

**DOLBY AND THE SMART GROUP
DISCUSSION FORUM THURSDAY 15TH MAY 2003**

**DIRECTIVES ON
WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE)
AND
RESTRICTION OF CERTAIN HAZARDOUS SUBSTANCES IN ELECTRICAL AND ELECTRONIC
EQUIPMENT**

Present:

AMS	Rob Hodgkinson	Indium Corp Europe	Mike Fenner
Dolby	John Blunden	MJM Marketing/SMART	Mike Judd
Dolby	Nigel Burt	ICR Ltd	Mark Jones
Dolby	Alan Rodgers	National Physical Laboratory	Chris Hunt
Dolby	David Watts	RWP	Steve Harris
DEFRA	Daniel Kapadia	Seho UK	Jack McCaigue
DTI	Steve Andrews	Snell & Wilcox	David Lyon
Dupont	Lucie Garreau-Iles	TDK Systems	Susan Weston
Hereaus	Simon Clements	Tin Technology Ltd	Kay Nimmo
		Tin Technology Ltd	Tom Perrett

| Apologies for Absence: Andrew Lunnon - DTI, Simon Hawkins – Metcal

- 1) The meeting was formally opened by Mike Judd, PR Director of the SMART Group, who welcomed the delegates. Mike introduced the SMART Group and drew attention to the Nepcon Show to be held in June 2003 in Brighton, where the SMART Group will be giving hands on demonstrations of lead-free soldering during the exhibition.

Mike introduced John Blunden from Dolby, who mentioned a ‘treat’ for those who stayed the day’s course in the form of a Dolby film/sound demonstration.
- 2) Nigel Burt, Production Engineering Manager at Dolby, proceeded to welcome the representation from the DTI, Steve Andrews, Head of the Recycling Policy Unit and Daniel Kapadia from DEFRA, with apologies for the absence of Andrew Lunnon.
- 3) Steve Andrews gave a short slide presentation, with handouts, on the European Union Directives from the RoHS standpoint.
- 4) This was followed by a further slide presentation from Daniel Kapadia on the WEEE perspective.
- 5) Nigel Burt gave all delegates the opportunity to introduce themselves and their companies with a view on what they hoped to glean from the day’s discussions. Some of the issues raised were:
 - Clarification of vague definitions
 - Implications for the Military
 - Lead-free soldering and other manufacturing implications
 - Gaining better understanding in order to persuade US colleagues why time and effort should be invested in the Directives
 - Understanding legislation
 - Compliance with the Directives
 - Taking lead-free products into the market
 - General impact of the Directives
- 6) The main discussions followed. Firstly concerning RoHS, followed by WEEE, as per this document.
- 7) The meeting was formally closed by Mike Judd, who further outlined the SMART Group’s forthcoming presentations at the Nepcon Exhibition in Brighton, June 2003. Details of the June IPC/Soldertec Lead-free conference in Brussels were also outlined.
- 8) Thanks were given to all the delegates and in particular to Dolby for hosting the meeting and providing this extremely useful and interesting day for all concerned.
- 9) The meeting closed with John Blunden introducing a spectacular Film Display on behalf of Dolby, which was greatly enjoyed and appreciated.

