

Long life projects; short lived components

Dealing with the growing problem of obsolescence. By **Graham Pitcher**.

When we asked readers what were the critical issues facing their company, many replied one was dealing with obsolescence and the related topic of counterfeiting.

Stuart Kelly, chair of the Component Obsolescence Group (COG), believes obsolescence is a growing problem. "It's being driven by projects that need to keep something in the sky or under the sea for 30 years," he said. "Designers are being forced to go down the commercial route and product manufacturers are facing inevitable obsolescence. As the life cycles of components shrink, the problem increases."

Obsolescence, in Kelly's opinion, should be equated with risk. "More companies are realising they have a risk and understand they need to do something about that risk. While military projects were an early driver of obsolescence management, COG is now dealing with issues in the oil and gas, rail and nuclear industries, amongst others. These industries face the same issues, as do any with long life projects."

So, faced with the problem of obsolescence, what can designers do? "Companies need to develop a proactive management capability," Kelly advised. "They need to plan and they need to apply procurement tools. The key is to understand all the parts in a project and the risks involved if and when they become obsolete. Put measures in place now so the impact in the future is mitigated."

Tools are available which highlight problem parts. "Managers can input a project's bill of materials and get an output in the form of 'traffic lights';

red means parts are obsolete, amber means there are issues. It could be the component only has a single source; if that source goes, there's a problem."

Amongst the 'hidden costs' of obsolescence are redesigns and requalification. "Obsolescence tools can point to potential alternatives," Kelly noted, "but the issue here is that a design may need to be subjected to a new clearance or qualification process for that change to be approved."

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Stuart Kelly

Kelly says avoiding redesign or requalification is important. "Statistics show redesign is a major expense. If you don't have proactive obsolescence management, you will be doing redesigns all the time, with an impact on through life cost."

Obsolescence can depend on your position in the supply chain and system builders may be more exposed, Kelly suggests. "The 'box' you're building may feature 100 components and the life cycle of each component can't be guaranteed to be for the life of the 'box'. That's a classic obsolescence risk and mitigating that risk means managing the parts."

One way in which companies can handle this aspect is by insisting on adherence to standards. Kelly

highlighted IEC62402:2007 as a suitable standard. "One important thing to do," he advised, "is to cascade obsolescence management down the supply chain to make sure your suppliers manage risk for you. Contract them to procure components in accordance with the standard."

Another aspect, often overlooked, is software obsolescence. Sometimes, said Kelly, this can be to do with code storage. "Access to software can be difficult if it's held on a floppy disk, for example – it happens in industry."

"There's also the issue of skills. A lot of software has been written in older languages – Cobol – for example. Getting hold of people with the right skills and experience is difficult."

Procurement departments can also

help. "We're exploring the role procurement has to play," Kelly pointed out. "It clearly has a role as they are the people with the contacts and who are often first to know that something is obsolete. Looking for alternative devices is important, but they need to ask themselves whether they are buying something that brings risks with it. Selecting a cheaper part could be costly in the long run."

And that's an area of the market attracting counterfeiters. "It's logical for counterfeiters to target obsolete parts," Kelly accepted, "particularly when companies are struggling to get hold of them. Obsolescence drives counterfeiting; it's a high risk area and managers looking for alternative products need to be careful."

■ For more on component obsolescence and to join COG, go to www.cog.org.uk