

Conflict Minerals in Central Africa: U.S. and International Responses

Nicolas Cook Specialist in African Affairs

July 20, 2012

Congressional Research Service 7-5700 www.crs.gov R42618

Summary

"Conflict minerals" are ores that, when sold or traded, have played key roles in helping to fuel conflict and extensive human rights abuses, since the late 1990s, in far eastern Democratic Republic of the Congo (DRC). The main conflict minerals are the so-called the "3TGs": ores of tantalum and niobium, tin, tungsten, and gold, and their derivatives. Diverse international efforts to break the link between mineral commerce and conflict in central Africa have been proposed or are under way. Key initiatives include government and industry-led mineral tracking and certification schemes. These are designed to monitor trade in minerals to keep armed groups from financially benefitting from this commerce, in compliance with firm-level and/or industry due diligence policies that prohibit transactions with armed groups.

Congress has long been concerned about conflicts and human rights abuses in the DRC. Hearings during successive congresses have focused on ways to help end or mitigate their effects, and multiple resolutions and bills seeking the same goals have been introduced. Several have become law. The most extensive U.S. law aimed at halting the trade in conflict minerals, specifically the 3TGs, is Section 1502 of Title XV of the Dodd-Frank Wall Street Reform and Consumer Protection Act (P.L. 111-203). Among other ends, Section 1502 requires the Securities and Exchange Commission (SEC) to issue rules mandating that SEC-regulated businesses that use conflict minerals in their products:

- report if they obtained their mineral supplies from the DRC or nearby countries;
- be permitted to label as "DRC conflict free" products that they can credibly demonstrate do not incorporate minerals sourced in a manner that directly or indirectly finances or benefits armed groups in DRC or adjoining countries;
- publicly report to the SEC on those of their products which do incorporate minerals that are not "DRC conflict free"—and which may not be labeled as such—and on diligence measures used to obtain these minerals.

Section 1502 raises complex rule design, compliance, cost estimate, and implementation questions, and Section 1502 advocates and critics—many politically influential—have been urging the SEC issue rules favorable to their respective views and interests. The complexity of the matters at issue and diversity of interests affected have prompted the SEC to repeatedly delay issuance of a final rule, although it is expected to act on the matter in mid-August 2012. Key rule-making issues under debate include:

- timing and a possible phase-in of rule implementation; and
- what due diligence standards are to be used.

There is widespread support for use of due diligence guidelines developed by the Organization for Economic Co-operation and Development (OECD) in eventual Section 1502 rules, both to ensure complementarity between U.S. and international conflict mineral trade abatement efforts, most of which employ the OECD guidelines, and to enable these schemes to mature.

The State Department has provided to Congress a strategy aimed at breaking the link between mineral trade and conflict and, together with the U.S. Agency for International Development, is implementing programs in central Africa to support tracking and certification schemes; local small-scale mining communities; anti-mining labor abuse efforts; and related ends.

In the short to medium term, Congress is likely to closely monitor Section 1502 rule-making and the effectiveness of any eventual rule and other conflict mineral-focused programs as they are implemented. Implementation is likely to be complex. While substantial financial and applied efforts are being invested in such efforts, conflict in eastern DRC has long posed a complex set of intractable security, governance, and human rights challenges, which such efforts alone are unlikely to overcome—and may complicate. An example of a possible unintended consequence of Section 1502 is a de facto buyers' boycott of minerals from eastern DRC attributed to the delayed rule-making process and to other factors. It has generated a local economic crisis and increased smuggling of minerals, but also reportedly reduced conflict funding and spurred conflict mineral trade control efforts.

Contents

Overview	1
Background: Conflict and the Role of Minerals	2
Minerals	3
Conflict Minerals: Key Approaches to the Problem	4
Mineral Sourcing: Chain of Custody Controls and Due Diligence	6
OECD Due Diligence System	6
Section 1502: Overview	7
Section 1502: Responses and Status of Rule-Making	10
Eastern DRC Mineral Boycott	
Delays in Rule-Making	13
Section 1502: Key Issues Under Debate	15
U.S. Policies and Programs to Counter Trade in Conflict Minerals	17
U.S. Strategy	17
U.S. Programs	18
Responsible Minerals Trade	18
Additional Responsible Minerals Trade Programs	
State Department Efforts	19
Outlook	20
Potential Prospective Congressional Role	23

Appendixes

Appendix A. Background on Conflict and Armed Actors in Eastern DRC	24
Appendix B. Regional and Industry Supply Certification and Due Diligence Initiatives	26

Contacts

Overview

The term "conflict minerals" is used to describe metal ores that, when mined, sold or traded, are widely reported to play key roles in fueling armed conflict and human rights abuses in several far eastern provinces of the Democratic Republic of the Congo (DRC, formerly Zaire). The main minerals at issue are columbite-tantalite (coltan, a source of tantalum and niobium), cassiterite (tin ore), wolframite (tungsten ore), and gold—and their derivatives. The first three minerals are dubbed the 3Ts. When gold is also considered, they are known as the 3TGs.

Links between conflict, human rights abuses, and the mining of and trade in these minerals have been the subject of numerous investigations, research studies, and policy papers, as well as policy advocacy campaigns focused on a need to respond to the persistence of conflict and its large toll in lives and human rights abuses. Such efforts have prompted policy makers, industry groups, and others, both in the United States and abroad, to craft measures aimed at cutting links between the minerals trade and those involved in or abetting armed conflict in eastern DRC.

Continuing political instability in Congo has been the focus of Congressional attention since the overthrow in 1997 of the regime of Mobutu Sese Seko, who had led DRC since 1965. Multiple congressional hearings have investigated various aspects of the DRC's conflicts, and multiple resolutions and bills have been introduced to help end them or mitigate their effects. Several have become law. The most extensive U.S. law aimed at halting the trade in conflict minerals, specifically the 3TGs, is Section 1502 of Title XV of the *Dodd-Frank Wall Street Reform and Consumer Protection Act* (P.L. 111-203). It is the subject of an ongoing Securities and Exchange Commission (SEC) rule-making process that is expected to lead to adoption of "final" Section 1502 implementing rules. This process, which has faced delays, is discussed further below.

These congressional efforts have dovetailed with executive branch activities aimed at curtailing conflict in DRC, especially in the east. For nearly two decades, State Department and U.S. Agency for International Development (USAID) officials have monitored the dynamics of instability in eastern DRC and the surrounding sub-region, including linkages between conflict, human rights abuses, and minerals. They have also implemented multiple humanitarian and technical aid, policy-focused, and public-private partnership programs to break such links, in some cases as mandated by Congress.¹ Multiple international public and private initiatives have sought to accomplish similar goals. The United Nations (U.N.) Security Council (UNSC) has, for instance, imposed DRC-focused sanctions aimed, in part, at curtailing the conflict minerals trade. It has also mandated that the U.N. peacekeeping mission in the DRC help the national government to achieve that end. Donor governments have also supported initiatives by states and intergovernmental entities in central Africa to design and implement transparent, accountable, and conflict-free national and regional mineral purchasing and trade certification regimes. Other donor-backed mining sector reform efforts also seek to reduce links between mining and conflict and boost legitimate trade.

Industry groups are also piloting several similar certification schemes in central Africa that seek to verifiably track supply chains of minerals sourced in the region to ensure that buying and trade

¹ Current U.S. conflict mineral-specific efforts are discussed in the U.S. programs section below. Past examples have included USAID, *Minerals & Conflict: A Toolkit for Intervention*, 2005; and *Trading for Peace*, an 2004-2009 research and policy reform project commissioned by USAID and other donors, among other mining reform efforts in the DRC.

activities do not fund armed actors or otherwise abet conflict. These schemes are designed to compliment government certification efforts in the region (see **Appendix B**) and in some cases are an inherent part of these efforts. A key component of most of these public and private sector efforts is a process of due diligence that was developed by the Organization for Economic Co-operation and Development (OECD) with input from a broad array of stakeholders.²

Background: Conflict and the Role of Minerals

The areas in eastern DRC that have been negatively affected most persistently by conflict lie in the border regions adjacent to Uganda, Rwanda, and Burundi, and include the provinces of North and South Kivu (known jointly as the Kivus). Armed groups and illegal mineral sector actors also operate in the district of Ituri, just north of the Kivus, the locale of an ethnically and resource-focused conflict in the mid-2000s. It has been relatively quiescent in recent years.

