

Preventing the Digital Dump: Ending “Re-use Abuse”

Today, as electronic gadget consumption skyrockets and obsolescence renders electronic equipment useless in a matter of a few short years, we are increasingly faced with mountains of toxic electronic waste. For a variety of motivations, both good and bad, this e-waste is increasingly sold and exported from rich developed countries to developing countries for the stated purpose of *re-use*. Such re-use exports have been touted as a means to bridge the “digital divide” and satisfy the great desire and need in the developing world to become a part of the information age through access to information technology. However, there is a very ugly side to this “re-use” trade as well and it is time that we begin to be able to tell the difference.

Re-use: The Good

Re-use, directly or via repair or refurbishment is usually the preferable option over recycling and disposal from an environmental perspective. Re-use can extend product life and means less environmentally damaging extraction, less energy consumption, less waste. Re-use of second-hand equipment can also often mean a lower price for products, thus increasing accessibility for more people who might not otherwise be able to afford the product. But, as shall be shown, these worthy goals alone, without a good measure of “responsibility” backed up by law, can perversely become a highway to a “digital dump,” instead of a bridge over the “digital divide.”

Re-use: The Bad

In late 2005, BAN conducted an extensive 10-day investigation in Lagos, Nigeria to better understand the burgeoning reuse/repair trade. That investigation revealed a major and growing influx of e-scrap that was *not* being controlled by the Basel Convention despite the fact that **as much as 75% of the material was strictly waste, as all or part of it could not be repaired or re-used** even in a country with excellent and affordable electronic engineers. Consequently this toxic e-waste was simply dumped and burned in waysides in Lagos, leading to serious environmental and health impacts.

Since then, additional investigations indicate that the report and film *The Digital Dump* represented just the first ripple of a

tsunami of such re-use exports, which are often cloaked by the seeming intent of “helping the poor” and exploiting an arena of trade which has not been well controlled by customs authorities. Recent visits to Ghana have revealed similar floods of e-waste and even working computer monitors arriving in the port of Accra are currently being smashed and burned for lack of a market. These glimpses of how this trade really occurs today has led us to the following conclusions:

- **Without mandatory testing and controls, “reuse” can be a pretext for exporting junk:** Most e-waste is hazardous by definition and thus meant to be controlled by the Basel Convention. But with vague definitions of “waste”, legal ambiguity becomes the norm and thus enforcement has not been as diligent as necessary. Mandatory testing, certification of full functionality are the needed remedy.
- **Export for repair usually involves export for disposal:** Export for repair usually involves almost immediate disposal of hazardous parts when bad parts are replaced. For example most repairs are made by swapping out faulty circuit boards and discarding the old one. Thus by Basel definitions (Art. 1, Annexes I, III and IV), export for repair likely involves transboundary movement of hazardous waste. Testing then is necessary prior to export to ensure no hazardous parts will need to be removed or else be subject to Basel Convention controls.
- **Export for reuse may not always be the preferable waste management option for a technology that undergoes rapid obsolescence:** The “digital divide” cannot be defined by the difference between those with computers (no matter how old) and those without, but rather by those with state-of-art computers and those without. A hand-me-down solution to the problem of the “digital divide,” then, will never completely eliminate the gap. And due to the very rapid obsolescence of IT technology today, this gap occurs very rapidly. Seen in this light, it is not always so charitable to provide hand-me-down technology which will become outdated in but a few years, particularly when that technology carries with it a substantial environmental burden. This is particularly true when weighed against other policy options, such as demanding toxics use reductions and investing in indigenous IT industries in developing countries.
- **Exporting toxic equipment for reuse to poorer consumers equates to “passing the toxic buck” and**

environmental injustice: If the solution of handing-down toxic technology from rich to poor becomes the norm on this finite planet known for its very inequitable economic geography, a very convenient world is created for some. In this world, in effect, rich, northern countries most capable of managing a hazardous waste problem can wash their hands of the global toxic e-waste burden by passing it to countries least able to deal with the problem. This would create a world where global pollution burdens from certain industrial sectors would effectively be transferred to the producers and last users – the low-waged poor. Indeed, even if developing countries had the very best waste management technologies, such management is not without significant risks. It is the very definition of environmental justice that developing countries or poorer communities should not receive a disproportionate global toxic burden.

