



SMART GROUP DISCUSSION FORUM ON DTI PROPOSALS FOR THE UK IMPLEMENTATION OF THE WEEE AND ROHS DIRECTIVES

HOSTED BY DOLBY LABORATORIES INC - TUESDAY OCTOBER 5th 2004

Present:

Aculab	Keith Green	Marconi	David Lucas
Aculab	Andy Smith	Marconi	Alex Robinson
Almit Technology Ltd	Chris Ward	Memco	Mark Elliott
Almit Technology Ltd	Peter Martin	MJM Marketing/SMART PR	Mike Judd
Almit Technology Ltd	Graham Cooper	NPL	Alan Brewin
Alstom Power Conversion	Ray Bagley	Park Air Systems	Robert Clunas
Altus Group Ltd	Rob Scrivens	Radstone Technology	Mike Isles
Apollo Fire Detectors	Michael Peach	Radstone Technology	John Boocock
Apollo Fire Detectors	Colin Greenman	Raymarine Ltd	Ian Doncaster
BAE Systems	Clive Simmonds	Renishaw	Michael Gambie
BT	Kevin Lewis	Blue Chip Technology	Richard Wallis
Dolby Labs Inc	Chris James	Rolls Royce Naval Marine	Bob Gregory
Dolby Labs Inc	Nigel Burtt	SMART Group	Tony Gordon
Dolby Labs Inc	John Blunden	Taylor Hobson Ltd	Peter Kitchen
Dolby Labs Inc	Alan Rodgers	Tecan Ltd	Alan Warner
Dolby Labs Inc	Duncan Percival	Telsis Ltd	Brian Wellington
DTI	Nick Jolly	TS&S Global Ltd	Andy Willey
DuPont	Tim Sweeney	TS&S Global Ltd	Maurice Slater
DuPont	Lucie Garreau-Iles		
EADS Astrium	Ian McNair		
EADS Astrium	Liam Murphy	Chair:	
Eldon Technology	Chris Wordley	Soldertec/SMART Group	Tom Perrett
Eurotherm Ltd	Gavin Salt	-	
Eurotherm Ltd	Kevin Shaw	Press:	
Haliburton Manufacturing	Sue Reid	EMP Magazine	Amy Faulkner
Haliburton Manufacturing	Derrick Darlow		
JJS Electronics Ltd	John Butcher	Scribe:	Linda Sellick

Apologies for Absence: Kevin Knapman – Marconi, Stephen Hopwood – Syfer Technology and Stephen Watts – Syfer Technology, Naim Kapadia – JJS Electronics

- 1. The meeting was formally opened by the chair, Tom Perrett of Soldertec, on behalf of the SMART Group, who introduced and welcomed Nick Jolly of the DTI.
- 2. Nigel Burtt, Product Engineering Manager at Dolby, welcomed all the delegates and then introduced John Blunden, Dolby's Production Director, who explained Dolby's operations at this site and mentioned a treat for everyone here in the form of a Dolby Digital Cinema demonstration at the end of the session.
- 3. Nigel Burtt then gave a short introductory presentation and gave all the delegates the opportunity to introduce themselves and their companies.
- 4. Nick Jolly of the DTI then gave a short presentation about the Directives and the Consultation documentation. Nick had been the originator of the suggestion that the SMART Group set up this day.
- 5. The main discussions followed on pre-submitted topics, firstly concerning RoHS and secondly WEEE, as per this document. This was then followed by discussions on the questions raised in the Consultation documents themselves.
- 6. The meeting was formally closed by Tom Perrett, with thanks given to Dolby for hosting the meeting and for providing this extremely useful and interesting day to all concerned.





RoHS Implementation - questions on topics raised in advance

1. Alstom: we would like qualification of what will be permitted lead wise in the spares/repairs scenario?

Nick Jolly: The DTI is trying to include upgrade/capacity expansion as well as repair and replacement exemption. Compliant product in the field should however be repaired with compliant spares. With regard to "last-time-buy" (LTB) issue when replying to the consultation you need to respond about this issue – must be careful not to allow an exemption to include "Mr Lazy" who does nothing right up until the deadline. The DTI may try to get exemption for last-time-buy components subject to certain criteria.