DISCUSSION NOTES

RoHS DIRECTIVE

- (“Scope” – **RoHS Article 2, DTI document RoHS Q3**) The first point raised concerned the “10 Indicative Categories” defining the scope of RoHS, which derive from Annex 1B of the WEEE Directive. The DTI’s response was to say that all along the Commission have stressed this is only an indicative list, but actually there may potentially be tens of thousands of products e.g. DVDs are not currently covered. This posed the question: “What was in people’s minds as they wrote the list?” DTI’s response was that white goods in recycling centres were the majority aim, but that professional equipment markets, such as that which Dolby or Snell & Wilcox are in, may well fall into some new ‘Other’ category in the end.
- The next point raised concerned low volume return products with low turnover – where is the line drawn? Should volumes be a factor? Could manufacturers be facing decisions on financial investment because they could be made to comply? Some products only get re-designed every 10 years and low volume mature products, still in stock awaiting sale, will end up in the environment anyway. In terms of the aims of the Directives, this would not be helping the environment. The DTI’s response was that this had already been discussed by the Committee in Europe at 2 technical meetings, one in January and one last week. The Directive does not set a limit for sales turnover – but in the main its aim is at the domestic side.
- The DTI said that at the aforementioned meeting last week, a paper with 50 suggestions was raised, 29 of which were from the UK. At the previous meeting in January, scope had not been an issue, but there was a U-turn last week with this being a major topic. At this latter meeting Member States were asked to produce criteria on whether certain products should fall into the scope of these Directives. DTI felt there was a good case for putting the responses being raised from our meeting into the Consultation Paper.
- Whether scope covers products similar to Dolby’s or not, it is going to become difficult to manufacture any other way as lead-free manufacturing becomes the norm. But, if you have low product turnover, by the time the design lifecycle is complete, you may have to withdraw it because it is made up of older components, which may contain lead etc. DTI agreed that it is nonsense to dispose of products rather than sell them, but no doubt the Commission will say it is better to remove the lead or hazardous substances. It will have an impact on the rest of the industry, but commercially you do have to be “in”. DTI’s response was that there are already exemptions and that this is ongoing. Although the target is July 2006, more exemptions are possible, but asking for extra time for certain products must be supported by the technical arguments. DTI mentioned they had a telephone call from a chip manufacturer who will miss the deadline of 2006, and from other manufacturers, such as AMD, with customers who already want them to be compliant by the end of this year.
- There is still a lot of confusion with the automotive industry in particular who want clarification. DTI’s response was there was a lot of triviality, e.g. musical cards, singing socks etc, where the line had to be drawn to exclude such products.

- **(Discussions turned back to volume)** Is, for example, one product a year really worth worrying about? But manufacturers do not want to run 2 sets of manufacturing processes (lead and lead-free), because they could get mixed up. DTI recommend thinking about criteria -they have to get their comments in by the end of the month as well.
- If you are an external producer, how is it going to be verified? We need definition supporting guidelines. *DTI/DEFRA: Because the scope of WEEE is similar to RoHS, the DTI have the same person dealing with both- it did after all start off as one and the same document. They do not want to have different scope for different Member States. There is a danger that more products than they originally thought might be covered by the scope of the Directives.*
- Solder Paste – do you want lead-free now or not? If you do, paste manufacturers say one ought to be prepared for the cost increase to be 250/1,000/10,000 times. If you do want to get around this for new product, make it leaded, but do it quickly. This affects small volume things, not white or brown goods, but small everyday things. Or, perhaps we should move our manufacturing and sales out of Europe?
- Are you allowed to still manufacture non-lead-free here and ship it out of Europe? *DTI/DEFRA: Yes. These Directives only apply within the European Union Member States, or any product placed on the market within the Member States. The European Union has no control over other markets. Be aware of the restrictions in other countries, e.g. Japan – 50% of DTI enquiries have come from Japan. The level of understanding, technical content and issues in Japan is far more than suppliers in the UK. Many of them are looking at manufacturing fairly high volume products and their market is export. But relatively small manufacturers do not have the same ‘clout’ to influence the component manufacturers.*
- Directives only appeared in final form in February when the DTI decided to go for a 3-stage Consultation process. The document under discussion has had a 2-month consultation period, the next stage will generate another (larger?) document in Sept/Oct 2003 with a 3-month consultation period and final consultation stage will be draft regulations published around Easter 2004, again with a 3-month consultation period. Before coming to any conclusions, the DTI stressed this is an Open Consultation Process, involving everyone affected by these Directives, i.e. the DTI have not made up their mind yet.
- In terms of the scope – RoHS Directive is for the “single market”, applicable to all Member States and may not be extended in each state. WEEE is an environmental Directive to achieve only minimum objectives and may be extended in each state. Some Member States think the EU Directives should simply become law in their particular country as they are – but not a requirement for this to be so.

