COG
Members' Newsletter
Component Obsolescence Group

THE VIEW FROM HERE:

By Ian Blackman, Chairman, COG UK.

As COG celebrates its tenth anniversary, obsolescence management has become increasingly important and continues to develop and grow as our membership changes. Recognition for the group is widespread and the breadth of obsolescence-related issues means there are many opportunities for the COG community to use its networking and collaborative skills to influence the industry. COG's participation in three Government & Industry forums is evidence of this.

The last few months have been particularly busy for the Steering Group, for Mike Trenchard, and for me. COG can be justifiably proud of the International Conference held at Cambridge in July, and planning for the 2009 conference, which will also be held in Cambridge, has already begun.

The September quarterly meeting was organised around a very full agenda – thanks to the COG admin team for their hard work, and to Westinghouse and Shaun Wilkins for their hospitality. As usual, the evening meal provided a good opportunity for social networking and for a robust sharing of ideas and opinions. With delegate numbers growing I hope that more members will take the opportunity to attend the quarterly meetings.

Europe has been high on COG's agenda and, in September, there were further discussions with potential COG members in France. Whilst there is still much work to do, some progress was made towards establishing COG France.

In early November a COG team went to Italy to hold opening discussions and present COG's objectives, achievements and the resources that are available to members. An initial meeting was held in Milan on 6th November, in which Mike and I met with Galileo Avionica. This was followed by a meeting in Rome, on 8th November, with Finmeccanica and a number of other companies and potential members. These allowed us to gain some useful insights into Italian culture and to understand some of the logistics challenges. However, I believe that good progress was made towards establishing a COG Group in Italy next year.

I would particularly like to thank all the UK team and COG Germany for their support and contribution to both the meetings in France and Italy.

I am very conscious that COG offers a broad range of services and that we must cater to a very wide audience. Feedback from members, therefore, is essential and the COG Steering Group values your thoughts and suggestions. We will report on the ideas we receive, and explain any changes that are implemented as a result of member feedback, at the quarterly meetings.

You can share your thoughts by email to admin@cog.org.uk or by calling Mike Trenchard on 01582 762934.

Thank you for welcoming me back as your Chairman, I hope to see many of you in Fareham in November.

About Ian Blackman

Ian brings over thirty years of experience in procurement and component engineering in the Aerospace and Defence sector to his role as Chairman of COG UK. During his career he has been an Obsolescence Strategy Manager for the Avionics Support Group at BAE Systems Avionics, as well as working on projects as diverse as head-up and helmet displays, digital maps, fly-by-wire flight controls, Sonar processing, fuel management systems, pilot sticks, gyro platforms and test equipment. He has been an active member of COG for ten years, and a member of the steering group and a number of COG working groups.

The search for simple answers

Ian Blackman explains the complexities of risk assessment.

A single obsolescence strategy only works if all the products being managed have identical technology needs, operating environments, in-service and support requirements, and the same contractual management demands. Therefore, once a company begins the process of defining an obsolescence strategy, it quickly becomes apparent that there is no simple, formulaic path to risk assessment. Different products will need different strategies.

Take age for example. Whilst it may seem reasonable to assume that older platforms must face a higher risk of obsolescence than later, high-technology products, the reality can be quite different. Modern cars, audio systems, computers and test equipment are far more sophisticated and, compared to their older counterparts, often based on a more modular design ethic. Consequently, it can be easier to replace discrete components in the older products than to replace or repair the more advanced modules in the latest high-tech generations.

Obsolescence tools can help to simplify obsolescence management. However, these obsolescence prediction tools do not cover every type of component and can paint an unrealistically pessimistic picture when predicting the future life of parts. This is due, in part, to the fact that predicted product lifetimes are frequently distorted.

Replacing discrete components can be easier in older products than in new high-tech versions.

Component lifetimes

Whilst it is a fact that the expected lifetimes for memories and processors are shrinking, in some cases to as little as 18-24 months, there is a strong aftermarket through which providers offer continuous support long after the predicted demise of a product. An analysis of end-of-life notices reveals that products have nearly always been available for longer than their assumed two-year lifetime.

Also, processors and memories do not constitute the whole system and other parts within the design, such as 2k x 8 SRAMS, 1M EPROMs, simple logic gates, A/D converters and amplifiers can have been available for over 30 years.