Meeting noted some confusion over definition of "spare parts" for repair/re-use, does this mean individual electronic components, or may this be extrapolated to mean complete modules/assemblies or units? DTI guidance needs to be clearer to encourage use of "true" LTB components. May need some additional guidance for inspectors. If parts are known to be Pb-free process compliant, but SnPb leads, it should be safe to strip and re-plate the terminations.

2. Marconi: we are concerned about the move to lead Pb-free soldering technology. We have 50 years of experience with Pb based soldering technology and understand how to ensure that our equipment is reliable and resilient for the mission critical applications in which our equipment is used. The new technology is largely unproven and the Directive recognises this with several exemptions, including one for telecommunications equipment. How do we gain confidence and what notice would we expect for removal of any current exemptions?

Nick Jolly: Much work done by NPL and Soldertec already looking at reliability, some data freely available on the NPL website. Notice of exemption unknown, but would be reasonable to expect minimum two years, probably 3-4, given current exemption for servers, etc. until 2010.

Meeting wished to have appropriate product lifecycles considered for any future exemption withdrawals. Ray Bagley pointed out SMART Group seminars for Pb-free information gathering, of course http://www.smartgroup.org/

3. Dolby/Avaya/Telsis: is there any scope for an interpretation, exemption or extension to cover obsolete and non-compliant components already in stock as last time buys used to manufacture existing products, where re-design is impractical and/or uneconomic?

Nick Jolly: All products sold after 2006 must be compliant, including all components used therein. Concept of last-time-buys not well understood by legislators. It would be wise to use the same definitions used in the Avaya briefing in your responses to this consultation.

Meeting agreed that the Avaya briefing should be circulated to all delegates (see appendix below.)

4. Taylor-Hobson: query concerning compliance of 'refit kits', sold to upgrade and enhance existing instrumentation out in the field already raised with the DTI. Their response is that they probably don't need to comply with RoHS under UK interpretation but this could be different in other EU states and could be challenged in the EU courts – where do we stand?

Nick Jolly: You have to ask the individual Member States – due to interpretation of the rules in the country where the product is being sold. There is some information about transposition in other EU states available on the DTI website. http://www.dti.gov.uk/sustainability/weee/index.htm

Meeting noted some more confusion over definition of "producer" – if UK supplier sells direct into another EU member state, is the local import agent in that state the responsible "producer", or is it still the original UK business? DTI guidance would benefit from some additional clarification.





5. Telsis: The RoHS exemptions, such as 'lead' in solders for telecoms infrastructure, do we know when all these will end?

Nick Jolly: The RoHS Directive requires review before February 2005. This review is already underway (contracted to ERA) and so cannot answer the question yet. The Technical Adaptation Committee (TAC) is considering new exemptions too.

6. Soldertec: we are concerned over the meaning of "put on the market". Is it for example, when something leaves the factory, when something leaves a warehouse to a retailer, or the date it is labelled with the WEEE mark or something else?

Do transfers between company sites count as "leaving the factory gate"?

If something is in stock in a distribution centre, not of the producer but a subsidiary or affiliate company, does that count as having been "put on the market"?

Nick Jolly: Distributors may have already put the equipment in their stock to sell. Lawyers will be charging large sums to sort this question out!

Meeting was directed to the ECs "Blue Book" section 2.3 which supposedly defines the requirements – see http://europa.eu.int/comm/enterprise/newapproach/legislation/guide/index.htm

It was absolutely clear that delegates were still confused about this and had many unanswered questions which the DTI guidance needs to help with, perhaps with some worded examples. (Possibly this is linked to when there is a transfer of ownership.)

7. BT/Syntegra: what substances might be banned in future, .e.g. Bismuth? Where do we get sources of reliability/testing data? Help with equivalent part sourcing, obsolescence notifications (e.g. Rosettanet component sourcing access/membership)

Nick Jolly: Don't know - there is another Directive about registering hazardous waste. Standard environmental policy would be to look at all types of material used in your business- can you demonstrate that you have done that?! NPL and Tin Technology/Soldertec can help with testing and reliability data. Component Obsolescence Group (COG) could help part supply issues – see http://www.cog.org.uk/, also see ELFNET http://www.europeanleadfree.net/

Alan Brewin (NPL): We are contracted by DTI to do relevant testing and reliability work and would encourage you to make use of it – data and advice available and so already paid for by UK business and individuals (you the taxpayers!) See http://www.npl.co.uk/ei/

Tom Perret: Soldertec can offer information and variety of services See http://www.lead-free.org/





WEEE Implementation - questions on topics raised in advance

1. Raymarine: The scope of WEEE and RoHS for business outside mainstream consumer products, or clear categories, continues to be a grey area. Please could we discuss what "part of another system" and "does not have a direct function outside the other item of equipment" mean in practice?