Over a decade and a half of conflict has also resulted in a breakdown of law and order and caused socio-economic devastation for many in eastern DRC, an area which had already suffered decades of state neglect and depredation under Mobutu's rule. Conflicts in eastern DRC have spawned a large number of armed militias, motivated by a mix of political aims and communal or ethnic self-defense, criminal, and other goals.

Multiple, often inter-related factors have underpinned these conflicts, which have consistently been characterized by numerous, extreme human rights abuses.³ Such factors have included interethnic political and economic competition, in some instances associated with the 1994 Rwandan genocide or Congolese state and societal discrimination against ethnic minorities. Diverse political grievances against and competition for control over the state have also played a role. Integration of various non-state armed groups into the national military and other military reform processes; lack of military training and discipline; and contested command and control and corruption within the military are also contributing factors. Widespread poverty and unequal patterns of resource distribution have also helped spur and prolong conflict, as have criminal opportunism, pillage, and predation of civilian populations, often by elements of state security forces. Such catalysts of conflict have not only motivated Congolese armed actors' actions; they also spurred several foreign state military interventions in Congo in the early 2000s.⁴ For more on the dynamics of conflict in eastern DR and actors involved, see **Appendix A**.

These drivers of conflict have been aggravated by competition and conflict over various resources, including land rights; tropical timber and agricultural commodities, such as coffee, palm oil, and charcoal; illicit drug cultivation and trade; and fishing rights—but more notably

² OECD, OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, 2011.

³ Recruitment of child soldiers, mass rape, and diverse other human rights atrocities have been common. Between 1998 and 2007, as many as an estimated 5.4 million people may have died in Congo from direct and indirect war-related causes, including malnutrition and disease, with the highest casualty rates concentrated in eastern DRC. See International Rescue Committee, *Mortality in the Democratic Republic of Congo: An Ongoing Crisis*, 2008; and CRS Report R40956, *Sexual Violence in African Conflicts*, by Alexis Arieff, among many other sources.

⁴ Other motivations for foreign interventions have included ethnic irredentism; state alliances with or opposition to the DRC government, elements of it, or rebels opposed to it; national defense against rebels operating from bases in DRC; and efforts to advance diverse other cross-border state political, economic, and military objectives in the DRC.

over mineral reserves, mining, and trade. Ores that have been the focus of such dynamics have earned the moniker "conflict minerals" because they:

- are found in all of the provinces of eastern DRC that have experienced lengthy periods of war and insecurity, and have often provided an incentive for acts of coercion and armed clashes;
- are mined under very poor, often dangerous labor conditions due to the use of manual modes of production and human rights abuses by armed groups, including state security force elements, who often directly or indirectly coercively control mining operations;⁵
- provide armed groups profit derived from direct participation in, control of, or extortion from mineral mining and commerce; and
- underpin an extensive black-market cross-border trade that is proscribed under UNSC sanctions pertaining to the DRC and which benefits armed groups, among other actors, many illicit, such as black market traders and smugglers.

Minerals

The main conflict minerals at issue are the 3TGs and their derivatives, which Section 1502 explicitly and formally defines as "conflict minerals." The reason that these minerals have both played such a prominent role in conflict in the sub-region and drawn extensive international attention is that they help supply a high-value, global commodities trade that provides crucial inputs to a wide variety of industries and manufacturers. They include:⁶

• Columbite-tantalite, a composite mineral ore known in Central Africa as coltan. Columbite is the ore of columbium, also known as niobium. Tantalite is the source of the metal tantalum. Tantalum is a highly malleable and corrosionresistant metal conductor of heat and electricity. It is a key component in electronics goods, especially capacitors (devices that store and regulate, or buffer, electrical charges) used in cell phones and auto electronics, computers, digital cameras, and other electronics. It is also used to create carbide alloys in hard metals for use in cutting tools, jet parts, and other applications. In the early 2000s, after a spike in tantalum prices, production and sales of coltan in the eastern DRC rose sharply—prompting increased concern over conflict minerals,

⁵ Mining sector-specific abuses in eastern DRC reported by a human rights advocacy group in mid-2011 included forced mining labor by armed groups, including forced child labor, debt bondage, peonage (forced labor by state officials based on sham criminal justice processes), coerced sex work, forced marriage, and the recruitment and use of children by armed forces and groups. See Free the Slaves, *The Congo Report: Slavery in conflict minerals*, June 2011. These and various other human rights abuses in eastern DRC have been reported on in detail for years by various U.N. agencies and other private human rights groups.

⁶ The following summaries draw from USGS *Mineral Commodity Summaries* and *Minerals Yearbooks*; BSR, *Conflict Minerals and the Democratic Republic of Congo: Responsible Action in Supply Chains, Government Engagement and Capacity Building*, 2010; Enough Project/Grassroots Reconciliation Group, *A Comprehensive Approach to Congo's Conflict Minerals*, 2009; and Päivi Pöyhönen and Eeva Simola, *Connecting Components, Dividing Communities: Tin Production for Consumer Electronics in the DR Congo and Indonesia*, FinnWatch/FANC, 2007, among others. Estimates of DRC contributions to world supplies in the summaries are based on USGS-reported data, but due to the fragmentary availability of hard data regarding export levels, these estimates should be considered as merely indicative; the actual share of DRC within global supplies may vary considerably. Some estimates are substantially higher.

as armed groups became involved in the trade—but later dropped as global prices decreased. Niobium is also highly malleable and heat resistant, and is used in alloys for jet and rocket engines, medical and optical technology, electronics, jewelry, and other applications. The DRC is a marginal source of niobium, supplying well under an estimated 1% of world supplies between 2006 and 2010, but it is a significant, though highly variable global source of tantalite. During the same period, its estimated share of world tantalite supplies rose from 1.6% to 20.5%, and it supplied an annual average of 11.4% of the global supply.

- **Cassiterite** (tin oxide) is the main ore source of tin, a highly corrosion-resistant metal often used in solders, tin plating, chemicals, and alloys, notably bronze. Often found co-located with coltan in the DRC, tin is increasingly being used in electric circuits. Laws requiring a phase-out of lead in such applications in Europe and Japan reportedly contributed to a spike in tin prices in 2007 and 2008. Asian industrial growth has also contributed to a gradual increase in demand for tin. Cassiterite is widely seen as the most important ore from eastern DRC, which has contributed between 2% and 5% of global supplies in recent years.
- Wolframite is the ore of tungsten. The latter is used as a source for cemented carbide, especially in the manufacture of mining, metal, construction, oil sector, and cutting tools and other machine parts; as an alloy for hard, high density, high-melting point metal products; and in varied electrical applications, including semi-conductors and cell phone vibrators. The DRC is a marginal source of wolframite, supplying between .5% and nearly 1% of world supplies between 2006 and 2010.
- **Gold**, a precious metal, has many ornamental, coinage, electronics, and industrial applications. DRC is a relatively minor global gold supplier, contributing a reported average, based on official or documented trade flows, of 0.2% of annual world gold supplies from 2006 to 2010. Its actual contribution to world supplies may be far higher, however—as much as 2% annually during those years; as much as 90% or more of much artisanal production from the key gold production zones in Ituri, north of the Kivus, and in South Kivu may reportedly be smuggled out of the DRC.

Conflict Minerals: Key Approaches to the Problem

There have been numerous U.N., governmental, academic, and non-governmental investigations and studies of the role of the minerals sector within the war economy of eastern DRC. These have examined the full range of factors associated with conflict mineral dynamics: the production, commercial, and profit structure of the trade; patterns of untaxed, fraudulent, and otherwise illicit cross-border mineral shipments; trade routes within and out of the region; ties between regional and international mineral markets; the sources, types, and levels of various armed groups' estimated earnings; and human and labor abuses associated with mineral mining and commerce in the region.

