

Conflict Minerals in the Supply Chain

Traceability, Accountability and Corporate Responsibility

By Andrew K. Reese, with Rory King

The financial reform bill signed into law on July 21, 2010, included a six-page section that will have a direct impact on the supply chain for companies across industries. The bill creates new requirements that will have companies reporting to the Securities and Exchange Commission (SEC) on the origins of the gold, tin, tantalum and tungsten in their products. The goal is to prevent so-called “conflict minerals” sourced in the Democratic Republic of the Congo (DRC) from entering the supply chain and, thereby, to cut off funding for armed groups deriving income from those minerals.

The practical implications of the law for the supply chain include both potential penalties for failing to comply with the SEC reporting requirements as well as the risks associated with an inability to respond adequately to customer or third-party requests for information about how these minerals are included in a company’s products or manufacturing processes. Industry-leading companies in sectors affected by the law already are starting to push

new reporting requirements down their supply chains.

Supply & Demand Chain Executive has worked with IHS, a leading provider of information and insight, to prepare this briefing document on the law, its requirements and the challenges that compliance with the law will pose for the supply chain. IHS, with substantial resources dedicated to global compliance and supply chain issues, has taken a lead role in highlighting the Conflict Minerals issue and bringing it to the attention of industry. In addition, this paper includes insights gained from interviews with industry practitioners at OEMs, suppliers and end-user organizations, as well as executives representing industry associations. It includes preliminary results from a survey of about 50 different companies on their response to the new law. Subject matter experts from IHS also have contributed a five-point plan to lay the foundation for preparing a compliance strategy.

It is important to note that this is an evolving issue, with significant regulations yet to be finalized. While this paper can offer a practical

framework for preparing a compliance strategy, affected parties should seek professional legal assistance where appropriate to understand the full implications of the law and to ensure compliance.

Background: A Nation in Conflict

Located in Central Africa, the Democratic Republic of the Congo covers about 900,000 square miles and has a population of about 70 million people. The country is, by all accounts, fantastically wealthy in terms of natural resources, with plentiful supplies of cobalt, copper, cadmium, diamonds, gold, silver, zinc, manganese, tin, germanium, uranium, radium, bauxite, iron ore, and coal. And yet years of civil strife have stunted growth, leaving the DRC with an estimated gross domestic product of only \$22 billion.

The conflict itself has a complex history that has been well documented elsewhere. Suffice it to say that the DRC has basically been in a state of civil war for most of the past 15 years in one form or another. The current “power players” include the Congolese Army and a



Figure 1.

group called the Democratic Forces for the Liberation of Rwanda, or FDLR, which are viewed as the main, but not the only, forces controlling the minerals trade. These and other armed groups are reported to control 12 of 13 major mines in Eastern Congo, the primary source for the conflict minerals in questions.

The result of the conflict has been more than 5 million people dead by 2008, but also ongoing deaths numbering up to 45,000 a month, according to reports from the region. The armed groups involved in the minerals trade used forced labor and child labor in the mines. What's perhaps one of the most disturbing aspects of the conflict has been the widespread use of sexual violence against local populations and workers in and around the mines.

Building Public Pressure

A number of non-governmental organizations, or NGOs, have become involved in promoting solutions to the conflict and the human rights issues in the country. Two of the more prominent NGOs that have been involved include:

■ **Global Witness**, which published a very thorough report on the DRC and the conflict minerals issue in 2009 called "Faced with a Gun, What Can You Do?", which provides a good deal of background on the militarization of mining in the conflict-affected areas of eastern DRC.

■ **The Enough Project**, which published a report in November 2009 called "From Mine to Mobile Phone," describing the supply chain that brings materials from the mines through trading houses and exporters to manufacturers and finally into consumer products. Enough's Raise Hope for Congo project has tried to "turn up the heat" on OEMs to make sure that they are excluding conflict minerals from their supply chains.

The mainstream media also has been devoting increasing coverage of the DRC and conflict minerals issue, particularly since the passage of the US law. The coverage has been fairly negative toward the electronics industry, with articles highlighting the issue of conflict minerals in the supply chain, including editorials headlined "Death by Gadget" (*The New York Times*) and "Clean Them Up" (*The Economist*), which talked about "breaking the link between laptops and war."

The Minerals

Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 ("Dodd-Frank Act") specifies several minerals as being potentially "conflict minerals," including cassiterite, columbite-tantalite, wolframite and gold. These frequently are cited as tin, tantalum and tungsten, or the 3Ts, plus gold.