- **Scope and Responsibilities (DTI document Q4/Q5):** If true that possibly an exemption for PCBs, say, less than 10cm sq – what if it is less? If you have higher volume of small PCBs, say, shipping 1million per year, this is more damaging to environment, than small volume of large PCBs. Who is responsible in each instance? We need clarification that the producer is responsible, i.e. - the person who put it on the market. Is the main product manufacturer is always responsible? The Producer is in a difficult position as there is still a lot of lead in components. *DTI/DEFRA: “Whether the product is safe to use is the Producer’s responsibility.”*
- Compliant components are quite difficult to buy – but your ‘clout’ depends on whether you are buying a million or 1,000 chips. Suppliers may not be interested in producing lead-free components if you have low volume; therefore some products will have to be redesigned. Also, once we get rid of the lead, we still need to think about the flame-retardants.
- Testing and verification is a long process. Mention was made of 250 line items evaluated in just one product for compliance. After 3 months of questions and testing, they still did not have all the answers.
- As an example of the confusion of information, reference was made to Intel as being thought quite unaware and not wishing to comply with the European directives, however it was subsequently discovered that they are actively pursuing lead-free. DTI response was that Intel actually has been very involved in lobbying and they are certainly very aware of the Directives. Attitudes in other market places, e.g. China, America is different. China is looking to go lead-free, because China has a focus on heavy volume manufacturing, and Europe is an important market for this business.
- *DTI/DEFRA: “We recognise scope as being one of the top 3 major problems.”*
- **(DTI Document Q1) “Put on the Market” definition:** *DTI’s view: There are different interpretations on this; therefore we have been trying to come up with a solution which is practical and understandable by all manufacturers.*
- The range of low volume products still required after the 2006 deadline is difficult to predict for manufacturers, but if those products continue and have to be lead-free, we need to plan for them to be lead-free at least 6 months before the deadline.
- Manufacturing something in one Member State and then transporting it to another Member State – RoHS still applies. But who is originator for business involving e.g.: stock-holding distributors, resellers, and installers?
- **Q1 “Factory Gate” definition** - does define it very well. Note these Directives will eventually apply to a number of other countries too, but may give rise to certain new local requirements for product sales.
- Low Voltage Directive implementation is a good example for precedence. Also, interesting parallel with EMC Directive because technically, if you build yourself a prototype in the lab, it must be CE certified. The cost of certification of that piece of equipment could be 10 times the cost of building it. Same would be true for RoHS.

- **(Q4)** WEEE could be sealed boxes, say, of lead spheres. Somebody buys for his own use on the Internet, but when do they become an electrical thing covered by RoHS/WEEE? *DTI/DEFRA: "Distance selling is covered by the Directive. Similarly, if you buy a CD player from Hong Kong, you are effectively the professional importer and are therefore technically responsible for the recycling."*
- Spares to the End User: Referral was made to a manufacturer where they have a duty to the customer for support for 3 years. They have not gone lead-free yet and the manufacturer is Japanese. Where do they stand? *DTI/DEFRA: "Spare parts are exempt. You can produce spare parts for existing equipment."*
- What if you change your manufacturing plant to lead-free and then you cannot produce the spares? *DTI/DEFRA: "There is an obsolete components market. The DTI are already seeing an opportunity for someone to build up a stock of spares."*
- Will there be a clause in the Directive for manufacturers to hold some sort of Inventory? *DTI/DEFRA: "An Amendment along these lines may get through, for example WEEE already amended in that it was trying to force householders to separate their electrical products for waste collection, but we showed this would not be enforceable."*
- **(Q5 - Related to Article 4) - "Server" definition:** If we put a server disk (that does nothing) into all of our products, we could be exempt?? Same for Ceramic parts – does this include multilayer ceramic capacitors? The definitions are too vague. *DTI/DEFRA: "All lead in electrical components is covered."*
- Referral made to TVs – 98% of lead content is in the cathode ray tube. *DTI/DEFRA: "This is why CRT has to be singled out for exemption".*
- **(Q6)** Why Military? Why not civil aircraft too? *DTI/DEFRA: "This is due to an over-arching exclusion that is in all the Treaties for the EU."* The DTI feels that it should make the link to the RoHS Directive and WEEE for military. But what is definition of military purposes? Is it a gun, or radar? *DTI/DEFRA: "Anything used by the military."*
- X-Ray equipment at airports is another example where exemption may be reasonable.
- The USA has been talking to lots of suppliers – claim they cannot make military spec. components lead-free and guarantee their reliability.
- **(Q7)** DTI noted that maximum concentration levels not specified and yet to be agreed by the Committee. At the January 2003 meeting, a proposal was developed that we should take the same line as the ELV Directives, 0.1% by weight for lead, hexavalent chromium, flame-retardants, and for mercury, and 0.01% for cadmium. USA proposing 0.2% as a standard instead for lead?