In order to find a balanced approach, which determines the average life expectancy of different components in each design, generic types of device need to be isolated and appropriate lifecycle rules applied to each group. It is important here to avoid blanket assumptions such as 'semiconductors will only be available for a period of months'. Instead, consider the length of time for which they have already been available, and predict their future availability with the help of obsolescence tools.

Skills obsolescence

Whilst components, software and materials may be the prime focus of obsolescence reviews it is also vital to consider the skills that are required to make the necessary judgements when assessing the risk of obsolescence. Many companies find that they lack the broad base of engineering skills, or no longer have personnel with an indepth knowledge of legacy systems. In many cases, it is personal experience based on years of practical design, over successive generations of products, which makes the biggest difference between a routine risk assessment and one which is insightful and cost-effective.

Conclusion

There are few simple answers in obsolescence management: It is a complex issue which needs careful and multi-dimensional analysis if it is to be successful. That is why different products need different strategies, and why obsolescence tools alone are no substitute for experience and the ability to make realistic judgements based on real-world situations.

COG UK DIARY DATES

2007 COG UK Quarterly Meeting	**28/29 November**	Alter Technology UK, Fareham, UK
2008 COG Workshop: Managing obsolescence in legacy in-service equipment	**17 January**	OA Centre, St. Albans, UK
COG Quarterly Meeting	**5/6 February**	Imperial War Museum, Duxford, Cambs, UK
COG Workshop: Emerging Technologies: How to take advantage of new technology without compromising system performance	**16 April**	OA Centre St. Albans, UK
COG Quarterly Meeting	**20/21 May**	To be confirmed
Components for Military and Space Electronics Conference (CMSE)	**10/12 June**	Marriott Hotel, Portsmouth, UK
2009 COG International Conference	**29th June to 1st July**	St. John's College, Cambridge University, UK

5th International Conference: a sponsor's perspective.

by Lloyd Francis, IGG Component Technology Ltd.

Field trials for the next COG steering committee?

IGG Component Technology Ltd along with PartMiner were joint main sponsors of the 2007 COG International Conference, which is usually held bi-annually. This year's event was a little more special as it also celebrated 10 years of COG. The event itself was split into two parts: an obsolescence tools workshop on day one, followed by the conference proceedings on days two and three. The COG International Conference was well attended with over 125 delegates, some travelling from as far afield as Singapore and New Zealand, not to mention the COG supporters from the USA.

Accompanying the COG International Conference, was an exhibition supported by a number of suppliers, which was housed in a marquee adjacent to the main conference hall. Logistics determined that refreshments, lunches and the evening buffet were served in the marquee which gave exhibitors ample opportunity to network with prospective customers.

There were also a couple of evening diversions arranged both officially and unofficially. The unofficial event took place on the evening prior to the Workshop on day one. A collection of COG members tasted various fine real ales, in many Cambridge hostelries, all in the name of Shaun Wilkins' stag night. I understand that subsequently the wedding went well and, at the last count, the couple in question were still talking to each other. The official events were an evening punting on the river Cam, where some fool wagered the Punter (the man at the end of the pole) to perform a demonstration of bridge jumping. This entails the Punter abandoning ship, scrambling up a parapet of a bridge, sauntering across the road and footpaths, and the leaping down the parapet on the other side and regaining his position on his punt.

The frivolity was followed the next evening by a formal dinner, where the Right Honourable Gerald Howarth, MP, Shadow Minister for Defence Procurement, was the after-dinner speaker. The formal dinner was also the launch event for the latest COG booklet, The Obsolescence Minefield - Senior Executive Edition, which contains a foreword by Sir Ralph Robins, of Rolls-Royce fame.

All this gaiety aside, there was a serious side to the three days, with the conference yielding some really interesting papers. The highlights for me were the papers by Tom Rochford on 'Component Obsolescence: Group Therapy', David Saul's 'Oil and Water', David Young's 'Windows-based RADAR' and David Lynch's presentation 'Three become one'. A copy of the proceedings is available from the COG shop at **www.cog.org.uk.**

So as a sponsor, did IGG Component Technology Ltd find it value for money? Absolutley! It was a first-class event, that was really well run, well attended, and the conference was well worth the three days out of the office. A big thank you goes out to all the COG staff and the COG Conference Group for making it all possible.

Will IGG Component Technology Ltd sponsor a future COG International Conference? No, but only because IGG Component Technology Ltd has changing its name to Alter Technology UK.

