Intel and Conflict Minerals: A Journey of Learning, Challenges and Leadership

Progress in Driving Conflict Free Sourcing

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Inside Supply Management®
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John serves as the editor of Inside Supply Management®, the flagship publication of the Institute for Supply Management™ and the authoritative resource for supply management executives in companies of all sectors, shapes and sizes.

John has worked in the publishing industry for more than 15 years — both in newspapers and trade publications. He began his career at ISM in 1999 as a senior writer, and was promoted to the role of editor. John holds his degree in English from the University of Northern Iowa.
Presenter – Carolyn Duran

Carolyn joined Intel in 1998 as a process engineer in the Portland Technology Development Group. In the next nine years Carolyn held technical and management positions in research and development groups, focusing on interconnects, polymer memory and wafer test methods.

In 2007, Carolyn joined the Fab Materials group. She began leading the conflict minerals program for Intel in Apr 2011, and also manages a team of technologists who ensure our supply line meets worldwide Environmental Health and Safety regulatory requirements. Carolyn received her B.S. in Materials Science and Engineering from Carnegie Mellon University, and her Ph.D. in the same field from Northwestern University.

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Agenda

- The Issue
- Developing the Process
- Intel’s Goal and Path To Conflict Free
  - Supply Line Mapping
  - Smelter Validation
- Summary

The Issue

Mineral resources (specifically the ores for tantalum, tungsten, tin and gold) in the eastern Democratic Republic of the Congo are being used to finance multiple armed groups, many of whom are committing serious social and human rights violations.

Source: Responsible Sourcing Network
Why We Care

Electronics is the largest consuming industry of Tantalum and Tin

Usage of the 3 T’s and Gold

<table>
<thead>
<tr>
<th>Electronic Hardware</th>
<th>Tantalum (Ta)</th>
<th>Tin (Sn)</th>
<th>Tungsten (W)</th>
<th>Gold (Au)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Printed circuit board assemblies (with components)</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Solder</td>
<td>✓ overhead</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Component lead frames, contacts, connectors</td>
<td>✓ overhead</td>
<td>✓</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Processors and chipsets</td>
<td>✓ overhead</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Capacitors</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Hard disk drive</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>LCD screens and displays</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Power supplies/adaptors</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Speakers</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Cameras</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Batteries</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Cables</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Mechanical parts</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

Note: Usage and typical or potential uses, and may not be found in all component parts.

Source: EICC-GeSI
Conflicts Minerals and the DRC

Relatively Small % of WW Production

<table>
<thead>
<tr>
<th>Mineral</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tin</td>
<td>3-4%</td>
</tr>
<tr>
<td>Tungsten</td>
<td>2-4%</td>
</tr>
<tr>
<td>Cassiterite</td>
<td>~1%</td>
</tr>
<tr>
<td>Wolframite</td>
<td>~1%</td>
</tr>
<tr>
<td>Tantalum</td>
<td>8-20%</td>
</tr>
<tr>
<td>Gold</td>
<td>~1%</td>
</tr>
<tr>
<td>Coltan</td>
<td>~1%</td>
</tr>
</tbody>
</table>

A Public Focus on Conflict Minerals and the Congo

Coltan, the "blood mineral" of Congo

A bloody connection to the Congo in every pocket...

Global Witness

Congo's riches fuel its war

Smartphones: The New Blood Diamonds?

Enough

Mineral wealth funds bloodshed in the Congo
U.S. Legislation: Dodd-Frank Act

- July 2010 - President Obama signs the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "Dodd-Frank Act").

- **Section 1502** requires companies to file disclosures and reports with the U.S. Securities and Exchange Commission related to the use of tin, tantalum (coltan), tungsten and gold in their products.

- The SEC was directed to promulgate final implementing rules by April 2011.

- Public vote on new ruling expected to take place August 22nd, 2012.*

Source: ITI; * Added by EICC

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Partnership Towards a Process Standard

Intel Engagement started with Key Management Support

Seek First to Understand

Focus
- Picked one metal as a start (Ta)

Research
- Extensive studies of the metal industry

Result: EICC-GeSI Conflict Free Smelter Program

Identify
- Smelter as focal point for validation

Validate
- Development of conflict free smelter program through EICC/GeSI
In-Region Schemes

Conflict Free Smelter Program (CFS)

Company Assurance

MINE SMELTER/REFINERY OEMS

Conflict Free Smelter Program Progression:

- **http://www.conflictfreesmelter.org**
- The compliant smelter/refiner lists are publicly available in order to maintain credibility and transparency of the Program.
- 20 refiners/smelters compliant to date
Concerted Efforts Have Led To Key Results

<table>
<thead>
<tr>
<th>Effort</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>EICC-GeSI Common Reporting template</td>
<td>Considered Industry Standard</td>
</tr>
<tr>
<td>EICC-GeSI Audit Protocols</td>
<td>Ta completed 2010, remaining 3 metals completed in Q3’11</td>
</tr>
<tr>
<td>EICC-GeSI Outreach</td>
<td>•Strong attendance at bi-annual workshops</td>
</tr>
<tr>
<td></td>
<td>•Addition of partners outside the electronics industry</td>
</tr>
<tr>
<td>Smelter Incentive Program</td>
<td>Launched by RESOLVE in Q2’12 – Intel, HP, GE Foundation are founding partners</td>
</tr>
<tr>
<td>In Region Sourcing Initiatives</td>
<td>•ITSCI Bag and Tag</td>
</tr>
<tr>
<td></td>
<td>•Solutions for Hope (Ta)</td>
</tr>
<tr>
<td></td>
<td>•Public Private Alliance for Responsible Mineral Sourcing</td>
</tr>
</tbody>
</table>