Such reports have generally provided policy recommendations aimed at halting the trade in conflict minerals. Some have focused on possible military and/or politically-negotiated ends to the conflicts that would lead to a normalization of economic processes generally, including in the mining sector. Others lay out various technical or regulatory reforms aimed at severing linkages

between conflict and the mineral trade and/or expanding legal mineral trading. Some proposals seek to compel actors involved in the trade to act peacefully and legally, through the use of armed force or such tools as targeted financial, travel, or trade sanctions, or the threat of international criminal prosecution. Other policy proposals seek to streamline the DRC's mineral export sector by reducing red tape; and increasing regulatory effectiveness of state agencies (e.g., customs, mine regulators, business licensing, safety inspections, etc) through institutional capacity-building and reform.⁷

The creation of varying types of certified production and trading partnerships have also been proposed as a means of supporting legitimate mineral commerce.⁸ Under some such proposals, an independent monitoring system would be put in place at mines that are determined to be in compliance with national laws and labor standards, free of armed groups, providing minimum wages to miners, or meeting various related criteria. Ore certified as originating at these sites could then be issued a certificate of legitimacy and legal origin. This model is aimed at creating positive incentives for good behavior and bolstering closed supply pipelines that can be monitored.⁹ A second model involves the creation of general, mandatory regulatory schemes, in which all actors must comply with certain specified criteria or standards (e.g., conflict-free mineral purchasing), for which a certificate is issued, with punitive sanctions imposed on those actors who do not obtain certificates or comply with regulatory mandates. Certificate systems typically incorporate company due diligence efforts, and may also employ forensic technologies that support scientific vetting of source supply origins, purity, or the like.

It is difficult to assess the relative viability of these proposals, as most are theoretical; have been attempted only episodically, on a small scale, or unsuccessfully; or are at early stages of development or implementation. While some approaches may well have the potential to succeed, most face a range of challenges related to cost, technical complexity, interest group opposition or dissensus, lack of national or international political will, and similar factors. The most immediate and profound challenge to all of these proposals, however, is the depth, complexity, and extensiveness of eastern DRC's conflicts, which to date have prevented any military, political, or policy-based interventions from durably or comprehensively succeeding.

⁷ Artisanal mining refers to small-scale mining, usually involving rudimentary manual, labor-intensive techniques. It is often contrasted with industrial mining, i.e., the extraction of materials from often deep or geographically extensive areas using heavy machinery. Artisanal mining operations are often informal micro-enterprises that may lack some or all legally required business or mining permits. Industrial mining firms, by contrast, are typically formally registered, often capital-intensive conventional firms.

⁸ Certification schemes generally seek to guarantee that a given product was produced or exported in compliance with certain standards in order to achieve various policy goals. One example is the Kimberley Process (KP) rough diamond trade regime, discussed briefly below. Others include the "fair trade" movement. It aims to enable small developing country producers of consumer commodities (e.g., coffee or cocoa) to earn an increased share of global commodity profits, foster environment-friendly farming practices, and prevent labor abuses. Natural resource certification schemes that promote environmentally sustainable resource use (e.g., timber and fish harvesting) provide another model.

⁹ Akin to those employed by the "fair trade" movement and some other certification systems, such a scheme would facilitate the creation of dedicated commercial relationships between ore miners and buyers, creating profit-based incentives for legal commercial cooperation between them. Incentives might include improved market access and more profitable, regular earnings via guaranteed sales for producers; and greater predictability of supply, regularized buying arrangements, positive public relations, and vertical business development for buyers.

Mineral Sourcing: Chain of Custody Controls and Due Diligence

Among the approaches to breaking mineral-conflict linkages that have attracted the broadest support from policy-makers, business interests, and non-governmental advocates are so-called mineral supply chain of custody controls and other proactive monitoring efforts, collectively dubbed "due diligence."

OECD Due Diligence System

Most of a handful of initiatives that are being established or piloted (see **Appendix B**) use as an operational standard a detailed set of conflict-free mineral sourcing due diligence guidelines crafted by the Organization for Economic Co-operation and Development (OECD).¹⁰ This guidance (the *OECD Guidance* hereafter) is also the primary due diligence standard that a wide array of interests groups has proposed the SEC incorporate into its Section 1502 rules. The *OECD Guidance*, adopted by the OECD Council in May 2011, was developed with input from various stakeholders and interests, and garnered broad international support, including from the State Department.¹¹ The *Guidance*, which is not legally binding, is part of a larger set of OECD efforts to promote legal and ethical business conduct in areas where the rule of law is weak.

OECD Model Supply Chain

The OECD Guidance lays out a model supply chain policy, essentially a code of conduct, for sourcing of minerals from conflict-prone areas. The policy prohibits sourcing acts that abet various negative phenomena, including torture or inhuman and degrading treatment, or forced or compulsory labor. It also bans direct or indirect support to non-state armed groups or security forces, public or private, involved in illicit extraction, taxation, transport, trade, handling, or export of minerals.

The *Guidance* also provides for a system of risk management to identify and assess factors that might violate a firm's policies. Examples include actions that provide direct or indirect support for armed groups, and measures to prevent bribery, money laundering, and fraudulent misrepresentation of the origin of minerals. It also seeks to promote ethical and legal roles for public or private security forces involved in protecting mining sites, and payment of all legally required taxes, fees and royalties. The *Guidance* contains a special supplement on tin-tantalum-tungsten due diligence and a final draft set of recommendations on gold tailored to industry-specific trade structures and challenges associated with these minerals. It also recommends use of third-party audits and public reporting to ensure full implementation of a firm's supply chain due diligence system.

The *OECD Guidance* is the main standard for several regional, state-sponsored and private sector national chain of custody tracking and certified trading chain systems, which many expect will provide the framework for a Section 1502-compliant due diligence system. These systems are discussed in **Appendix B** of this report.

¹⁰ OECD, OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, 2011.

¹¹ The *Guidance* incorporates due diligence guidelines drafted by the U.N. Group of Experts (a panel of specialist investigators that monitors and reports on compliance with U.N. Security Council sanctions), which were endorsed by the U.N. Security Council (Resolution 1952, November 2010), along with inputs from other stakeholders. The *Guidance* is strongly supported by the State Department; its mid-2011 conflict minerals strategy (see below) stated that the State Department "will encourage governments and the U.S. Securities and Exchange Commission to use this guidance when developing national regulations." The *Guidance* has also been endorsed for such purposes by the DRC and other central African governments and by a number of key non-governmental organizations (NGOs).

Section 1502: Overview

Section 1502 of P.L. 111-203, passed as H.R. 4173, is the culmination of several prior congressional efforts to help break links between mineral trade and conflict in eastern DRC.¹² At its core is a requirement that SEC-regulated firms that use the 3TGs in their products publicly report whether or not they obtain their supplies of these minerals from the DRC, and if so, what due diligence they exercise to ensure that these purchases do not benefit armed groups.

Congressional Activities Focusing on the DRC

Recent hearings have included a May 10, 2012 House Financial Services Committee International Monetary Policy and Trade Subcommittee hearing entitled *The Costs and Consequences of Dodd-Frank Section 1502: Impacts on America and the Congo*; a February 2, 2012, House Committee on Foreign Affairs, Subcommittee on Africa, Global Health, and Human Rights hearing entitled *U.S. Policy Toward Post-Election Democratic Republic of the Congo*; and a December 15, 2011, U.S. Senate Committee on Foreign Relations Subcommittee on African Affairs hearing entitled *Improving Governance in the Democratic Republic of Congo.* Apart from P.L. 111-203, key DRC-related laws enacted include the *Democratic Republic of the Congo Relief, Security, and Democracy Promotion Act of 2006* (P.L. 109-456, introduced by then-Senator Barack Obama) and P.L. 111-172, *Lord's Resistance Army Disarmament and Northern Uganda Recovery Act of 2009* (introduced by Senator Russell Feingold). Several enacted national authorization or appropriation acts have also included DRC-specific provisions. DRC-specific bills and resolutions have included such measures as S. 3058 (Brownback), S.Res. 713 (Feingold), H.Res. 795 (Cooper), and H.Res. 1227 (Maloney), all introduced in the 110th Congress; H.Res. 542 (Garrett) introduced in the 111th Congress, in addition to the conflict mineral-specific measures discussed in the section on P.L. 111-203; and S.RES.350 (Lee), introduced in the 112th Congress, along with several resolutions focused on the Lord's Resistance Army.

For supporters of the measure, part of the rationale for including the provision in a financial reform law was the assertion that if a firm were to be tied to conflict minerals and associated human rights abuses, such linkages would constitute an investment risk. Proponents successfully argued for inclusion of the measure which, from their point of view, provides a way for firms to offer investors material assurances that they are not subject to reputational or other risks—potentially including legal liabilities—arising from their sourcing or use of conflict minerals.