- **(Q8)** Confusion over definition of items as material or components? *DTI/DEFRA: terms seen as meaningless, and they will not be including this wording in the final document.*
- Where do these percentages end? If it is a final product, it is by weight per component, but this still confusing. E.g. car radios – if you build it at the same time as the car, the percentage is completely different, than if you supply separately. You could make product casing out of very heavy material to reduce overall % of lead in the product. *DTI/DEFRA: “Aim is to stop introducing lead into the environment as homogenous material”.*
- Need to somehow provide a guarantee to your customer measuring the amount of lead in “lead-free” materials and need a method of calculation and measurement. If you are selling very low volume, say, 1 unit per year, how do you measure it? Melt it down and measure it? Expensive!! Who pays?
- **(Q9)** *DTI/DEFRA: suggested date for the current exemptions to be included is 2012. However, there may never be a final version of the Directive - it will be reviewed every 4 years. At any time, the Committee has the power to look at the Directive and change it to include other items.*
- In 5 years time you will have to go lead-free anyway, because there will not be anything else available to manufacture with. But some components are not replaceable (the military problem as well.) It would be financially crippling to bring out lead-free versions of older low volume products that are still required by customers. Economics of scale are the big factor. (E.g.: Dolby Digital in the theatre started around 1992, still supporting and selling some product from around that date. Dolby SR came to market in 1986, now volume is very low but still basic studio kit - no point in re-design, and certainly, within Europe by 2006 there will still be a demand for these things.) Legacy products are a problem.
- Interesting relationship between the RoHS and the ELV Directive. Lead is exempted from that Directive? *DTI/DEFRA: No links between these Directives. Minimum levels were seen purely as a good starting point. – Not chosen for the same reasons.*
- Enforcement? Could a lawyer jump on you? People have known about the Directive for some time. *DTI/DEFRA: Note that deadlines are the result of negotiations first 1/1/2008, and then it was 1/1/2007, then 1/1/2006 – then a compromise with July 2006.*
- Will manufacturers need a full time person to keep an eye on what is going on? This is precisely where the SMART Group can help, by alerting people to what is happening in Brussels. The DTI are also doing their best. The Directives are currently taking up 90% of their time.
- **Q10 – DECA BDE.** Flame-retardant originally included because it appears in other Directives, but environmental risks debatable. Studies are going on in Sweden and the UK to support exemption, but even after this the conclusions are not going to be clear. *DTI/DEFRA: There is no hidden agenda; it is a reasonable thing to wait.*

