combination of availability data with the sustainment data. We really don’t utilize a formal model.

We have a watchlist capability within OMIS to help us monitor stock levels and rates of consumption over time. It allows for a variety of triggers to notify a SME that can then relay to the stakeholders a potential impact based on usage rate or stock levels. Prediction model for this type of analysis is essentially a linear burndown model. We do have other capabilities that do forecasting of how long current inventories should last based on stock, usage, tech refresh schedules. Those are updated frequently, and projections updated as the data is refreshed. When a supportability driver is identified based on criteria set, it gives notice to a SME to investigate the potential impact.

**Question 8: Does contractual language such as Government Purpose license rights provide enough to enable the contractor to provide that data?**

Jason Voeltz answered in chat during the webinar.