Some critics of Section 1502, on the other hand, view it as a non-germane use of SEC regulatory authority. They argue that it falls outside the intended scope of the Dodd-Frank Wall Street Reform and Consumer Protection Act, that is, to reform the U.S. financial system in order to address the causes of the post-2007 U.S. financial crisis.¹³ Many assert it imposed inordinate, potentially large financial and regulatory burdens on a large, broad class of U.S. and international firms in order to attempt to address a discrete problem in a single region of a foreign country. Some Members also question the legislative process that led to the enactment of Section 1502.¹⁴

¹² Passage of Section 1502—which appears, as enacted, to have been the product of conference committee agreement was preceded by efforts in the 111th Congress to address problems posed by the conflict mineral trade in eastern DRC. These include S. 891 (Brownback, *Congo conflict minerals Act of 2009*), amendments offered by Senator Brownback to S. 3217 (the Senate version of H.R. 4173, i.e., P.L. 111-203), and H.R. 4128 (McDermott, *Conflict Minerals Trade Act*), which was considered a companion bill to S. 891. As enacted, Section 1502 appears to have incorporated significant elements of Senator Brownback's amendments and of S. 891 and H.R. 4128, which shared in common many findings and provisions, with one major difference: H.R. 4128 did not contain any SEC-related provisions.

¹³ See, for instance, the May 10, 2012 opening statement by Representative Gary Miller, Chairman of the International Monetary Policy and Trade Subcommittee of the House Financial Services Committee, at the subcommittee's hearing on "The Costs and Consequences of Dodd-Frank Section 1502: Impacts on America and the Congo."

¹⁴ At the May 10, 2012, House International Monetary Policy and Trade hearing on Section 1502, for instance, Representative Miller stated that "No legislative hearings were held on the requirements contained in Section 1502 (continued...)

Section 1502 states that the exploitation and trade of conflict minerals from the DRC help to finance violent armed conflict in eastern DRC, particularly sexual- and gender-based violence, thereby contributing to an emergency humanitarian situation. As previously stated, it defines conflict minerals as "columbite-tantalite (coltan), cassiterite, gold, wolframite, or their derivatives; or [...] any other mineral or its derivatives determined by the Secretary of State to be financing conflict" in the DRC or an adjoining country. Other minerals are found in eastern DRC (e.g., bauxite, uranium, rhenium, cobalt, manganese, tourmaline, and pyrochlor), and some of these have periodically been implicated in conflict-related trade. They could, therefore, potentially be designated as conflict minerals, including under Section 1502. To date, however, they have garnered little attention from policy-makers or global markets.¹⁵

Defining Conflict Minerals

As previously discussed, at present the main conflict minerals are limited to the 3TGs. Diamonds were a contributing source of conflict in central-eastern DRC early in the last decade, and have funded conflict elsewhere in Africa, where they were known as "conflict" or "blood" diamonds. These terms were coined, beginning in the late 1990s, as international concern grew over the role that rough diamonds played in fueling armed conflict in several African countries and potentially elsewhere.¹⁶ Over the past decade, however, diamonds have not been at issue in the eastern DRC provinces where linkages between the 3TGs and armed groups have been most often documented. For this and other reasons— for instance, rough diamonds were already governed under a certification system called the Kimberley Process—diamonds were not defined as a conflict mineral under Section 1502, and have featured rarely, if at all, in conflict mineral policy literature.¹⁷

The 3TGs, by contrast, were the focus of Section 1502 because they were closely associated with conflict and human rights abuses at the time that the provision was drafted. They were also viewed as having broad similarities in terms of their mining, refinement, and smelter chokepoints, characteristics that would facilitate design of a single trade monitoring framework. According to CRS communications with staff involved in crafting the legislation, drafters also wanted to provide the regulatory authorities who would implement the law with a manageable initial group of minerals, while allowing for a larger future target list. Thus, the law allows the State Department to designate new conflict minerals. The intent was to lay out a policy framework leading to a high-impact, practicable regulatory process crafted by line agencies and defined by a limited list of minerals, rather than to mandate a potentially unwieldy, complex process by congressional fiat—although the process that has emerged is arguably more complex than the originators of the bill may have anticipated.

^{(...}continued)

before it was enacted. In fact, this provision was added to the Dodd-Frank Act during House-Senate conference negotiations in the middle of the night. The House never passed any bills or held any hearings to explore the issue or the policy provision that was ultimately included in the Dodd-Frank Act. Congress did not have an opportunity to consider how Section 1502 would be implemented, whether it would help end the conflict in the DRC, and what its effects would be on the DRC, the companies that use these minerals to manufacture goods used by consumers and other manufacturers, or the broader economy. Although bills similar to Section 1502 were introduced in earlier Congresses, no legislative hearings were held on those bills and they were not marked up" in committee.

¹⁵ As a general matter, the term "conflict minerals" may feasibly be used to describe minerals linked with conflict anywhere, but with rare exceptions, refers almost exclusively to minerals linked to conflict in eastern DRC, specifically to the 3TGs. On use of the term in a non-DRC context, see Matthew DuPee, "Afghanistan's Conflict Minerals: The Crime-State-Insurgent Nexus," *CTC Sentinel*, (5:2), February 2012.

Section 1502 amends the Securities Exchange Act of 1934 by requiring the SEC to issue rules requiring selected SEC-regulated "persons" (essentially business entities) to publicly report certain information about their activities to the SEC. Affected businesses are those that engage in commercial activities involving products for which "conflict minerals are necessary to the functionality or production of a product." Such disclosures must include information on whether designated minerals used by the firm originated in the DRC or an adjoining country. When this occurs, affected firms must submit to the SEC and publicly release a report containing:

- a description of the measures that the person (i.e., business) has taken "to exercise due diligence on the source and chain of custody" of any conflict minerals used, to be accompanied by a certified, independent, SEC-compliant audit of the information being reported; and
- descriptions of the products manufactured or contracted to be manufactured that are not DRC "conflict free."¹⁸ Section 1502 does not explicitly ban use of minerals linked to conflict, but firms must be transparent about their use of such minerals, in order to enable investors, businesses, and consumers to make informed choices about dealing with firms that do not meet "conflict-free" criteria.

The report must also describe the entity that audited the due diligence efforts of an affected firm; the country of origin of the minerals used; the facilities used to process the minerals; and "efforts to determine the mine or location of origin with the greatest possible specificity." Penalties for non-compliance with Section 1502 are standard penalties, such as fines and other SEC enforcement actions, to which firms that violate SEC regulations may be subject.

- Other Section 1502 Provisions: Strategy, Map, and Additional Reporting Mandates
- Section 1502 also requires the State Department, in consultation with USAID, to produce and provide to Congress a strategy "to address the linkages between human rights abuses, armed groups, mining of conflict minerals, and commercial products." It must include a "plan to promote peace and security" in the DRC through the provision of support to regional and international efforts to:
- monitor and stop "commercial activities involving the natural resources" of the DRC "that contribute to the activities of armed groups and human rights violations"; and
- develop "stronger governance and economic institutions that can facilitate and improve transparency in the cross-border trade involving the natural resources" from the DRC in order to "reduce exploitation by armed groups and promote local and regional development."
- The State Department must also provide due diligence guidance to Section 1502-regulated firms; set out possible

¹⁸ "Conflict-free" products are defined in the law as those "that do not contain minerals that directly or indirectly finance or benefit armed groups" in the DRC or an adjoining country.

^{(...}continued)

¹⁶ See CRS Report RL30751, *Diamonds and Conflict: Background, Policy, and Legislation*, by Nicolas Cook.

¹⁷ In order to prevent the use of rough diamonds in funding conflict, an international, voluntary trade regime, the Kimberley Process Certification Scheme (KPCS), was created to control and monitor international trade in rough diamonds. Under the KPCS, signatory countries, which include the United States, in accordance with the *Clean Diamond Trade Act* (P.L. 108-19), agree to adhere to a set of KPCS rules and a requirement that they issue and mandate the use of internationally accepted legal certificates. These are intended to guarantee that rough diamond shipments passing through participating countries' territories are legal and comply with KPCS rules and standards. The system has attracted widespread global participation, but has also long been the target of critics who allege that it is inadequately robust and effective, and does little to respond to emergent links between conflict and the diamond trade.

punitive measures against those who violate its intentions; and produce a publicly available map depicting "mineral-rich zones, trade routes, and areas under the control of armed groups" in the DRC and adjoining countries. Section 1502 also requires reporting to Congress by:

- the U.S. Comptroller General, on rates of sexual- and gender-based violence in war-torn areas of the DRC and adjoining countries; an assessment of the effectiveness of Section 1502 "in promoting peace and security" in the region; challenges to Section 1502 implementation; and a review of the effectiveness of SEC reporting requirements under Section 1502; and
- the Secretary of Commerce, on "all known conflict mineral processing facilities worldwide," on the accuracy and effectiveness of private sector audits and other due diligence measures required under the bill, and on ways to improve the effectiveness of such measures.