If one's products are not distributed through regular retail outlets such as shops, the arrangements for take back are not quite as easy to package. Could we share what other are doing to address this area and support their outlets especially with channels that are not normally seen as electronic retailers?

Nick Jolly: There is no onus on producers to get material back and there is no onus on customers to get material back. Producers incur financial liabilities for processing equipment at the end of its life. You will have to show that you have joined a compliance scheme or have taken individual corporate responsibility for these costs. You could collect up the WEEE products, but I am sure you do not want to do that. The National Clearing House will not process your product; they merely arrange assignment of separately collected waste to producers or compliance schemes. You must register as a procedure for paying the proposed National Clearing House. Your annual production, say, is £100,000 - y% of the UK total registered. Therefore you are responsible for collecting and treating y% of the separately collected WEEE.

Meeting again felt the discussed definitions were in need of further clarification in the guidance documents.

2. Marconi: We operate entirely in the Business to Business (B2B) arena making telecommunications equipment. Much of the Directive seems to be targeted at consumer electronics and appliances (i.e. B2C). Our WEEE will be dealt with by ourselves (default situation) or by our customers (as allowed under Article 9), the actual route being agreed at the time of sale of the equipment. Our WEEE generally has a residual value and therefore it never ends up in the public waste stream. This has always been the case and our investigations reveal that we (or our customers) have been achieving the WEEE Recycling targets with our old equipment for some time. As we see it, the new Directive formalises the situation which already exists and clearly specifies our responsibilities or that of our customers (if they choose to continue to take on these responsibilities). The issue is that the Directive clearly requires us to report the amount of EEE placed on the market each year in order to calculate our "market share." We have no objection to reporting the figures but the Directive seems to imply that the market share will be used to establish our share of the total collection, treatment and recycling cost of al waste equipment which will be shared over all producers. Thus, although we accept the responsibility to ensure that all Marconi WEEE is dealt with in accordance with the Directive we do not accept any responsibility for WEEE from other sources such as the consumer world. This is an issue because most consumer related waste does not have a significant residual value and there are costs involved in its recycling. In summary we would like it to be made clear that B2B producers who wish to deal exclusively with their own WEEE and no other WEEE will be allowed to do so.

Nick Jolly: Yes, you can register individually with the NCH. If you have demonstrated that you have already recycled your B2B market share you may not have to put in any extra money.





2(cont). Marconi: It is not clear from the Directive whether a company outside the EU can register as a producer within the EU in order to sell his products into the EU. The only alternative seems to be the creation of an entity within the EU in order to register. This seems unnecessary bureaucracy. In the case of a producer wishing to manufacture in one Member State and sell into another Member State does he have to register and report WEEE recycling activity in both Member States? Again this would seem to be additional bureaucracy.

Nick Jolly: It should not be necessary to register anywhere except in your own member state. For example, if the German regulations are the same as the UK regulations, then it will be the responsibility of your importer in Germany to register locally. Your distributors and agents need to understand this. However, still vague and it may be worth paying someone to examine this in detail for your business, or putting some cash aside (an insurance policy) to cover costs.

3. Taylor Hobson: We are a manufacturer of high cost capital equipment (metrology instrumentation) which is all made in the UK but 95% export to EU and ROW. Most of this equipment has exceedingly long life as customers cannot/will not replace it but expect us to 'keep it going' due to the costs. What will be the hit in the UK with unrealistic targets for recycling on a year by year basis?

Nick Jolly: Targets in the Member States are for separately collected waste. There are different figures applied for the different categories of WEEE. Your target will be the final sum of your targets. If you have already paid for your market share of the collected WEEE, then you will have achieved your legal requirements, there are no additional costs for treatment, collection, recycling etc. Businesses cannot put any of its WEEE into the consumer waste-stream, thus in theory, as producers of B2B business sales, you are responsible for your B2B end user's product disposal costs, but you have no direct obligation to get all the actual WEEE back again. However, if your customer knows that you are going to pay for disposal costs and the customer does not get it back to you, it will be his responsibility to pay.