Re-use: The Illegal

Much of the e-scrap that is exported today is not being controlled as a Basel waste despite the fact that it falls well within Basel definitions. Some claim that if the material is destined for re-use, repair or refurbishment it is a product and not a waste. Yet, as was determined in the Mobile Phone Partnership Initiative (MPPI) and later in the Partnership for Action on Computing Equipment (PACE), this is not likely true.

Direct Re-Use Does Not Fall under Basel if Tested. Certainly, direct re-use (without any refurbishing or processing required) does not involve Annex IV recycling or disposal operations. Thus, used electronic equipment that is functioning and is intended for direct re-use should not be considered a waste, regardless of whether it is hazardous or not. However, from a regulatory point of view, this is not ascertainable without testing, certification and labeling to assure and make transparent that a) the device is fully functional as-is and b) that it is destined for a legitimate reuse destination.

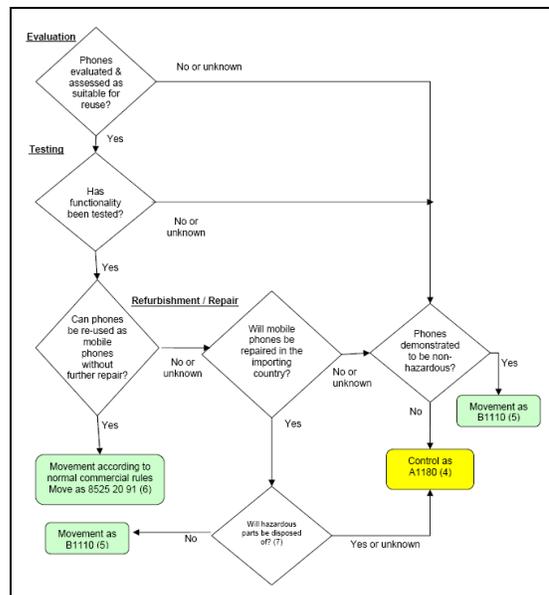
Repair and Refurbishment. While the word “repair” or “refurbishment” does not appear in the Annex IV lists, this does not mean that such equipment is non-waste. In fact, very often materials sent for repair or refurbishment will, in part, move to Annex IV operations, when the repair or refurbishment requires that a *hazardous part* of the equipment be replaced and the old part is disposed of/recycled (e.g. bad batteries, mercury lamps etc.) while the rest of the equipment is re-used. **Thus, it is clear that repair and refurbishment are very likely to involve recycling or disposal destinations.**

The logic of considering a hazardous, non-functioning part that must be replaced during repair as a Basel-controlled waste becomes clear when looked at in another way. Exporting a non-functioning circuit board by itself destined for recycling is clearly a hazardous waste export. Yet this is very much the same as exporting a hazardous, non-functioning circuit board as part of a computer sent for so-called repair/refurbishment. In both cases a waste circuit board is involved in a transboundary movement.

The MPPI/PACE Guidance Documents' Decision Trees

This was the subject that the Mobile Phone Partnership Initiative (MPPI)'s working group on Collection and Transboundary Movement addressed. One of the most important results of those deliberations was to create a procedure to avoid confusion and properly apply the Basel Convention to electronic wastes, by use of the Decision Tree below.

In sum, the Decision Tree indicates that **whenever a hazardous part is replaced during the repair or refurbishment operation, then the export of the used equipment to that operation must fall under the Basel control procedures.**



MPPI Decision Tree for Exports for Reuse

Conclusion: Testing and Labeling Prior to Export

It is clear that it has become far too easy for waste brokers to simply make a claim of re-use and all manner of useless junk can then be exported while customs officials are forced to simply take their word for it. That has got to stop!

Currently, the Basel Convention is creating a new Technical Guideline on the Transboundary Movement of Electronic Waste. It is essential that the work of the PACE and MPPI partnerships, embodied by the Decision Trees is replicated in the new Guideline. However what should no longer be accepted are the numerous exceptions (e.g. for equipment under warranty) and the so-called “voluntary procedure” of those agreements. Those exceptions have no legal basis and must be denied.

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