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Intel’s Goal

Ensure the minerals used in our products are not financing conflict in the region

2012: Validated conflict-free for Ta in our microprocessors

2013: Validated conflict-free for all four metals in our microprocessors

Conflict Free Mineral Sourcing: Focus on the Smelter

Determine Smelters in our Supply Line
• Develop Due Diligence Processes and Systems
• Prioritize Scope

Validate Smelters as Conflict Free
• Smelter Visits
• Encourage participation in EICC/CeSI program
• Or remove from supply line

Transparency
• To our customers
• To meet the US Law
Mapping the Supply Line

- Microprocessor Supply Line >90% mapped
- ~200 Direct Suppliers Surveyed
- Over 6000 line items identified
- ~140 Unique smelters

CFS Audit Process Overview

- EICC & GeSI Audit Program Manager coordinates all the below activities

Pre-Audit
- Visit by EICC or GeSI Member(s)
- Sign Audit Agreements
- Pre-Audit Checklist
- Line-Item Summary
- Audit Quote
- Funds Received
- Set Audit Date

Audit
- 3rd Party Audit
- Auditor Report and Compliance Recommendation
- Audit Review Committee (ARC):
  - Compliance
  - Improvement Needed

Post-Audit
- (non-compliant)
  - Improvement Plan (sent from ARC)
  - Improvement Completed (within 90 days)
  - Re-audit (as necessary)
  - ARC Compliance Determination

Source: EICC-GeSI
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What We’ve Learned

- Be “On the Ground”
- Collaborate toward common goal
- Drive standards for global implementation
- Encourage and enlist fellow travelers
- Help Others

Summary

- Leadership and collaboration are essential to solving complex problems
- Supply chain transparency and deep understanding are critical to formulate a viable solution path
- We have driven results within our supply chain and will continue to push forward
Intel Resources

- Conflict Minerals Whitepaper
- Video
- 2011 Corporate Social Responsibility Report
Frequently Asked Questions

• **How can I obtain my CEH for this event?** Attendees of today’s event will receive an email from ISM within ten working days with a secured link to:
  
  Your 1.5 Continuing Education Hour certificate. CEHs are awarded to attendees who participated for at least 75 minutes of the seminar. **Note:** You must be logged-into ISM’s Web site for these secured links to work.

• **How can I get a copy of the slides?** Attendees of today’s event were emailed the slides prior to the event. The slides are also available in the “Documents” tab on the bottom right of your screen.

• **Where can I learn more on Conflict Minerals?** A document has been put together of other resources and articles that may be beneficial to attendees. The resource document can be found in the “Documents” tab.
EICC® Members
As of 27 February 2012

GeSI Members
(As of 6 January 2012)
Smelter as a Critical Point in the Supply Chain

Compliance Requirements:
1) Policy
2) Mass Balance
3) Sourcing Document Summary

100% Company Mass Balance
- Includes all warehouses/inventory
- Includes all facilities
- Accuracy +/- 10%

Ore / Concentrate
Intermediate (i.e. Ingots / Bars)
Secondary / Byproducts

Smelter Company

Byproducts & Losses
Finished Products

Toll Customer
Toll Supplier

Conflict Free Policy
Conflict Minerals Reporting Template Progression:

- Excel template and dashboard available at [http://www.conflictfreesmelter.org](http://www.conflictfreesmelter.org)
- Enables transfer of smelter/refiner sourcing lists, some suppliers resistant
- Revision #1 experienced successful Global proliferation, more to be done

2010:
- Development: Created Conflict Minerals Reporting Template data structure.

2011:
- Deployment: Revision 1 of Reporting Template released publicly, and began to be proliferated by LICCs and Cobalt smelter companies.

2012:
- Improvement: Revision 2 of Reporting Template to be released publicly (2017), to be proliferated. Standards to be used to begin an Aggregate Rollup Template.

2013:
- Standardization: Esa to complete standardization of Reporting Template and proliferation.
CFS Early-Adopters Fund

- Smelter Incentive program
  - Intel, HP & GE Foundation seeded $225K to encourage early adoption of the CFS program
  - Smelters/Refiners who pass an audit receive ½ of audit cost up to $5K USD to reduce financial burden
  - Previously compliant Ta smelters can apply
  - Fund will be managed by RESOLVE
  - EICC/RESOLVE contract setup to assist other EICC, GeSI, or partner members who may wish to contribute
In-Region Schemes

- iTSCi (Bag-Tag scheme in Katanga/Rwanda currently)
  - CFS program continues to work closely to align the two programs
  - First smelter receiving iTSCi material has become CFS compliant (2nd audit)

- Public-Private Alliance (PPA)
  - Governance Committee
    - Call for Request for Proposals sent out (funding requests)
    - Working to address new members and continuation of funding
  - Working Groups established:
    - Communications, In-Region, Membership and Fundraising
  - PPA Documents
    - RFP, Improved MOU, protocols (including document sharing), Work Plan

- Solutions for Hope (Ta) – closed pipeline of material

Smelter Visits: Traceability, Encouragement

Ensuring clean traceability
- Walk the materials flow
- Identify every point which material can be introduced into the process

Encouraging participation
- Demonstrate value
- Impact to supply chain