4. TS&S Global: We are a small company of 50 people. We repair circuit boards for telecoms equipment. We also do third-party manufacture of circuit boards on a small scale for local companies. We do not sell anything that is your own finished product. If you are an assembled circuit board supplier to a company that assembles and sells the product into the open market as their own branded product, are we still classed as a producer and therefore liable to take the circuits back?

Nick Jolly: As a sub-contractor, you are not a producer, however, your customer might want to put the obligation on you as part of B2B contract negotiations. He may also want you to be RoHS compliant, perhaps earlier than you would like!

5. BT/Syntegra: Known details of any Registration body(s)/scheme(s)? Also any lists of accredited recyclers?

Nick Jolly: National Clearing House is being established and you will have to be registered before August 2005. Currently no list of compliance schemes being set up, but try the DTI website, which is updated regularly. Also, no list of approved recyclers as yet, but try http://www.icer.org.uk. Not a lot of recycling companies in the UK, so choice limited anyway. They are shortly going to start a new registration regime and a new consultation on this will come out, but will not be in place in time so there will be specific regulations on this.





Consultation Questions

1. **WEEE National Clearing House** – Do you agree with the proposals for establishment of the National Clearing House, including the suggestions for the specification of its operator?

Meeting generally agreed that this should be the favoured approach but were keen to understand costs.

Q: Is it going to be a profit or non-profit making operation and a monopoly

Nick Jolly: It will be a monopoly but will be carefully watched, profit-making is not defined

Q: If I am a producer and I produced x amount of WEEE this year and I already deal with it at every stage – would I have to register to report all this?

Nick Jolly: Yes, even though the National Clearing House will be established, you are responsible for getting that waste treated and have to show that you have met the requirements.

Q: If you negotiate with your customers that they are responsible for WEEE, do you still need to register yourself as a producer?

Nick Jolly: I think you would do. The Government is to report back on this.

2. **Allocation of Separately Collected WEEE** – which of the 3 options proposed for allocation of separately collected WEEE to producers to you prefer? Please explain why?

As delegates were almost all B2B, the meeting was fairly ambivalent about this question, the suggested preferred option was thought to be sensible

Q: What if I make small items and am not likely to get any back? Why should I pay for WEEE allocated to me?

Nick Jolly: It is a compromise to try and reduce the amount of waste going back to be recycled. Note that if you dismantle product to remove hazardous materials/specific components yourself prior to collection and disposal there is a danger that you may be classified as carrying out waste treatment, which will put further restrictions on you – so better to let authorised operators do this.

3. **Designated WEEE Collection of Facilities** – what is your assessment of the implications for designated collection facilities of these options? The Government particularly invites views from prospective operators of designated collection points including operators of civic amenity sites and retailer-led sites.

No strong opinions were voiced – this question did not seem to directed at the interests of those at the meeting

4. **WEEE Allocation for Small Businesses** – which do you think is the allocation approach which best meets the particular requirements of small business?

Meeting seemed to agree that Option 2 works better for small business. Would expect the norm to be that the NCH would deal with waste pickups via approved and registered compliance schemes. However, does this push up the price of membership of compliance schemes for small business?





5. **Producer Involvement at WEEE Collection Facilities** – what level of involvement would be appropriate for producers, their compliance schemes or their contractors to take in the management of WEEE at designated collection facilities, including civic amenity sites?

No strong opinions expressed from those present.

6. **Direct Point of Sale WEEE Collection** – what do you think of the proposed arrangements for direct point of sale collection arrangements between producers and retailers and local agreement collection sites, which could run alongside the mainstream NCH allocation of WEEE?

No opinion from the meeting as delegates businesses mostly unaffected.

7. **WEEE Category Groupings** – do you agree with the proposed grouping on WEEE categories for collection at designated collection facilities?

Can be difficult to know which category your business belongs to and businesses will want to ensure that your WEEE is put into an appropriate category which does not by implication unfairly weight your contribution compared to others in the same category. How do we know which category to select?