I would, however, urge you to make a note in your 2009 diary, to keep 29th June - 1st July free for the next COG International Conference.

Members' NEWS

Two new agreements for MINCO

Minco Technology Labs has signed a worldwide agreement with Linear Technology (LTC) to manufacture their obsolete DSCC SMDs, providing an important potential source for these items, especially where they are specified in legacy systems.

In a separate agreement Minco will also represent Honeywell as its international sales channel in Europe, South Korea, India, and Australia. The agreement gives Minco access to Honeywell's product portfolio of radiation-hardened mixed-signal and digital ASICs, logic and structured ASIC components, rad-hard processors, FPGAs, static RAMS, MCMs, non-volatile memories, A/D converters and SERDES communication I/O functions.

In addition to the radiation-hardened products, Minco will be able to sell obsolete replacement IC services and emulation solutions on high reliability components in the European military and aerospace market. These emulation services include replacing products ranging from FPGAs to digital-to-mixed signal ASICs, microprocessors to microcontrollers, SRAM, FIFO and discrete analogue functions.

Paul Green joins Rochester

Rochester Electronics have appointed Paul Green as a European Strategic Account Manager, Paul joins Rochester following 17 years in the electronics industry with Arrow Electronics, and he will work with key customers and distributors, throughout Europe, to promote Rochester's extensive range of products and services. Paul will be attending the Quarterly COG Meeting in November to meet COG members and gain further knowledge of COG.

A-TEC launch VME Boards Division

A-TEC International Ltd has launched an embedded computing division, VME Boards International. Marketing both current and legacy products in VME or CompactPCI form factors, VME Boards can source replacement items worldwide thereby enabling not only the extension of equipment life cycles but also avoiding costly financial and time-scale redevelopments.

Supplying VME CPU Boards, CompactPCI, PCI and PCI Mezzanine Cards from manufacturers such as Motorola, Force, GE Fanuc, VMIC and Xycom, for upgrade or redesign, VME Boards International will also purchase new or pre-used excess units.

Harris award goes to TTems

Howard L. Lance (left), Chairman, President and CEO, Harris Corporation, presents the award to Andrew Cox, Managing Director, TTems.

TTems has received an award for outstanding performance from Harris Systems. The electronics manufacturing services (EMS) company received the award for their consistently high quality and on-time delivery for the MoD Bowman programme. The award was presented at Harris Systems Ltd's new Advanced Manufacturing facility at Winnersh, Berkshire.

4800 series production moves to Charcroft

Charcroft's Quality Manager, Phill Darwood inspects 4800 series resistors

TT electronics, Welwyn have transferred the production rights for 4800 series precision resistors to Charcroft Electronics. The move ensures the continued availability of the 4800 series, including the CECC 40-302-002 release versions of the 4802 BX and 4812 CX style devices. These are used extensively for maintenance, repair and overhaul (MRO) in the defence, aerospace and precision instrumentation sectors.

Contribute to the COG Newsletter

The next COG newsletter is planned for March/April 2008. If you have news or comments that you would like to share with other COG members via the newsletter, please email **admin@cog.org.uk** with NEWSLETTER as the subject before Friday 7th March 2008.

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Post: COG International Limited, PO Box 314, Harpenden, Herts, AL5 4XL, UK.

COG Briefings

COG Looks to Europe: Meetings in Italy and France

COG were invited by the UTE Obsolescence Group in France to attend a meeting at Thales in Orsay near Paris, France on 12th September 2007. Several members of the UK and German Steering Groups attended the meeting during which the activities of both groups were explained and discussed. Obsolescence is perceived as an important issue in France and COG are hopeful that a COG Group can be formed there.

Preparatory talks have also taken place on the formation of a COG Group in Italy. An exploratory meeting, on 8th November 2007, was hosted by Finmeccanica at their offices in Rome, Italy. Presentations were given by Finmeccanica and representatives of the UK and German COG Groups. The formation of a COG Group in Italy is planned for 2008 and a further meeting will be held early in the New Year.

COG Council Meeting

Representatives of COG UK and COG Germany attended a Council Meeting on 30th October 2007. The meeting exchanged details of current activity and it was noted that the number of member companies was now 55 members in Germany and approaching 200 worldwide.

The meeting also discussed updating the COG Web Site, membership from Universities and other educational establishments and future COG International Conferences.