- What about flame-retardants in common use as in the plastic cases of TVs and VCRs? Also cabling?
DTI/DEFRA: "External cabling is exempt, but not internal wiring."
- Point raised about UL approved cable insulation – does this contain banned flame-retardants? Could end up with products that can be sold in either Europe or USA but not both! DTI only recently aware of UL requirements.
- **Q11.** "Energy Efficient" light bulbs do contain mercury, which are "good for the environment", but may have exemption removed in future. *DTI/DEFRA: "None of this is easy."*
- **Q12.** 0.1% is expected to be limit for flame-retardants also.
- **Q13 Compliance.** How will it be policed? Will we have the Inspector from RoHS who comes and checks up?
DTI/DEFRA: Enforcement is undecided. WEEE is straightforward – The Environmental Agency is responsible for the WEEE Directive. RoHS is difficult – likely to be Trading Standards Officers who police products on the market on the shelves. However, it may not be, but it could be the DTI who will sub-contract it out. Whoever it is, they will work collaboratively with manufacturers to try to get a self-certification approach. Maybe random testing, once testing procedures are finalised.
- Manufacturers' involvement has major financial implications. If we have to test for something, you are going to have to destroy the product to find it. *DTI/DEFRA: Expected that this will be funded by Government.*
- It could be done under something like ISO standard? But there could be no testing possible of some things.
- **Labelling:** Will the supplier have to show lead content? Is there a threshold below which no labelling will be needed? *DTI/DEFRA: We may have to know what the levels were in each component. On the WEEE Directive, information is required about how easy it is to disassemble.*
- A computerised inventory could show that a product is built with lead-free parts, but for a small company, this is a major job to go through and discover who all the suppliers of their parts are and whether they comply.
- What do we actually mean by lead-free? What process temperature does it withstand? Percentages? Weights? It is a big job just to create a definition.
- Is there going to be any future legislation – e.g. Integrated Product Policy (IPP), Life Cycle Assessment (LCA) data? *DTI/DEFRA: No formal proposals at the moment. Not sure how this is going forward.*

WEEE DIRECTIVE

- **Q1 Scope** – already addressed in the RoHS discussion.
- Referral made to changing the silk-screens on one manufacturer's products - should they be putting the "wheelie bin" symbol on it? *DTI/DEFRA: The symbol is to do with the waste disposal advising the end user not to put it into the waste stream. The DTI are still undecided how the symbol should be displayed, size etc. They have contracted out to produce a European document of guidelines on the best use. Maybe it could be on the packaging for small items, rather than the item itself. There may be a requirement to put on other information, e.g. date of manufacture etc.*
- Advice is not to use the symbol on products until after 13th August 2005, but note that current Dutch law requirements are to carry the logo already. It is a costly exercise to put this through production in one go - it would be helpful to add logo at the same time as any other changes to products. *DTI/DEFRA: Legally, no one is actually incurring additional liability by displaying this symbol on product.*
- **Q3 UK Implications:** Do people agree that it should be non-statutory guidance? *DTI/DEFRA: It is flexible and if problems arise, it is much easier to make recommendations and changes. The only people who may disagree are lawyers!*
- **Q4 Definitions** – already addressed in the RoHS discussion.
- **Q5 Product Design** – already addressed in the RoHS discussion.
- **Q8 Recycling and Reuse-** Printer cartridge re-manufacturers are concerned that certain printer manufacturers are putting devices on to their cartridges, which means they have to be recycled, and not re-used, e.g. smart chip, zigzag welding. This makes it difficult to open up the cartridge for re-filling. *DTI/DEFRA: The purpose of this legislation is to encourage better design.*
- Should it be a voluntary agreement or legislation? Cuts across a whole spectrum of these products. If the Producer is responsible for the cost, is it also applicable to the design? *DTI/DEFRA: It is to encourage eco-friendly design of products, but the main purpose is to discourage products that cannot be re-used in the future, unless there is a good reason for doing so. E.g. safety features in toys, medical equipment, etc.*
- *DTI/DEFRA: WEEE Hierarchy of aims:*
 - Prevent waste
 - Recycle or Reuse i.e. turn old product into a new product
 - Recovery – e.g. composting, or burn and recover energy
- If you send a number of printer cartridges back to a manufacturer, they tend to recycle them rather than re-use them. Or, they could be looking for a monopoly position on their products! (They make more on the sale of printer cartridges than the printer itself).

