Global Electronic Product Repair Practices in the High Tech Sector

&

Update on Basel proposals

ICT Group

ICT Group

A group of Infocomm Technology (ICT) companies started to discuss on environmental topics in July 2008

16 major global ICT and Consumer Electronics companies

Voluntary participation

Regional coverage; commonly on Southeast Asia with some company representatives covering other countries of Asia & Australasia

Apple
Brother
Canon
Cisco Systems
Dell
Epson
Hewlett Packard
Hitachi
Konica Minolta
Lenovo
Mitsubishi Electric
Motorola Solutions
Panasonic
Ricoh
Sharp
Sony

Mission of EEE manufacturers

- Contribute to **enrich people's lives through safe and high quality products** with consideration for the environment
- Provide appropriate **product assurance** and **maintenance service** when quality problem or failure occurs
- Consider **environmental conservation globally** through the entire **product lifecycle**

Global producers of Electronic and Electrical Equipment (EEE) are aligned with all who fight against illegal shipments of E-Waste.

Producers are committed to **helping governments** solve the problem of illegal waste shipments

The mid-to-long term solution is to develop an appropriate collection & recycling infrastructure for **ALL** countries to ensure proper management of their domestically-generated **end-of-life** electronics.
Pilots are currently established by leading Producers (e.g., EACR in Kenya by DELL, HP, Microsoft, Philips)

We need to collectively work towards a future where -

No hazardous e-waste shipments are made to developing countries and countries in transition

Presented at OEWG in Geneva by :

Information Technology Industry Council

DIGITALEUROPE

Producers of Electrical and Electronic Equipment (EEE)

- Employ a global network of highly sophisticated and regionally centralized facilities that provide legitimate repair and refurbishment services to:
  - Extend the useful life of valuable products
  - Save energy and limit demand for new natural resources
  - Avoid and minimize the generation of waste and prevent the premature generation of e-waste
  - Provide access to technology to those who cannot readily afford new products
- Provide for repair at affordable cost to ensure the **highest yield**, and reuse of refurbished spare parts (**resource efficiency** and lower cost for customers)
- Implement **proper management procedures** for the small fraction of waste generated through legitimate repair

Repair costs determine if a product gets repaired or will be discarded

Repair **competes with** **New**

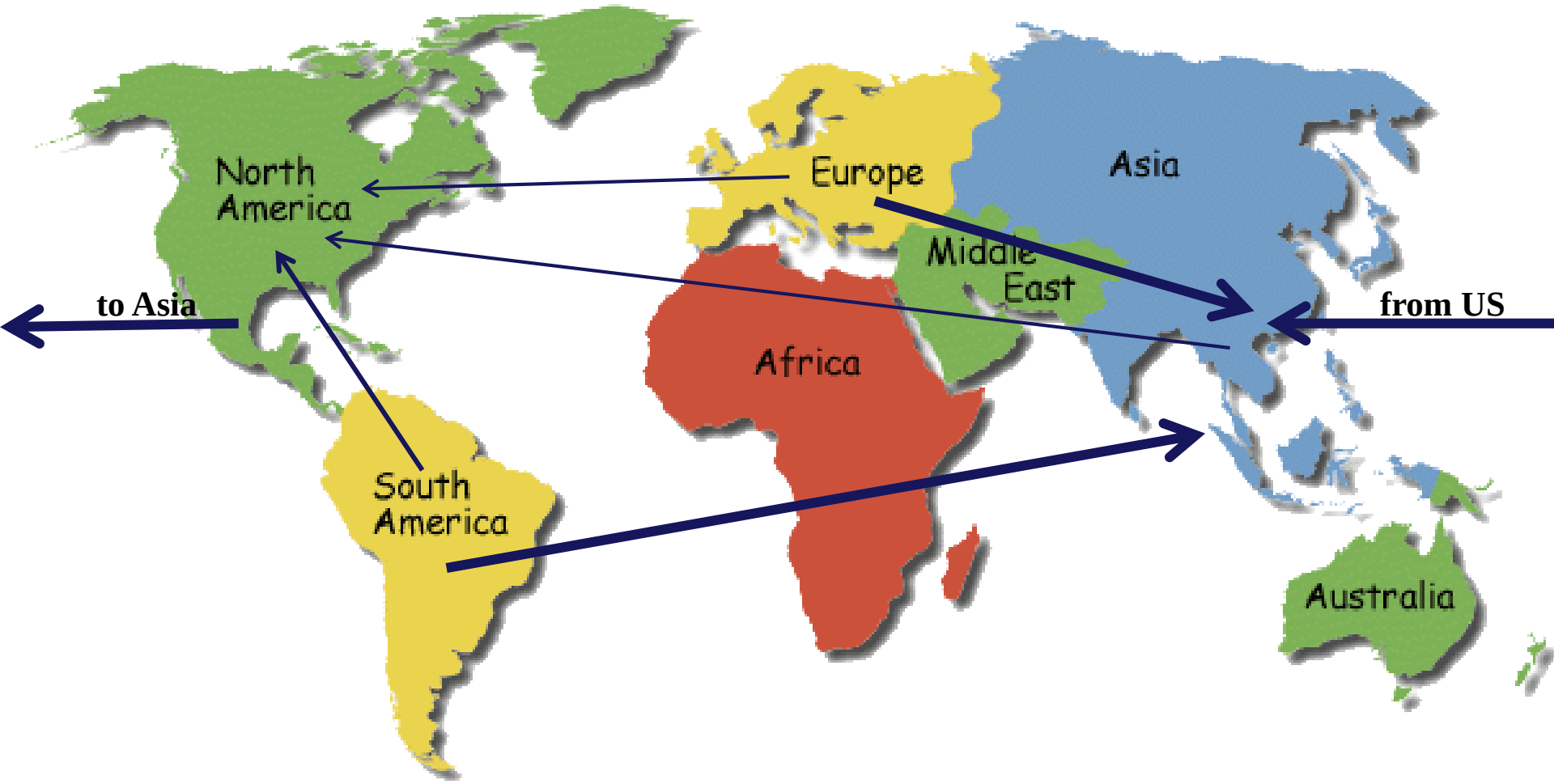
If repair cost > xx% of new new wins !