■ Tin, which is mined as cassiterite, is used as a solder on circuit boards, among other things. The DRC is responsible for approximately 6-8 percent of worldwide tin production, but it's estimated that tin earns armed groups in the DRC about \$85 million a year.

■ Columbite-tantalite, or coltan for short, is refined into tantalum, which is used in a variety of electronics – tantalum capacitors are common in electronics products, for example. The DRC is a leading producer at present, with estimates of its global share ranging from 10 percent to 20 percent. Only a portion of DRC tantalum is thought to come from the eastern region of the country that is pegged as the source for most conflict minerals, but that small share "casts a shadow" over any and all tantalum coming from the country.

■ Wolframite is an important source of tungsten, used as tungsten carbide in turning tools and milling but also in cell phones to make

	None <u>Used</u>	Minimal <u>use</u>	Moderate <u>use</u>	Extensive <u>use</u>	Don't <u>Know</u>
Coltan	56%	15%	15%	0%	15%
Cassiterite	37%	22%	19%	19%	4%
Wolframite	44%	22%	15%	7%	11%
Gold	33%	33%	7%	22%	4%

Figure 2.

them vibrate. Estimates are that just 2-4 percent of global production of tungsten comes from the conflict regions of the DRC, but armed groups are still estimated to earn \$2 million a year from the mineral.

■ Gold is widely used in jewelry, of course, but in 2007 the electronic industry was estimated to account for 9 percent of the global demand for gold. Less than 1 percent of worldwide production of gold comes from the conflict regions of the DRC, but this “conflict gold” potentially taints any of the mineral coming from the region. And armed groups are thought to be earning tens of millions of dollars from gold produced in the DRC.

It’s important to note that the law extends to derivatives of the 3Ts and gold that come from the DRC, as well as “other minerals ... financing conflict” in the country, so new minerals could be added to the list over time.

Provisions of the Law

Under the provisions of the law, the US State Department is to draw up a “conflict minerals map” that will show the mines thought to be sources of conflict minerals. The map is to serve as a tool that companies can – theoretically – use to understand whether the minerals in their supply chain are coming from potential conflict regions. That map is to be updated every 180 days to reflect the current situation on the ground, so the “coverage” of the law will evolve over time.

Section 1502 requires companies to make an annual disclosure to the SEC regarding whether potential conflict minerals (the 3Ts and gold) used in their products or in their manufacturing processes originated in the DRC or an adjoining country. If the minerals were sourced from these countries, the companies must report on the due diligence measures they employed to understand the source and chain of

custody of the minerals. An audit by a third-party firm will be necessary to confirm the accuracy of the company’s disclosure. Companies also must disclose products they manufacture that are not “DRC conflict-free” – that is, goods containing minerals that directly or indirectly help to finance armed groups in the DRC or an adjoining country. The SEC has 270 days from the enactment of the law – until April 2011 – to finalize the regulations, which will go into effect thereafter.

The law is not intended to ban these minerals if they originate from the DRC. In fact, manufacturers could continue to use conflict minerals from the DRC or an adjoining country, but they would face liability for failing to disclose their sourcing practices accurately. And, ultimately, they would face potential public backlash from a failure to take adequate measures to keep these conflict minerals out of their supply chains and their products.

Impact on the Supply Chain

The law clearly poses challenges for Supply Chain executives looking to support their companies’ compliance with its provisions. First, the law does not define what constitutes “due diligence” in meeting the law’s reporting requirements. The Organization for Economic Cooperation and Development (OECD) currently is working on a framework around due diligence as a way of establishing standards for traceability throughout all stages of the supply chain. However, that document is in draft stage at present, and it remains to be seen whether its framework will be accepted by US authorities as sufficient.

Another challenge, of course, is the complexity of the supply chains extending back from the consumer to the mines. **Figure 1** was adapted from a chart that a cell phone equipment

OEM put together to illustrate the multiple tiers in its supply chain. The manifold layers of the supply chain pose multiple windows of vulnerability where parties to the conflict can gain from the mining or movement of minerals, whether through “taxing” miners, imposing fees on transportation through checkpoints, smuggling minerals themselves or other measures.

The preliminary results of a *Supply & Demand Chain Executive* survey of nearly 50 companies on their preparedness to meet the requirements of Dodd-Frank illustrate the looming challenge of compliance. Substantial numbers of respondents indicated that their organizations employ the 3Ts and gold in their products or processes. (**Figure 2**) But the survey found a minority of companies confident in their company’s ability to identify and report country of origin for these minerals. (**Figure 3**) Interestingly, companies were more confident in their suppliers’ ability to provide adequate reporting (**Figure 4**), suggesting an over-reliance on the supply base that may be misplaced.

