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ELECTRONICS MANUFACTURING & PROCUREMENT

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 Email: newsdesk@empmag.co.uk
 www.empmag.co.uk



Electronics Manufacturing and Procurement is owned by MIT Publishing Limited and is published 12 times per year and distributed free of charge to applicants in the UK meeting the Publisher's criteria. Subscriptions are also available at £60 per annum to UK readers or £148 overseas.

Reprographics by Anton Print Solutions

Printers: Hastings Printing

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What a difference a year makes



Neil Stanton



Nigel Burt



Alan Lund

In the March 2006 issue of *EMP* we featured a 'round table' debate with a number of industry experts on the subject of the RoHS directive. The idea behind the debate was to establish a feel for how the electronics industry was shaping up towards compliance prior to the deadline date of July 1st 2006. Now over one year on, *Dave Tudor* asks members from that same select panel how things are progressing. Providing the answers are Alan Lund of RS Components, Nigel Burt of Dolby Laboratories and BSI's Neil Stanton.

Okay, straight in at the deep end. One year on since the July 1st 2006 deadline, has the electronics industry risen to the challenges of RoHS compliance in your opinion?

Neil Stanton: Much of the industry has risen to the challenge. UK electronics manufacturing is still very much split with regards to RoHS and non-RoHS as a lot of production is in areas yet to be covered by the directive. Many of those actively engaged in ensuring compliance have been seen to be implementing some very robust processes.

Alan Lund: Yes, this is especially noticeable in the consumer electronics sector, with the majority of products within the scope of RoHS now marked with a symbol to indicate compliance. This however does vary because, unlike the WEEE 'crossed-out wheeley bin', there is no standard marking for RoHS. I suspect the average consumer has no idea what the symbols mean.

Nigel Burt: The few weeks either side of the deadline were a bit frantic, but since then I think the vast majority of the initial challenges applicable to our own sphere of the industry at Dolby have been met and in some instances found to be less troubling than we had feared.

Is this the outcome you expected?

Neil Stanton: Yes, more or less. There will always be those organisations who embrace change and others that try to avoid it and look for reasons not to comply. I'm pleased to say that most of the companies we speak to have had a very positive attitude to the challenges presented by the RoHS directive.

Alan Lund: Availability of the components required for the RoHS-compliant conversion of assemblies was initially an issue, but has definitely improved. Clicks on the RS RoHS website, which had been running at thousands per month, had declined significantly by the start of 2007.

Nigel Burt: No, even in early 2006 the industry as a whole still

seemed ill-prepared though I was confident that we had done as much as we could at Dolby. This didn't happen through chance though - corporate objectives and resources had to be put in place.

The availability and potential obsolescence of components, both leaded and lead-free was a big concern back then. Are there any developing trends concerning component availability and the supply chain in general?

Neil Stanton: I think this situation will continue for some time. The ratio of 'leaded' to RoHS compliant product varies greatly from CEM to CEM but I think it's safe to say that most will have dual processes for a number of years to come even as more and more RoHS compliant components become available.

Alan Lund: The trend that we have seen developing for some time is that very few new components are anything other than RoHS compliant at launch, with some going a step further to be China RoHS compliant. This would seem to have had the effect of making some manufacturers who operate within exempt industry sectors to review their policies in terms of 'green' manufacturing and aim to convert production to be RoHS compliant well before they potentially would have to do so by law.

Nigel Burt: We are definitely seeing that approved component sources are switching over to RoHS compliant products only, and some products currently being produced for sales outside the EU are having to at least partially convert sooner than we had planned. This is entirely predictable given economies of scale and the laws of supply and demand. In general I have been pleasantly surprised that we did not see a lot more problems with the RoHS component supply chain since the deadline, as I expected this to cause significant difficulties for a long time.

Based on the fact that Bob Willis continues to be busy with educational seminars all over the world, I'm assuming that there's still a fair way to go and the job is far from complete. In terms of education and training, where are the main areas of demand or problem areas?

Neil Stanton: I'm sure Bob will continue to be in demand regarding the technical aspects of lead-free. In addition to this, RoHS compliance and control of the product supply-chain continues to be a demanding area with many diverse approaches to compliance.

Alan Lund: In our experience, there is still some confusion around what is and what is not covered by RoHS, and we still regularly receive questions about this aspect. I think the demand for general RoHS education in the UK is waning but there is a need to raise awareness about China RoHS among exporters.

Nigel Burt: It's clear from messages posted on industry email forums that there are still some, who didn't need (or perhaps want) to comply immediately, and are still seeking answers to fairly basic and rudimentary questions about RoHS and lead-free solder. Additionally those concerned with high reliability, military and aerospace applications have a lot of more difficult questions to answer.

RoHS is essentially an EU directive but obviously non-EU companies wishing to supply into Europe are directly affected. How is the rest of the world shaping up with compliance?

Neil Stanton: In many cases the non-EU suppliers have made a significant commitment to compliance. This may well be due to the demands made of them by their European customers. Others however, have not been so diligent. It is really the responsibility of the EU 'producers' to ensure that the suppliers from outside the EU comply with this directive.

Alan Lund: Interestingly, we receive more technical enquiries about RoHS from some countries that are not affected directly than some that are. It has proved of particular interest to customers in Japan, who have been active in the area of lead-free production for many years, and China is starting to wake up to the requirements of China RoHS, which is far more prescriptive than EU RoHS.

Nigel Burt: The fact that legislation applied only to products sold within the EU (and associated EFTA) member states was always going to be irrelevant once it was in place, due to market globalisation and the impact of the internet for e-commerce. The first stage of China's version of RoHS is already in place, with product and packaging marking requirements and Korea has also begun to implement legislation with a similar intent to the RoHS, WEEE and ELV directives. There appears to be moves to create some kind of similar federal legislation in the USA too.

For the exempt sectors, such as medical and aerospace, when do you think compliance will be enforced? Are leaded parts becoming more and more scarce as the world moves totally towards lead-free?

Neil Stanton: The medical sector is likely to be included in the scope of the RoHS directive within the next few years. Other than categories 8 and 9 of the WEEE directive there are no sectors that are expressly exempt.

Alan Lund: I believe it unlikely that areas that are currently exempt from the requirements will be subject to enforcement for several years yet. Assuming that they are brought within scope I doubt that anything significant will happen before 2012 at the earliest.

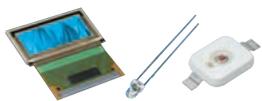
Nigel Burt: While very real doubts about vital high-reliability applications remain I don't see the legislation being fully enforced for such equipment. It has always been slightly amusing that whilst the bulk of the industry is trying to gather evidence that the component chain is fully compliant, some of the exempt industry has also been demanding evidence to prove the exact opposite, insisting on lead.

Finally, are we out of the woods yet?

Neil Stanton: Probably not. Both in the EU and throughout the globe we still have a long way to go before we can be confident that we are manufacturing compliant and environmentally-friendly products. Also, as the REACH regulation and the EuP directive roll out there may be further restrictions which may impact on many materials used in the electronics supply chain.

Alan Lund: In our experience, there is still some lack of understanding of the RoHS requirements, complicated by the many published and requested exemptions, but knowledge is definitely increasing.

Nigel Burt: No, I still think we can't see the woods because of all the trees.



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