- **Q9 Standards?** – Electronics go obsolete so quickly. How can you re-use? For example, how can you re-use a 486 PC? *DTI/DEFRA: There are many organisations willing to take them off your hands and export them to the 3rd world. But if you pass these on, are you not contravening the Directives? DTI/DEFRA: No – it is not a new product.*
- The DTI recognises it is difficult to re-use many items, e.g. electric toothbrushes. They are really concentrating on re-use of large white goods, e.g. fridges. Reference was made to “The Fridge Mountain” – fridges were sold for re-use outside the UK, being drained of the CFCs but then re-filled with more environmentally friendly fluids. But they then stopped it and it became a problem because the insulation also had to be replaced – which is impossible.
- Example with Dolby products: How to extract the aluminium frame? EMC and LVD Directive requirements for enclosures make it more difficult to disassemble for recycling.
- No point in re-use at disproportionate costs, or for inefficient appliances, which are a detriment to the environment. TVs are a good example. No one really throws a TV away for a long time; it often simply gets passed to a different room. So, its end of life is not necessarily when you buy a new TV.
- **Q13 Retailer take-back obligations** - It is possible for Producers to be responsible for the collection from private households, but does not seem necessary as we already have an infrastructure in place, thus avoiding creating a new one.
- But, what about products that get exported to distributors in other countries? For the purpose of the Directive, you are then not the Producer. *DTI/DEFRA: If your original manufacturer is in the EU, they are the Producer. If you are importing into a Member State, you are the Producer. If you are the Importer, and you are in a Member State, the financial obligations then must be on the Producer. We recognise there is a problem with ‘Inter -State’.*
- If you buy a PC and then buy an option card, who is responsible for disposal? Does the responsibility lie with assemblers or the individual component manufacturer? Where does the chain begin and end? There is a problem with “grey importers” selling into European countries, e.g. “box shifters” in the USA who ship in and walk away, providing no after-sales service or support. Why should local European rep. be made responsible? And who is the Producer? Or, perhaps products are manufactured here and exported to a dealer in the US, then brought back here. Who is then the Producer? *DTI/DEFRA: There will be a Register of Producers: Importers will have to be responsible. When a company is putting a product on the market, they will have to provide a way of disposing of that product - i.e. so that costs of recycling etc. will be covered. There are really two categories, Historic (pre- August 2005) products that are dumped as waste, and Orphaned products, where a manufacturer no longer exists. E.g. Yugo Cars - in this case the costs will be divided amongst remaining registered producers in that sector.*

- *DTI/DEFRA: Definitions*
 - *If you manufacture within the EU, you are the Producer.*
 - *If you import into the EU products that have been manufactured outside the EU, you are the Producer.*
 - *If you market it under your own brand name, you are the Producer, wherever it is manufactured. (E.g. B&Q Power Tools.)*

- *But the DTI recognises there is still a problem with Inter-State business. DTI/DEFRA: We may have in the UK a 'Visible Fee', maybe where the consumer pays for the product +10% eco-tax.*

- *But if we do that, and your product turns up in another Member State, you could end up paying for it twice, once at purchase and once at disposal. How would they prove that you as Producer really are liable for this bill? DTI/DEFRA: The Directive talks about waste and products likely to be ending up in the domestic waste stream. Financial arrangements associated with disposal are not yet defined. Options are open, but a State-by-State approach is favoured.*

- *Do we need to be aware of the national legislation in each Member State? DTI/DEFRA: Yes! A single market directive like RoHS is trying to harmonise for a clear playing field, but WEEE is not like that.*

- *If someone buys something here in the UK and then takes it to Spain. Where is the responsibility for that product's disposal? DTI/DEFRA: It depends on the country. It would be highly unlikely to trace each individual product turning up in waste, because everyone would have to count each manufacturer's waste products!*