The Industry Response

Given that the conflict minerals section was tucked away on page 838 of the 848-page financial reform bill, it is not surprising that awareness of the law’s provisions has been slow to build in the supply chain community. Six in ten (61 percent) of the respondents to the SDCE survey said that they had not been aware of Section 1502 dealing with “conflict minerals.” A similar percentage said that prior to July 21 (when the bill was signed into law), their company had not received any queries from customers regarding conflict minerals content; 52 percent said they received no queries after July 21.

Industry has been responding, however, particularly in the electronics sector, as reflected in the involvement of several industry associations in the issue:

■ **IPC – The Association Connecting Electronics Industries** is an industry association for printed circuit board and electronics manufacturing service companies, their customers and suppliers. It has been active in working in Washington to educate lawmakers and government officials about the conflict minerals issue, to present the industry’s perspectives on the issue to officials, and to represent the industry’s interests in the halls of government. It also is educating its members about the conflict minerals issue.

■ **The Electronics Industry Citizenship Coalition (EICC)** promotes an industry code of conduct for global electronics supply chains to improve working and environmental conditions. Its members include electronic manufacturers, software firms, information and communications technologies (ICT) firms, and manufacturing service providers.

The EICC joined with **The Global eSustainability Initiative (GeSI)**, which brings together leading ICT companies – including telecommunications service providers and manufacturers as well as industry associations – and non-governmental organizations to focus on achieving sustainability objectives through innovative technology) to commission the “Resolve Report,” which outlines many of the challenges of traceability in the minerals supply chain. These two organizations also have been working to educate companies in the supply chain for these minerals about responsible sourcing practices for the materials.

Other organizations working on the issue include **ITRI**, an international tin trade association that

How confident are you in YOUR COMPANY’s ability to identify and report country of origin, or, specifically isolate materials from the DRC or adjoining countries?

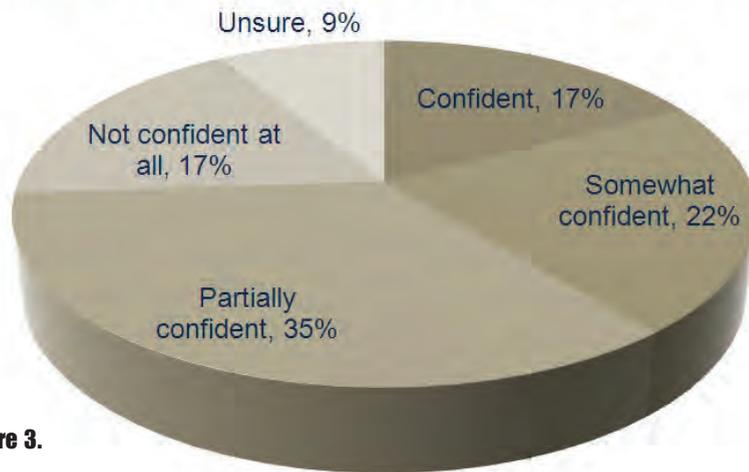


Figure 3.

How confident are you in YOUR SUPPLIER’S abilities to identify/report where the minerals they use come from?

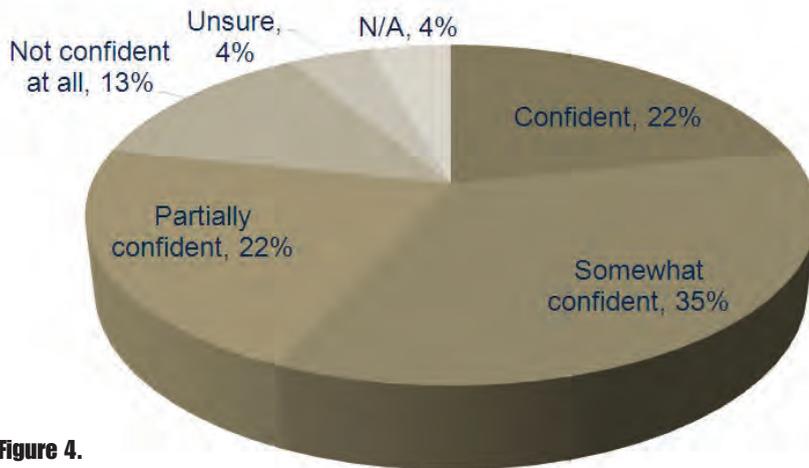


Figure 4.

has been working on implementing a due diligence plan for tin minerals exported from the DRC. The **ITI** is another advocacy organization that works on behalf of the ICT industry to educate lawmakers and government officials about the industry’s perspectives on issues like conflict minerals. And finally, a group of various leading companies in the electronics industry is working on a pilot project to trace the origins of tantalum in the supply chain.