8. **Sales Data Reporting for Allocating WEEE** – do you agree with the approach to sales data reporting? If not, can you suggest a way in which all producers can fairly and simply declare their business to business sales; and which could be administered cost-effectively.

Meeting would prefer to know how total numbers shipped and total weight figures are going to be combined to assess market share for purposes of WEEE allocation.

Nick Jolly: This still to be clarified. Wanted to avoid sales value to be fair in cost allocation. For example, your WEEE maybe high value, but low weight and low sales volume items, which should not be judged the same as say a washing machine manufacturing – low value, large weight, large sales volume.

One suggestion made that it could be done through the VAT system to identify B2B separately, but perhaps simpler, cheaper to implement and fairer going for "catch all" solution.

9. **Wider Environmental and Social Impact of WEEE** – whilst being sensitive to the costs of compliance of the WEEE Directive to UK businesses the Government is minded to ask producers and their compliance schemes to take into consideration wider environmental and social impacts, including local impacts, when discharging their obligations under the WEEE Directive. Do you agree?

Meeting felt this was reasonable provided there were some sensible cost benefits to producers too, rather than increased burdens. Geographical considerations for waste collection were mentioned as a means to reduce costs for all involved.

10. **Business to Business (B2B) Approach to WEEE** – do you agree with the proposed approach to enforcement of business to business obligations? If you do not, please say why not and explain any alternative approach you would prefer.

Meeting largely agreed, but some concern expressed about how to police B2B sales agreements that put onus of WEEE costs on end-user. It was suggested that details should be put in notes on invoices, and/or the creation of audit trails with individual customers. Some felt that bearing the cost of competitor's WEEE for replacement sales is counter-productive and could have an adverse effect on fair competition. There was some discussion about cross-charging amongst businesses as an alternative.





11. **WEEE Compliance Data Reporting** – do you agree that producers, or their compliance schemes, should report compliance data on a quarterly basis to the National Clearing House, with these reports subject to monitoring and enforcement action by the environment Agencies?

Meeting agreed that on start up quarterly reporting for the first year or so was sensible to build the picture, but then should switch to mandatory annual reports only.

Consultation Question – RIA (updated July 2004)

The Government also invites to views on the indicative costs associated with the proposals for implementing Regulations and Guidance in the partial regulatory impact assessments which form part of this consultation. Do you agree with these estimates in respect of (i) WEEE and (ii) RoHS? If you do not agree, please provide as much detail to back your own estimates as possible.

Meeting raised some cost issues that do not appear to be considered:

- Internal bureaucracy/staff to manage and police RoHS/WEEE including future legislation, possibly from other countries outside the EU adopting similar measures may need multilingual translation help!;
- Gaining understanding of RoHS/WEEE regulations in other member states where interpretation is different from UK and has impact on our businesses;
- Costs of creating new products to replace those that cannot be made to comply with the Directives and cost of stocks of unusable obsolete parts (Last-Time-Buy issue again);
- Cost of purchase and replacement of existing capital equipment needed to continue with manufacturing (RoHS RIA talks about re-design of machines to suit new processes, but not about testing, specification and purchase of these re-designed machines, nor of disposal costs for old machinery)
- Cost of ensuring current product reliability expected/demanded by customers still met HALT testing and field failure monitoring/response systems
- Business cost of fines if found to be non-compliant either by accident or design?





Conclusions

It is quite clear that the guidance is not clear enough and needs to be clarified, especially over whether finished goods stock at July 2006 needs to comply with RoHS – lots of people have different opinions. It is crucial that you need to know what you can and what you cannot sell after July 2006. DTI advice is that you should assume worst case and start a road map now if you have not already done so, the safest interpretation being – if your product has got non-exempt lead in it after July 2006 you cannot sell it.

Finished goods needs to be watched with a regular eye on distribution, as that might be a further escape hatch. If you keep stock in a bonded warehouse for customer this may still fall foul – DTI imply change of ownership even if they had not paid for it.

