

***EUROPEAN COMMISSION
ENVIRONMENTAL DIRECTIVES ON***

***ELECTRICAL AND
ELECTRONIC
EQUIPMENT***

THE DIRECTIVES

- Waste Electrical and Electronic Equipment. (WEEE) (under EU treaty article 175)
- Restriction of the use of certain hazardous substances in Electrical and Electronic Equipment. (ROHS) (under EU treaty article 95)

THE WEEE DIRECTIVE APPLIES TO

- All telecommunication equipment
- IT equipment
- All household appliances
- All other electrical and electronic equipment and tools.



CONTENTS OF THE DIRECTIVES

- Recovery and recycling schemes will be set up for domestic and commercial WEEE by 2005.
- Producers will finance the treatment, recovery and disposal of WEEE.
- Substitution of certain hazardous materials by 1st July 2006.

SEPARATE COLLECTION

- Member states are to provide for the recovery of the separately collected private household WEEE.
- Distributors to offer free take back, when supplying a new similar product.
- Other collection schemes to be agreed between producer and user at time of purchase, for instance business to business.



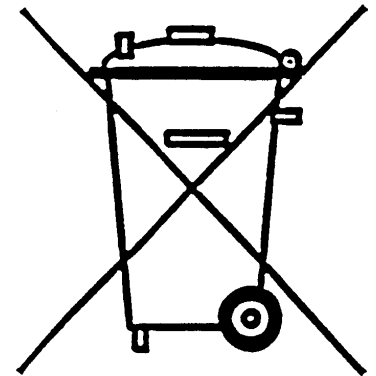
EXAMPLES OF REMOVAL & SELECTIVE TREATMENT

- LCD displays, greater than 100 sq. cm.
- All back light LCD displays with gas discharge lamps.
- Plastics containing brominated flame retardants. (Printed circuit boards and plastic cases)
- All Printed Circuit boards over 10sq.cm



RECYCLING TARGETS

- At least 75% of collected end of life telecommunication equipment must be recovered.
- Material re-use and recycling shall be greater than 65%.



HAZARDOUS SUBSTANCES IN ELECTRICAL & ELECTRONIC EQUIPMENT

- Under the RoHS directive the following materials will be substituted by 1st July 2006
 - lead (even solder)
 - mercury
 - cadmium
 - hexavalent chromium
 - PBB and PBDE flame retardants.

TARGET DATES (UK)

- **WEEE**

- **Feb 2003** OJ publication of Directive
- **May 2003** Discussion paper. Q&A
- **August 2004** WEEE Directive commences in UK !
- Now late ,as is most of the rest of Europe
- **October 2004** Final consultation
- **Late 2004/ Early 2005** UK legislation
- **Early 2005?** Set up NCH
- **June 2005** Financial obligations commence
- **December 2006** Recovery and recycling targets to be achieved

Target Dates (UK)

RoHS

- **10th October 2002** Conciliation completed
- **Feb 2003** OJ publication of Directive
- **May 2003** Discussion paper. Q&A
- **October 2004** Final Consultation
- **Late 2004/ Early 2005** UK legislation
- **1 July 2006** Substance ban takes effect

COMPANIES MUST COMPLY WITH THESE LEGISLATIONS BY

- Supplying information to the regulator, user and treatment facilities.
- *Regulator* - quantities put on the market, collected and recycled. (tonnage and numbers).
- *User* - recycling schemes, their role in system.
- *Treatment facilities* - identification of materials, dangerous substances etc.

THE COSTS

- **WEEE**

- Returns to recycling company.
- Disassembly.
- Removal of hazardous materials.
- Treatment of hazardous material.
- Data tracking.

MORE COSTS

- **Producer will pay for private & business**
 - Collection
 - Treatment
 - Recovery
 - Disposal of own and orphaned products
- **However on B2B he should be able to negotiate**

ANY EVEN MORE COSTS

RoHS

- Researching alternative materials.
- Lead free component sourcing.
- Investment in new soldering plant.
- Redesign of some PWBs
- Trials of alternative materials.
- Quality and reliability testing.
- Production
- All by December 2005, to ensure products are available by July 2006.

RECOMMENDATIONS

1. Stop using the hazardous materials now.
It will save a significant amount of money at the end of life.
2. Design products for ease of disassembly.
It will save time and money now and at the EOL.
3. Design products for reuse and the ability to upgrade, to extend the products life.

RECOMMENDATIONS

4. Contact suppliers now to ensure that they will be able to meet the WEEE requirements.
5. Ensure that they are evaluating alternatives to the hazardous materials.
6. Future products are designed for ease of disassembly.
7. Identify hazardous materials in existing products.

CONCLUSION

These directives will mean that all EEE producers will be facing:-

- Increases in disposal costs of EEE.
- Increase in production costs of EEE.
- Increase in data gathering
 - sales data
 - recycling data
 - database of materials in products.
- All in all a major task.



THANK YOU
**(I doubt if we would
get any of these back)**