Section 1502: Responses and Status of Rule-Making

Public comments on Section 1502 rule-making have been submitted to the SEC by diverse politically or economically influential actors—notably firms and industry associations, human rights and good governance advocacy groups, and Members of Congress—with both overlapping and divergent equities in the outcome. International responses to Section 1502 by concerned foreign governments, non-governmental advocacy groups, and some industry groups and firms have been positive, although some have voiced concern over whether Section 1502 will comport with existing voluntary international due diligence systems (see **Appendix B**).

Reaction to Section 1502 among many affected U.S.-listed firms and industry groups has been mixed. Most U.S. business interests that have publicly commented on Section 1502 express support for its basic goal of reducing conflict and human rights abuses in eastern DRC. Many firms and trade groups, some Members of Congress, and others, however, question whether the potentially large costs associated with implementing Section 1502 are justifiable. Concern has been expressed over whether the potentially complicated logistical and procedural challenges of compliance can practicably be surmounted as rapidly or comprehensively as advocated by the congressional sponsors and other supporters of the law-if at all. Many see the SEC's draft rules¹⁹ as containing multiple onerous, costly provisions that cannot be realistically met, and some have argued for what they would see as more pragmatic rules.²⁰ Business interests, as well as some academic and non-governmental analysts, have set out suggestions for doing so. Common among these are recommendations that provisions of final rules be phased in. Supporters of a phase-in support cite the need for existing mineral certification pilot projects to mature and a need to build understanding of and compliance with traceability schemes among local actors in eastern DRC. Some also contend that existing supply contracts, commodity processing and stock clearance timeframes, and the complexity of product supply chains, especially for large-scale multi-

¹⁹ SEC, "Conflict Minerals," Federal Register (75: 246), December 23, 2010; "Proposed Rule" hereafter.

²⁰ The National Cable and Telecommunications Association, for instance, has expressed concern "that the proposed rules extend well beyond the statutory mandate, and, if implemented as proposed, would create significant market inefficiencies and impose significant costs and burdens on a far greater number of issuers than Congress intended, while producing very little benefit in terms of furthering the goal of Section 1502." Comments by some Members to the SEC have raised similar concerns. Representative Tim Murphy, for example, wrote to the SEC that the "current proposal would create burdensome and cost-prohibitive compliance protocols that would put U.S. manufacturers at a severe competitive disadvantage globally. I respectfully request the SEC rewrite the conflict-free minerals rule in a manner that is more transparent, achievable, and economically feasible while upholding congressional intent to ensure the mining of valuable minerals is not used to fund violent criminals guilty of committing human rights abuses in central Africa." NCTA, Comment to the SEC, October 31, 2011; and Representative Tim Murphy, Comment to the SEC, December 29, 2011. Some other Members have voiced analogous concerns.

nationals, are incompatible with a single, set deadline. Other key recommendations focus on how compliance standards and reporting burdens will be defined, or request that the rules limit the numbers, types, and sizes of businesses that would be affected.

In contrast to the bulk of business interests, many of the strongest U.S. advocates of Section 1502—such as Congressional sponsors of the law and non-governmental advocacy groups—support rapid adoption of final rules, although some have suggested amendments to the SEC's proposed rules.²¹ Most of the advocacy groups see the costs of implementing Section 1502 as fully justified, cost-effective, and not as prohibitive as business groups have tended to claim, but they differ regarding such issues as proposed phased-in approaches and certain reporting standards. Those arguing for quick rule implementation generally contend that continuing delay undermines various efforts to break the persistent link between conflict and mineral trading; abets continuing human rights abuses associated with the trade; and constitutes a continuing risk to investors. Many also emphasize that the congressional deadline for issuance of the rules has not been met, and the SEC has had more than adequate time to prepare final rules.²²

Eastern DRC Mineral Boycott

Another issue spurring some Section 1502 advocates to urge that final rules be adopted rapidly and some critics to argue that its effects, even prior to implementation, have been destructive and that it should be abandoned—is a de facto buyers' boycott of minerals from eastern DRC. Firms appear to fear that they might procure minerals in a manner that might not comply with "DRC conflict free" Section 1502 provisions—or might otherwise be accused of exercising inadequate due diligence in procuring minerals from the region. Rule issuance delays have therefore spurred them to sharply decrease or stop purchases from eastern DRC. The effects and motivations for this de facto boycott were amplified by a DRC government ban on most mineral mining and trade in eastern DRC between September 2010 and March 2011 imposed, in part, to reassert legal compliance and regulatory oversight over the sector and allow the deployment of newly trained mining police. The ban reportedly had a limited deterrent effect in curbing illegal mining, as had a similar, more limited ban in 2008 in North Kivu's Walikale district, and the certification system implementation reportedly remains, at best, embryonic and police deployments have faced diverse challenges.²³

²¹ Patrick Alley, "New products at CES Often Contain Dirty Little Secrets," [op-ed], *Mercury News*, January 12, 2012; Tom Barkley, "Democrats Urge SEC To Impose Strong Conflict-Mineral Disclosures," Dow Jones, October 19, 2011; *Financial Market Regulatory Wire*, "The Securities and Exchange Commission Holds a Roundtable Meeting on Reporting Requirements Regarding Conflict Minerals," [transcript], October 18, 2011; and submissions to SEC on Section 1502 (SEC, *Proposed Rule: Conflict Minerals*, Comments on File No. S7-40-10).

²² On June 22, 58 Members wrote to the SEC making that point and urging rapid rules adoption. The SEC issued its proposed rules for implementing Section 1502 in December 2010, but did not issue final rules within 270 days after enactment of Section 1502, as the measure required. Instead, it several times extended the period of public comment— which typically ranges between 30 and 60 days—that precedes and is considered as final rules are drafted. In early 2012, the SEC had projected that the rule would be adopted by June 2012, but later ceased to provide a publicly-stated timeline, instead simply referring to its rule-making on Section 1502 as a "Pending Action." On July 2, 2012, however, the SEC announced that it would meet on August 22, 2012 to "consider whether to adopt rules" required under Section 1502. SEC, "Proposed Rule," op cit.; SEC, "Rulemaking, How it Works," April 6, 2011; SEC, "Implementing Dodd-Frank Wall Street Reform and Consumer Protection Act — Upcoming Activity [...](Estimated January-June 2012)," February 28, 2012, later entitled "Implementing Dodd-Frank Wall Street Reform and Consumer Protection Act — Pending Action" July, 2, 2012; and SEC, "Sunshine Act Meeting," July 2, 2012, among others.

²³ See U.N. Groups Experts' report S/2011/738, Annex 89, among other sources.

The de facto boycott was reportedly deepened by a Conflict-Free Smelter (CFS) program announcement requiring smelters to provide documentation "from a credible in-region [DRC and regional] sourcing program verifying their conflict-free sources" as of April 1, 2011. Since separate but related chain of custody certification programs upon which the CFS program relies were not yet operational in eastern DRC (and, as of late June 2012 were still not), the notice effectively prevented CFS-participants from sourcing from the region. The CFS is a voluntary, industry association-run "conflict free" smelter program designed to ensure that smelter raw material inputs and production outputs are from conflict-free sources; see **Appendix B**. The April 1 deadline was set in order to "enable the electronics supply chain to be conflict-free by January 1, 2012" and permit implementation of mineral tracking programs.²⁴ There was a rush to sell stocks of minerals between the lifting of the ban in March and the CFS deadline in early April, but eastern DRC exporters have since been unable to sell to major traditional buyers (i.e., refineries and smelters seeking CFS compliance status or middlemen supplying them).