Your Next Steps

As was mentioned above, conflict minerals is an evolving issue that requires professional legal assistance and counsel to ensure compliance with yet-to-be finalized regulations. However, companies can already be taking steps to lay the groundwork for compliance. *Supply & Demand Chain Executive* worked with subject matter experts at IHS to develop a five-point plan to lay the foundation for preparing a compliance strategy.

These steps include:

1) Get an understanding of the issue.

Read Section 1502 of the Dodd-Frank bill. Key sections to understand include:

- Definitions of “conflict minerals” and “conflict-free.”
- Timelines for regulations to be issued by SEC and for subsequent disclosures to SEC.
- Who is required to make disclosures to the SEC and (via company Web site) to the public.
- Content of disclosures.
- Requirements for audit or certification of disclosures.

The sites of the NGOs and industry associations involved are also valuable resources for further background on this issue. (See the link to additional resources at the end of this article.)

2) Get involved in industry – but do not wait. Industry groups such as IPC and EICC offer guidance and practical advice on the regulatory response, and they work on standards and practices that form the basis of an industry-wide approach. They also serve as a critical interface between the supply chain community, on the one hand, and lawmakers and regulators, on the other, and it is important to be involved with these groups. At the same time, companies must be proactive in leveraging these organizations and other resources to educate themselves about the relevant issues and to prepare their own strategy around conflict minerals that best suits their specific objectives and requirements.

3) Assemble and engage the organization. An effective response will require cross-functional engagement across the enterprise, including:

- **Sales & Customer Support** – Your interface with the customer, who is already – or will be soon – asking about “conflict minerals.”
- **Sourcing/Procurement/Supply**

Management – The conduit to the supply chain, with knowledge of materials, suppliers and sources.

- **Legal/Regulatory Affairs/Compliance** – The experts in ensuring compliance with the law, and in crafting language on company policy and for contracts with suppliers.
- **Environmental Compliance, Sustainability or Product Stewardship** – Bring experience with environmental regulations and compliance (e.g., with RoHS and REACH) from a data collection, supplier audit or supply chain impact on materials perspective.

■ **Executives** – Senior management (C-level) must be engaged to facilitate cross-department communication.

■ **Component Obsolescence/Engineering** – Potentially involved where design changes become necessary to accommodate changes in materials.

■ **Quality** – Experience with enforcing Supplier Codes of Conduct and with risk management inherent where materials are concerned.

■ **IT** – Knowledge of the systems and capabilities necessary to manage the collection, management and storage of necessary product and supplier information to support compliance.

4) Simulate your response.

Questions to ask yourself, and your cross-functional team, include:

- What if we had to report tomorrow (to the government, to our top customer) on the presence of the 3Ts and gold in our products, our processes and our supply chain?
- Who is involved within the enterprise and in the supply chain, what dependencies do you have, and what data would you require?
- What are your design/redesign cycles in the event that materials shortages arise as a result of this law and its implementation?
- What materials are sole sourced?
- How competitive are your

materials/products? What are high/medium/low risk of substitution if your competitors are first to assure “conflict minerals free” products or lock up “conflict free” sources of supply?

5) Assess your IT landscape. Do you have the systems and capabilities necessary to manage the collection, management and storage of necessary product and supplier information. Outline your current state to identify gaps in systems and capabilities, and providers and partners that can assist in filling those gaps.

Conclusion

With regulations yet to be finalized, it remains unclear how Section 1502 ultimately will be implemented. The law, for example, does not specify penalties for failure to accurately report conflict minerals content to the SEC. However, those details will be worked out in the end, and moreover public opinion already is moving forward and pushing increasing numbers of companies to formulate strategies for ensuring a “conflict free” supply chain. Leaders will be working now to drive compliance into their supply chain, lock in “conflict free” sources of supply where necessary, and prepare to meet both regulatory requirements and customers queries (or mandates). Lagging enterprises that adopt a wait-and-see approach may find that by the time all the regulations are put in place, they already are at a disadvantage in terms of their response. ■

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