- *But, this is a global market. You buy things over the Internet etc – if you do that, you are the person responsible. DTI/DEFRA: We have to take a pragmatic approach. The DTI want to have relationships, which are practical and pragmatic, to maximise environmental benefit.*

- *Is this not going to be a stealth tax on local manufacturers? DTI/DEFRA: No, because it is for a specific purpose.*

- *What about those who get a large market share and then disappear? DTI/DEFRA: We want to get a scheme, up front, in place. Better to do it up front to deter those fly-by-night companies. At the moment we are just putting forward the option of these fees.*

- *It is going to be extremely onerous to count things up at end of life. DTI/DEFRA: There are a number of large companies who have said they are happy to accept the costs, but only for products that carry their name. A collective approach is much easier. E.g. washing machine manufacturers may have their own collection system. Grouping of companies together may be another solution. We are going to look at different sectors separately.*

- What about packaging? *DTI/DEFRA: Already a Packaging Directive approved in 1997. Will it be incorporated or policed? DTI/DEFRA: In the UK packaging is transposed through Producers who are financially responsible for recycling packaging, but the way this happens may or may not be the way forward for WEEE.*
- **Q17 Permitting** = Licensing. All treatment sites have to be licensed or 'permitted'. A Permit is authorised from the Environment Agency.
- **Q18 Treatment** - DTI expect to contract out to third parties. Also, many treatment facilities already exist. The treatment requirements of the Directive are not technically challenging. The documentation is there already and there is no shortage of major waste contractors. At the moment we are using a lot of our capacity recycling white goods etc. The main issue is who is paying for it? Difficult in specialist areas.
- **Q21 Recovery** - There are certain recovery targets. They apply to the whole category, not an individual Producer. Washing machines will more than satisfy our requirements at the moment. Recovery in this context does not mean collection. It is an umbrella term for re-use, recycling, etc. Out of 100 tons by weight, 75 tons must be recycled into new products or components, plus 5 tons must be recycled or recovered another way (could be incineration to make energy). Therefore, the maximum by landfill is 20%. Collection target is 4kg per person per year. Large household appliances (e.g. freezers) and concrete blocks already more than cover this.
- What about computers? If you weigh the CRT that is most of the total weight. *DTI/DEFRA: They are in a category with all IT equipment. IT targets are lower than large household appliances. We will review this every 4 years.*
- If you satisfy the targets, they will then be put up! *DTI/DEFRA: We favour a collective approach. The obligation is not being placed on the manufacturer; it is placed on Member States. But, if individual manufacturers do nothing to help, there is nothing the DTI can do about it. Every 2 years reports are drawn up to see how the UK is doing on these targets.*
- Does it matter to us that we know which category our products belong to? *DTI/DEFRA: Some of the categories are lumped together when it comes to targets.*
- Confusion because professional products in audio-visual and broadcast sectors are not consumer electronics. There does not seem to be any distinction between volume (e.g. home entertainment) and professional (e.g. cinema processors) products. *DTI/DEFRA: The WEEE Directive is aimed at minimum domestic waste, but the RoHS Directive is aimed at both domestic and industrial waste.*
- If you are not covered by WEEE, does this mean you are not covered by RoHS? *DTI/DEFRA: No. The problem is because RoHS refers to the scope of the WEEE Directive. In hindsight, what we should have done is not to make the cross-references, but this started out as all one Directive originally.*