There is debate over the impact of the boycott. According to a late 2011 U.N. Group of Experts report, the boycott has "increased economic hardship, and more smuggling and general criminalisation of the minerals trade. It has also had a severely negative impact on provincial government revenues, weakening governance capacity."²⁵ Other observers portray the local effects of the embargo in stronger terms, calling them catastrophic and disastrous. They contend that the removal of thousands of miners' incomes is causing local economic collapse and negative multiplier effects, as local businesses' customer base dries up, social service providers are left without paying clientele, and unemployed miners and their dependents are left without the means to supply their basic needs.²⁶ The Group of Experts also reported that the boycott has caused mineral traders to sell "to smelters, refiners and trading companies in China that do not require tags or evidence of due diligence," often at heavily discounted prices and, in some cases, in a manner that may benefit armed groups, including DRC military criminal networks. In general, the boycott has undermined short-term incentives of local, mostly small-scale actors in eastern DRC's mining sector to begin instituting due diligence.²⁷

While the boycott represents a widely recognized negative unforeseen consequence of Section 1502, the law is also viewed by some as already—even prior to final rules adoption—having had salutary effects. Anticipation of the rules' issuance, for instance, has spurred changes in the way firms source their mineral supplies, along with growing efforts to operationalize or expand various due diligence systems described in **Appendix B**. These emergent schemes are beginning to show some positive results—including lessons on which approaches tend to work and which are less promising. They are thus functioning as applied models illustrating how potential Section 1502-compliant, *OECD Guidance*-based due diligence processes can work in practice—albeit, to

²⁴ Electronic Industry Citizenship Coalition (EICC)/Global e-Sustainability Initiative (GeSI), "GeSI and EICC Announce Update to Conflict-Free Smelter Program," April 22, 2011.

²⁵ U.N. Group of Experts, Comment to the SEC, October 21, 2011.

²⁶ See David Aronson, "How Congress Devastated Congo [Op-Ed]," *New York Times*, August 7, 2011. Aronson's views were widely criticized by supporters of due diligence efforts. Aaronson's critics generally see the boycott as a temporary effect produced by fear of uncertainty derived from the delay in issuing Section 1502 rules, rather than a permanent effect. For a lengthier, more considered analysis drawing some conclusions that are similar to Aronson's, see Laura E. Seay, *What's Wrong with Dodd-Frank 1502? Conflict Minerals, Civilian Livelihoods, and the Unintended Consequences of Western Advocacy*, Center for Global Development, Working Paper 284, January 2012.

²⁷ U.N. Group of Experts, S/2011/738, December 2, 2011.

date, only in locales where there is not conflict, such as in Rwanda and Katanga, in southern DRC.

In October 2011, the U.N. Group of Experts reported that such efforts are "reducing conflict financing, promoting good governance in the DRC mining sector, and preserving access to international markets for impoverished artisanal miners. [...who are] are among the prime sources of recruitment for armed groups in the DRC." The Group also reported that "since the signing into law of the Dodd Frank Act, a higher proportion than before of tin, tungsten and tantalum mined in the DRC is not funding conflict." It attributed these outcomes to an emergent shift in the mining of these minerals to less conflict-prone provinces near the Kivus (the two main conflictaffected provinces in eastern DRC); the loss of control over mines by certain armed groups; and a decline in purchaser demand for 3T production from the most conflict-prone areas. It concluded that Section 1502 "has had a massive and welcome impact so far, requiring chain participants all over the world to take due diligence and conflict financing seriously. This should not and must not be thrown away or weakened. [...] Retreat now will confuse all players in the market, unfairly and unwisely diminishing the efforts of those who are implementing due diligence, and playing into the hands of the cynical and those with other agendas who have thus far refused to implement due diligence in the hope that it will simply go away." ²⁸ Despite such assertions, it is crucial to note that private or public sector certification systems are not currently operational in the Kivus-which are the crux of the conflict minerals problem and the primary initial motive for establishing these systems.

Delays in Rule-Making

The large volume of comments submitted to the SEC on Section 1502 and the complex prospective rule implementation issues that these comments have raised pose substantial challenges for the SEC, as do possible court suits.²⁹ These factors appear to be the main determinants of the SEC's repeated extensions of the commentary period on the rules, thereby delaying final adoption.

While these delays have been criticized by Section 1502 supporters on a number of grounds, including with respect to spurring the de facto mineral buyers' boycott discussed above, the extended commentary period has spurred constructive debate on rule-making. It has provided parties with potentially opposed interests in the law opportunities to respond to one another, to craft solutions to problems raised by their peers, and to build consensus around some issues (e.g., rules phase-in). While there is some contention over phase-in, it is likely that a phased-in approach will ultimately be incorporated into the SEC rules—as SEC Chairman Mary Schapiro stated during a March 2012 congressional hearing—albeit potentially with a firmly scheduled set of benchmarks compliant with congressional intent.³⁰ Another key proposal around which consensus has grown is a need for Section 1502 rule complementarity with the *OECD Guidance*.

²⁸ The Enough Project has come to similar conclusions. U.N. Group of Experts, Comment to the SEC, October 21, 2011; and Sasha Lezhnev, *A Window for Reform in Eastern Congo: November's Elections and Three Achievable Steps on Conflict Minerals*, Enough Project, November 2011.

²⁹ Sarah N. Lynch, "U.S. SEC to Hold Round-Table on Conflict Minerals," Reuters, September 29, 2011; and Oxfam America, "Oxfam America Files Lawsuit Against Securities And Exchange Commission," May 16, 2012.

³⁰ Sarah N. Lynch, "US SEC to Have Phase-in on Conflict Minerals Rule," Reuters, March 6, 2012; and CQ Transcripts, "House Appropriations Subcommittee on Financial Services and General Government Holds Hearing on the Proposed Fiscal 2013 Appropriations for the Securities and Exchange Commission," March 6, 2012.

Due Diligence: What Manner and Standard of Compliance?

Section 1502 lays out reporting requirements on mineral sourcing and uses, mandating that reporting be reliable, but otherwise does not explicitly define what due diligence measures or standards must be used by complying firms, leaving decisions about this matter to be determined during rule-making.³¹ The level at which due diligence must be carried out is also not explicit. The law could be interpreted to require that complying businesses must directly investigate the chain of custody and origin of their mineral supply (it refers to "the measures taken *by the person* to exercise due diligence," emphasis added). It is, however, silent on the degree to which they may legally rely upon third party declarations regarding mineral sources and origins.

There is a widespread understanding—including among some congressional proponents of Section 1502 and SEC officials consulted by CRS—that the rules will allow compliance through participation in collective mineral due diligence systems and mechanisms, as long as they meet basic Section 1502 reliability standards. This is important to many in industry who would like to be able to meet the law's requirements by using and building upon emergent tracking and sourcing certification programs (see **Appendix B**). Collective due diligence efforts allow cost savings, shared economies of scale, pooling of expertise, and progressive system improvements based on "lessons learned." Dependence on credible third party declarations and shared due diligence mechanisms is arguably essential if the law is to be implemented in a pragmatic, effective manner.

While the SEC may not specify that any particular due diligence system must be used, as previously discussed, there is widespread support—including from the OECD32—for rules that would define due diligence in such a way as to make the OECD Guidance Section 1502-compatible. The Guidance has drawn support because it is already the most extensive due diligence standard in applied use in almost all currently operational certification systems; and it allows for the kind of adaptability that many interested parties view as critical to making Section 1502 rules practicable and efficacious. The Guidance states that

due diligence in conflict-affected and high-risk areas [i.e., areas at risk of armed conflict] presents practical challenges. Flexibility is needed... The nature and extent of due diligence that is appropriate will depend on individual circumstances and be affected by factors such as the size of the enterprise, the location of the activities, the situation in a particular country, the sector and nature of the products or services involved. These challenges may be met in a variety of ways, including but not limited to:

- Industry-wide cooperation in building capacity to conduct due diligence.
- Cost-sharing within industry for specific due diligence tasks.
- Participation in initiatives on responsible supply chain management.
- Coordination between industry members who share suppliers.
- Cooperation between upstream and downstream companies.
- Building partnerships with international and civil society organizations.
- Integrating the model supply chain policy and specific due diligence recommendations outlined in this Guidance into existing policies and management systems [or] due diligence practices of the company.

The *Guidance* specifically states that mineral sourcing due diligence challenges "may be met" by specific industry association-implemented initiatives that are under way, which it states "may assist and complement" the International

³¹ It requires that the Secretary of State submit to Congress a "plan to provide guidance to commercial entities seeking to exercise due diligence" to ensure conflict-free mineral sourcing, but does not mandate that such guidance be incorporated into the SEC's Section 1502 rule. The SEC has indicated a preference for not designating a specific system. Its draft 2010 rule states that while "due diligence must be performed," it would not "be appropriate to prescribe any particular guidance for conducting due diligence because the conduct undertaken by a reasonably prudent person may vary and evolve over time."

³² The OECD has produced a factsheet illustrating complementarity between the *OECD Guidance* and Section 1502. OECD, "*OECD Work on Conflict-Free Mineral Supply Chains & the U.S. Dodd Frank Act*," October 2011.