Without **affordable** repair options, 23,000,000 products might be prematurely scrapped every year

What flows, shipments and centralized facilities for testing/repair/refurbishment look like

Major Flows: Equipment for Repair

Major Flows: Spare Parts for Repair



Service parts are shipped for refurbishment from regional and local repair facilities in the Americas, Europe and Asian **states** to Refurbishment Operations is Asia (e.g., Singapore, Malaysia, China, Philipines)

Repair Processes: Comprehensive, Consistent, Certified

Inspect & Test → Repair → Load Software → Cosmetic Service → Configure → Repackage

Packaging for Repair/Refurbishment

Defective Products Shipping

- Palletised
- Properly packaged
- Labelled

Skilled de-installation and transport

- Careful disassembly into components, parts, cables, etc.
- Specialized packaging and transport

Defective Product Receiving

- Individual boxing
- Cushioned
- Parts separated
- Each part tracked – by serial/part number

Defective Parts Receiving

A Repair Center Interior View

Defective Product Receiving

Incoming Quality Control & Warranty Acknowledgment

Product In-Circuit Test (ICT)

Product Diagnosis & Repair

Testing of servers / mainframes in specialised Hubs

Repaired and ready for dispatch

- Repaired
- Tested
- Fully Functional / As New
- Return to use
  - Inventory
  - Customer

Results of the Digital Europe Survey

Results of a survey from Digital Europe*

- Every day, the useful life of 100,000 products is prolonged through testing/repair/refurbishment

- 59% are repaired under warranty, 41% are serviced outside of warranty

- Total amount of products / spare parts shipped for service across border / summary of flows for transborder shipments of EEE for testing/repair/refurbishment:
  - 80% are sent to OECD countries
  - 10% are sent between Non OECD countries
  - 10% are sent from OECD countries to Southeast Asia and China* (Spare Parts)

* Survey was conducted in Feb 2014 amongst the members of the European Industry Association of global producers of IT and Electronic Equipment.

Results of a survey from Digital Europe*

- 100,000 product repairs/refurbishments/day
- 41% of all repairs involve products ouside of warranty
- 80% of all repairs involve products from consumers /dual use
- 6% of the amounts repaired will become waste
- 1% of amount shipped across borders will be scrapped in Non-OECD countries**
- The amount of Annex 1 waste is being further reduced by the increasing number of products compliant with hazardous materials reduction legislation (e.g., RoHS II)

* Survey conducted by DE with its international members in Febriary 2014

** Combination of Data from the DE survey and details from a major producer

Conclusions

- EEE producers are **supporting the fight** against illegal e-waste shipments
- Using sophisticated centralized repair facilities enables us to **preserve legitimate and efficient operations**
- These hubs provide **affordable and high quality service** that extends the life of more than 23,000,000 products annually.
- This channel should be **defined narrowly** to avoid its misuse
- There exist **clear and reliable methods** to distinguish between products/parts shipped for legitimate repair and illegal e-waste
- EEE producers are **committed to continuing work** on conditions and details from now until COP 12

Current Status of Basel Proposals

Basel Para 26b – 2 current proposals

Proposal 1

7 criteria:

1. Country opts in
2. RoHS Compliant
3. Ownership retained by exporter
4. Valid repair contract
5. Signed declaration
6. Waste Generated shipped to Annex VII country
7. Adequate Packaging

Proposal 2

Parties to define their own criteria:

- Accountability of Exporter
- Compliance with regulations on Hazardous Substances
- Packaging
- Import restrictions
- Management of residues

Majority of Repair activities - Components

ASIA Countries:-

- Malaysia
- Singapore
- Japan
- Korea
- China

Processing in country

- China
- Philippines
- Taiwan
- Vietnam
- Thailand
- Korea

We need your help to ensure that our industry can still provide legitimate services to extend the life cycle of **used products**

What we fight:

What we support

Thank You