- Is there a possibility of revising ‘scope’ between the two documents? DTI/DEFRA: *Yes, it is not law. The law is not set out before next August. You will only need to comply with UK regulations, i.e. UK regulations apply, not the EU Directive – until you ship the product into another country. RoHS is far more significant to the Manufacturing Industry.*
- **Q27 – Visible Fee:** The key difference is between household and non-household. DTI/DEFRA: *There is no intention to place obligations on household users.*
- If businesses were to become liable for every bit of business they have done in the past, there would be a huge responsibility. DTI/DEFRA: *A draft of the amended wording has been seen in DEFRA to suggest the following: Say a business supplies 100 PCs to an office; they will be liable to take back 100 old PCs from that office. They would then be liable for the costs of disposal of those 100 PCs as the End User. However, if the office just disposes of the 100 computers without replacing them, then the office is itself liable for the disposal costs.*
- We need Pan-European agreement on this – because trading conditions in one country vary to other countries. What if there is an up-front fee on top of the cost of the product, but not on the same product in a different country where it is sold? What about goods sold over the Internet? DTI/DEFRA: *Visible fee only refers to historic products. Two financing systems – (a) for historical WEEE and (b) for new WEEE. A Visible Fee would be for (b) new WEEE only. In the UK there is a huge division. In general manufacturers are for a Visible Fee, because it shows why their products are going up in price. Retailers do not want it because the consumer does not like it.*
- **Q35 - WEEE Information to user:** provide by central Website page or by individual manufacturers websites, or in product manuals?
- Treatment Facilities – always the option of simply putting waste product straight into the shredder. Contact DTI/DEFRA to visit a site to see how it is done.
- **Q42 Information and Reporting:** There is a requirement for all Producers to be registered and really, in practical terms, it will be the Producers who do the registering.
- Is it the responsibility of the Producer to get on the Register? DTI/DEFRA: *Yes.*
- But if they shirk who follows it up? An Enforcer? DTI/DEFRA: *At that time, there will be some way of judging if you are in a grey area. Registering will be like registering for VAT etc. If you choose not to register, or comply, then you are liable for prosecution. There will be free-riders who try to dip in and out of markets according to fashion, but Producers also have to report the quantity of goods they are putting on the market. This is difficult if the goods come outside of the EU, e.g. mass volume Chinese products. HM Customs & Excise will play a part in this.*

- What information is required?
 - How much is on the market?
 - How much for final disposal?
 - How much re-used?

- Can we depend on waste collection people for these stats? *DTI/DEFRA: The approach will be via categories. One possible approach is to develop a protocol of material which is entering the recycling facilities, e.g. white goods – how much of a pile of scrap at a shredder is WEEE, and when it gets shredded roughly how much is category 1 WEEE, etc. However, this does not take into account different manufacturers' names, e.g. Bosch, Black & Decker etc., etc.*

- But how will the waste site people know how to categorise say, whether something like a cinema processor is in the IT category, or some other category?

- **Q47 RIA:** Note there are differences between the types of market you are in. Percentages of investment are different.

CONCLUSIONS

- In terms of responses, we have a list of more questions! Is that still helpful? *DTI/DEFRA: All the ideas have been helpful.*
- Criteria for final scope – when we have some improved criteria, we could better define whether the products are in or out of the scope.
- Exemptions – are there valid legitimate excuses for exemption, or are some of those already agreed perhaps invalid?
- You also have issues of customer and supplier relationships and some of the problems that arise out of those complex relationships.
- Data Capture: How could the data required be readily accessible? What likely cost to the manufacturer to meet the requirements? Does this involve revealing commercially sensitive information, perhaps sales figures?
- Market Shares: How do we define them? Is it weight, quantity? You may get a group of manufacturers saying, “Look how bad we are doing” and claiming lowest market share to get their WEEE costs down!
- DTI will be helping to analyse the responses over the summer with a view to writing the second a more focused Consultation Paper for release September/October 2003, after which there will be a further 3 month consultation period. Draft legislation should be available for more consultation in Easter 2004 and this has to be laid before Parliament before the Summer Recess next year. DTI accept that 18-month transposition deadline is ludicrous for such complex Directives. Already losing 8 months in consultation time out of the 18 and are taking a long time because it needs to adapt regionally for the Devolved Administrations. Also, need to take account of other Member States.
- Aiming to minimise the controls on business and to make them with the least costs.