³³ It explicitly cites the ITRI Supply Chain Initiative (iTSCi); the Electronic Industry Citizenship Coalition (EICC) and Global e-Sustainability Initiative (GeSI) Smelter Validation Scheme; the 2010 Conflict Standard and Chain of Custody Standard, World Gold Council; the 2010 Chain of Custody in the Diamond and Gold Jewellery Supply Chain, Responsible Jewellery Council; and the 2010 Global Reporting Initiative Supply Chain Working Group.

Conference on the Great Lakes Region's (ICGLR) Regional Certification Mechanism (RCM) or similar efforts. ³³ On the initiatives and the ICGLR, a central African inter-governmental organization, see **Appendix B**.

Section 1502: Key Issues Under Debate

A large range of legal, technical, logistical and other types of issues are in play under the Section 1502 rule-making process, as are diverse human rights, transparency, political, corporate financial and reputational (e.g., public relations and consumer perceptions) interests. Apart from debate over rule phase-in and due diligence standards, key legal and technical questions focus on such issues as how final Section 1502 rules will define, operationalize, or treat:³⁴

- Product "functionality" (a concept at the core of Section 1502³⁵) given that a product may include a conflict mineral but arguably be able to function without it (e.g., a use might be ornamental, say, or occur in a car radio that is not essential to functionality as a transport vehicle). A related subject of debate is the extent to which tools used in manufacturing that may contain a conflict mineral—or tools used to produce other specialized tools necessary to the manufacture of a product—are covered under the law. The SEC has proposed that such tools would likely not be affected, but has solicited feedback on this issue. A similar set of issues focuses on components necessary for the functionality or manufacture of other production components.
- Product "manufacture," given that while the Section 1502 "functionality requirement" only applies to those who use conflict minerals in their products, the reporting requirement that applies to such persons refers to "a description of the products... *contracted* to be manufactured" [emphasis added]. This disparity may raise questions over who is required to report under the law, as may varied interpretation of the term "manufacture." The SEC had proposed not to offer a definition. Various commentators, however, have suggested that one should be included, but have proposed disparate definitions, some broadly inclusive and others quite narrow. There has also been debate over whether mining operators are to be defined as "manufacturers" bound by the law.
- Reporting thresholds, if any, in cases where a firm does not control all facets of production of its products (e.g., parts are manufactured by chains of discrete subcontractors who are contractually unrelated to the final buyer) or has a role limited to product branding and sale (e.g., of generics that may be sourced from multiple vendors).³⁶

http://tinyurl.com/SECRoundtable. The round table link contains a transcript and a video archive of the event.

³⁴ The following questions and issues are addressed in the SEC's December 2010 proposed rule; the SEC's public commentary web site on Section 1502 rule making [http://www.sec.gov/spotlight/dodd-frank/speccorpdisclosure.shtml] and Specialized Disclosures [http://www.sec.gov/comments/df-title-xv/specialized-disclosures/specialized-disclosures.shtml]; and in an October 18, 2011 SEC roundtable on conflict minerals,

³⁵ As previously noted, Section 1502 defines applies to firms for which "conflict minerals are necessary to the functionality or production of a product manufactured by such person."

³⁶ In its proposed rule, the SEC asked how it should "articulate the minimum" [...] "level of influence, involvement, or control over the manufacturing process before an issuer must comply with our proposed rules."

- Various derivatives of the minerals and their recombination with other elements to create new substances.
- Ornamental and other "de minimis" uses of the minerals, or instances in which a product unintentionally includes naturally occurring trace occurrences of a conflict mineral.³⁷
- Recycled supplies with essentially untraceable origins.
- "Reasonable" credibility standards for mineral country-of-origin inquiries.
- "Armed groups." It is unclear, for instance, how firms would differentiate between state military or police forces at large and those elements of these forces which—based on allegations of human rights abuses or other criminal acts, including illicit involvement in the conflict minerals trade—would be considered armed groups under the law.
- Indirect "finance or benefit" to armed groups arising from association with a conflict mineral. The threshold or definition for "indirectly finance or benefit" is not defined in Section 1502. The burden of proving an absence of indirect financing or benefit could potentially be large.³⁸
- Firms bound by long-term contracts that precede or may conflict with or otherwise not reflect the requirements of Section 1502 (such as rules that might require immediate implementation and compliance).
- The status of stocks of materials that are already in processing and supply pipelines prior to the adoption of the rules.
- Firms covered, as some interpretations of the definition of "person described" in the law, as written, could arguably be applied to "persons" who are not SEC issuers.
- The standards and responsibilities that accountants and auditors will need to comply with to provide required due diligence auditing to firms subject to Section 1502.
- The technical modalities of reporting language and standards, types of documentation and forms to be employed, and other technical and legal process questions.
- The basis for determining whether compliance costs may be too great for small manufacturers to bear and, in general, for determining what the costs will be for the full range of affected firms, persons, and industries.

³⁷ SEC Chairman Mary Schapiro stated in early March 2011 that Section 1502 did not permit a de minimis exception. Sarah N. Lynch, "US SEC to Have Phase-in on conflict minerals Rule," Reuters, March 6, 2012.

³⁸ The law states that "DRC conflict free' is defined to mean the products that do not contain *minerals that directly or indirectly finance or benefit* armed groups" in the DRC or adjoining countries [emphasis added].

Variable Estimated Cost of Implementing Section 1502

Cost estimates for compliance with SEC Section 1502 rules have varied widely. Some pro-business critics have alleged that in its proposed rules, the SEC underestimated the number of firms and products that the law would affect— along with the complexity of compliance—and thus the cost. Some non-governmental advocates of the law, by contrast, view business estimates of implementation costs as overblown. Some proponents also maintain that cost estimates must factor in the cost benefits of preventing a further toll in lives and human rights abuses. Others cite a need to reduce the cost of international contributions to peace, security, and stability efforts in the DRC.

At the top of the estimated cost range is a National Association of Manufacturers (NAM) estimate projecting that rules are "expected to cost the U.S. industry \$9-16 billion to implement"—a projection that is far higher than the SEC-estimated cost of \$71.24 million plus 153,864 in added firm personnel hours. Other estimates have generally fallen between these ranges, usually at a much lower level than those cited by the NAM. A 2011 study by the Payson Center/Tulane University, a response to a request for an estimate of compliance costs by a Member's office, found that the main costs to firms of complying with the SEC's proposed rules would center on "(1) strengthening internal management systems in view of performing due diligence, (2) instituting the necessary IT systems, and (3) commissioning CMR audits."³⁹ The study concluded that the cost of such compliance activities to all firms across all sectors would be \$7.93 billion. Of this amount, it found, half—\$3.4 billion—would be met with in-house company personnel time, and the rest—\$4.5 billion—would be paid for outside consulting, IT and audit services. Comparing the costs to the issuers vs. the suppliers, the bulk of the total costs—\$5.1 billion, or 65%—would be incurred by the suppliers (the group not included in SEC's analysis), while a smaller portion of the total—\$2.8 billion, or 35%—would be carried by the issuers. These costs would, however, be borne by thousands of individual firms across diverse industries (e.g., aerospace, healthcare, automotive, chemicals, electronics/high tech, retail and jewelry).

Another study, by a firm called Green Research, reviewed the above-cited studies and several other cost projections, notably including studies by a firm called Claigan Environmental. It concluded that Section 1502 compliance costs would "vary widely with the size and complexity of companies' supply chains but seem to be manageable for all company sizes. The largest companies (with annual revenues over \$50 billion) are facing one-time costs ranging from \$500,000 to \$2 million; companies with well developed responsible sourcing systems may need to spend only half as much. Many smaller companies should be able to meet their obligations for less than the cost of a full-time employee in the first year, with costs declining over time." It also stated that "It's worth noting that public companies are already bearing costs that private companies do not. One study put the costs of being publicly traded in the US at over \$2 million annually for companies with under \$1 billion in revenue and up to \$12 million for larger companies." The types of costs that the Green Research study projected as likely to be at issue include: Supply chain management systems (tracking supplier responses; multi-level traceability; location tracking); supply chain processes (company risk assessment/remediation; supplier contracts/requirements and training; and supply chain audits); grievance channels for ethics or compliance violations; corporate responsibility reporting; policy statement; and code of conduct.⁴⁰

U.S. Policies and Programs to Counter Trade in Conflict Minerals

U.S. Strategy

As required under Section 1502, the Department of State transmitted a conflict minerals strategy to Congress in mid-2011. It identifies multiple "strategic objectives and current, planned, or

³⁹ CMR is a reference to a conflict minerals Report, i.e., a report submitted under the SEC's proposed rule.