Be aware that the consultation questions are all concerning the WEEE guidance, but DTI are looking for responses to RoHS guidance too. Actual Directives cannot be altered now, but guidance can be altered to give the best protection possible to UK businesses. For example, delegates were encouraged to examine the "Producer Analysis" section of the RoHS guidance, how do you estimate the costs of this and what standard tests can you apply where the possible measurement error will not exceed the 0.1% or 0.01% compliance targets? This information is missing! Also in terms of "Supplier Declarations", how often do you have to revisit this with each component supplier to prove due-diligence? Can you just take their word for it or should you demand written proof regularly, e.g. annually. What extra costs are involved here?

Tom Perrett closed the meeting:

You all have the ability to send an email to the DTI on your responses to the WEEE/RoHS consultation and have your say and we would encourage you to do so in addition to the feedback from this meeting. We will collate meeting responses and submit to the DTI on behalf of the SMART Group, we will get back to all of you with our reply as soon as possible.

Remember responses must be submitted by Friday 29 October 2004 to:

Gordon Tarrant, Sustainable Development, Department of Trade and Industry Bay 430 151 Buckingham Palace Road London SW1W 9SS

Email: weee/rohsresponse@dti.gsi.gov.uk

Tel: 0207 215 5823 Fax: 0207 215 5835





APPENDIX: Avaya Briefing Document - Life Time Buys of End of Life Components

1. Introduction

Life Time Buy or Last Time Buy (LTB) and End of Life (EOL) component, are terms primarily applied to special one time purchases of semiconductor parts just prior to the part manufacturer ceasing forever the manufacture of that part and for which there is no direct replacement. The primary use of LTB parts is in low-volume products that have a significantly long lifetime, such as in the telecom, medical, aerospace, test equipment, industrial, and commercial equipment industries. This typically does not apply to short life cycle and high volume products, such as consumer electronics (TVs, stereos, PCs, mobile phones, DVD and CD players, portable electronics, etc).

2. The PCB Design Process and Component Obsolescence

When a product is first designed, all efforts are made to use the most up-to-date components on the market. A component might consist of a single part or an entire modular assembly. Once the design is put on the market, there is normally a period of stability in the availability of components. However, eventually one or more of the components used will be deemed obsolete by its manufacturer, usually because the technology is so old and/or the volumes on the part are so low that it makes manufacturing uneconomical. The component then enters the EOL stage. At this stage, the manufacturer normally grants customers the chance to make a final, large quantity, one time purchase of that part. This purchase is called a LTB.

At this stage the product component engineer/hardware designer searches for replacement parts for this EOL part. If none exist, then in order to keep the product in production, a LTB is made. Purchased stock of LTB is usually delivered to the product manufacturer or held at a distributor for delivery as needed. Usually the LTB period is good for a year or so after the EOL is announced. Once the LTB period has expired, then no more of these components can be purchased from this manufacturer. Once executed, the LTB is normally non-returnable and non-cancellable.

3. The Redesign Dilemma

The alternative to making a component LTB is to redesign the product to use a newer, more up-to-date component. Usually this requires a significant redesign cycle which can be as short as a few months and a few thousand dollars, or as long as a year and many hundreds of thousands of dollars. This is the reason that LTBs are made, instead of redesigns being done. Economically, it makes far better sense to make a good estimate of the number of years a product will stay in production and the quantities used each year, and then make a LTB of the EOL component. This strategy has been used extensively at many companies.

4. LTBs and The Lead-Free Problem

The RoHS Directive will render most, if not all LTB components obsolete, as most will contain lead. Many companies have thousands (maybe hundreds of thousands) of lead-containing LTB parts throughout the world. Not being able to use these parts beyond July 2006 will cause a great financial burden on companies, plus it means these parts will have to be disposed of as waste, thus exacerbating the problem. In addition, if entire product lines are discontinued prematurely due to the RoHS Directive, then even more components will end up needing disposal, increasing the disposal problem even more.

5. The Proposed Solution

Our proposed solution to all of this is for an exemption to be made to allow the LTB components to continue to be used in existing products until stocks are exhausted, saving the industry countless millions of dollars in component inventory. There would need to be rules put in place to define exactly what constitutes a valid LTB component that qualifies for the exemption. This remains to be worked out, but could involve some kind of self-declaration based on documentation from the manufacturers of the components. A cut-off date for when parts can be made obsolete and still fall within the timeframe of the exemption would need to be established. This date could be retrospective. It should exclude components being made obsolete by manufacturers who don't intend to produce lead free equivalents.