⁴⁰ On the NAM estimate see NAM, Comment to the SEC, March 2, 10211. The SEC estimate is contained in the SEC's December 2010 proposed rule, cited above. On the Tulane estimate, see Chris Bayer and Elke de Buhr, *A Critical Analysis of the SEC and NAM Economic Impact Models and the Proposal of a 3rd Model in View of the Implementation of Section 1502 of the 2010 Dodd-Frank Wall Street Reform and Consumer Protection Act*, Payson Center for International Development/Tulane University, October 17, 2011. The Green Research findings are contained in, *The Costs and Benefits of Dodd-Frank Section 1502: A Company-Level Perspective*, January 2012, commissioned by Global Witness and submitted as part of a January 27, 2012 comment to the SEC by Green Research.

possible U.S. actions" to achieve the aims of the strategy, which is entitled a "U.S. Strategy to Address the Linkages between Human Rights Abuses, Armed Groups, Mining of conflict minerals, and Commercial Products." These actions center on security force reforms; support for DRC government mineral trade regulatory systems; small-scale miner and local community protection and related capacity building; support for international and regional efforts to curtail illicit minerals trading; and promotion of due diligence and responsible trade through public outreach. The strategy also provides State Department views on "punitive measures against commercial activities that support armed groups and human rights violations."⁴¹ The State Department also published an initial Section 1502-mandated conflict minerals map, although it is heavily caveated. It states that the map "does not provide sufficient information to serve as a substitute for information gathered by companies in order to exercise effective due diligence on their supply chains."⁴² An updated map was published in late May 2012.

U.S. Programs

Responsible Minerals Trade

Several programs designed to implement the U.S. conflict minerals strategy and the objectives of Section 1502 are under way. USAID's efforts are being undertaken primarily under the Responsible Minerals Trade (RMT) program, an inter-agency effort. It is primarily funded with \$10 million from FY 2010 Section 1207 appropriations and \$4.78 million from FY 2011 Complex Crises Fund (CCF) appropriations.⁴³ The USAID DRC country mission directly implements a three-part RMT component program with \$8 million of this funding, which also funds an initiative called the Public-Private Alliance for Responsible Minerals Trade.

The first component supports various field-level infrastructure and training efforts to help the DRC government to implement its pilot national conflict-free mineral supply certification system. Key activities include the rehabilitation or completion of two trading centers (Centres de Négoce, or CdN), an administrative building in South Kivu, and transport infrastructure linking the centers to export points.⁴⁴ It also supports piloting of DRC's certified mineral chain tracking and export systems through CdNs in the Kivus in 2012. A second component focuses on reducing child labor in mining through various educational activities, skills training for children leaving mining and support for DRC government efforts to integrate a child labor-free criterion into its national certification process. A third component provides technical support to the DRC Mines Ministry and other national and local mining authorities to help them implement conflict-free minerals

⁴¹ The strategy states that "primary responsibility for taking punitive measures against commercial activities that support armed groups and human rights violations would fall to the DRC and neighboring countries, which could pursue civil penalties and criminal prosecution for violations of their mining codes or other relevant laws." It also states U.S. support for "efforts…through diplomatic advocacy and concrete technical assistance to a government's capacity to monitor, investigate, and prosecute" and "as a preventive measure… will also continue to pursue targeted U.S. and UN Security Council sanctions, entailing a travel ban and asset freeze, against entities 'supporting the illegal armed groups in the eastern part of the Democratic Republic of the Congo through illicit trade of natural resources."

⁴² State Department, *Democratic Republic of the Congo Mineral Exploitation by Armed Groups & Other Entities*, June 14, 2011.

⁴³ On the origin of Section 1207 funding, see CRS Report RS22871, *Department of Defense "Section 1207" Security and Stabilization Assistance: Background and Congressional Concerns, FY2006-FY2010*, by Nina M. Serafino.

⁴⁴ The CdN are designed to act as trading posts where legal minerals can be reliably traded under national and regional CTC systems and regulations, and are to be linked by fixed air or land transport routes to regional border export hubs.

supply chain initiatives and provide capacity-building to help the artisanal mining sector to move toward a legally-based, semi-industrialized, formal production model.⁴⁵

Public-Private Alliance for Responsible Minerals Trade

In November 2011, the State Department and USAID launched the Public-Private Alliance for Responsible Minerals Trade (PPA), which is facilitated by Resolve, a non-profit group. PPA members include the ICGLR, four industry associations, five non-profit organizations broadly focused on policy advocacy or development aims, and 18 major global firms. Its goal is to help establish scalable, self-sustaining, robust conflict-free mineral supply chain systems and, eventually, will be both OECD and Section 1502-compliant. The PPA also serves as an information source for business on methods of implementing due diligence and certification systems. It is also a forum for technical and cost-reduction collaboration among actors involved in establishing conflict-free mineral supply chain and certification systems, which the PPA also seeks to ensure are operationally compatible.⁴⁶ An initial 16-month period of PPA activity, focused primarily on field-based efforts to support conflict free sourcing activities in the DRC, is being funded by a portion of a \$3.5 million tranche of the Section 1207 funds cited above. It is slated to be funded with an additional \$2 million or more in firms and industry association smust contribute \$125,000 or more.

Additional Responsible Minerals Trade Programs

In late January 2012, USAID also announced an obligation of \$4.78 million in FY 2011 CCF appropriations to support an initiative to "mitigate the unanticipated consequences of the de facto embargo by end-user companies on the mineral trade, support the mining sector reform agenda, and reduce existing tensions." The funding will, in part, support operationalization of the International Conference on the Great Lakes Region (ICGLR) independent Minerals Chain Auditor—a key component of the ICGLR's regional certification mechanism (see **Appendix B**). Programs will seek to rapidly scale up implementation of validation and traceability systems in conflict zones and areas affected by social and economic vulnerability in order to induce economic recovery and job creation. USAID's Office of Conflict Management and Mitigation "is providing an additional \$1.2 million for community mediation, alternative livelihoods and civil society engagement in the areas around the pilot conflict-free supply chains" implemented by a project implementing partner, a non-profit organization called Pact.⁴⁷

State Department Efforts

USAID's programs are closely coordinated with programs sponsored by the State Department and the Department of Defense (DOD). One is a set of Democracy, Human Rights and Labor Bureau (DRL) two-year, \$1.4 million program supported by Democracy Fund/Human Rights Democracy Fund FY2010 appropriations implemented by the non-profit Pact. It seeks to break links between illegal mineral exploitation, conflict, and serious human rights abuses by supporting DRC certification implementation and "a realistic oversight mechanism for the… vast network of

⁴⁵ USAID reply to CRS inquiry December 7, 2011; and USAID, *The Responsible Minerals Trade (RMT) Program*, n.d. Congressional requestors may contact the author for more detailed program information.

⁴⁶ According to a draft PPA work plan, a key goal of the PPA is to "contribute to, harmonize and concentrate efforts by the ICGLR, OECD, the UN Group of Experts, the Governments of the DRC and Rwanda, PROMINES (DRC mining governance reform project), BGR [a German technical agency; see below], iTSCi, Pact, a non-profit development technical assistance provider, and others to pilot OECD-compliant, validated, certified and traced supply chain routes, to be audited using agreed-upon standards and mechanisms, for a significant portion of the gold, tin, tantalum, and tungsten supply in the eastern DRC and Rwanda by the end of 2012." PPA, *Draft Work Plan*, August 11, 2011.

⁴⁷ USAID, "USAID Advice of Program Change," CN #12, January 27, 2012; and USAID communication to CRS, June 11, 2012.

remote militarized mines" in eastern DRC through local capacity building. It also has three components, which complement and overlap with some RMT activities:

•The first focuses on building local security, human rights abuse, corruption, and mineral traceability public education, monitoring, and reporting capacities, in order to protect mining communities and help implement traceability and certification systems at the local level.

•The second supports efforts to operationalize the CdN mineral trading posts and related efforts to improve traceability and certified trade in minerals; introduce mineral certification systems; bolster security, and human rights abuse and corruption prevention; and create local grievance and conflict resolution mechanisms.

• The third centers on public education in eastern DRC and Rwanda regarding minerals sector governance and reforms, links between the minerals trade, conflict, and human rights abuses, and the implementation of mineral traceability and certification systems.⁴⁸

USAID and DRL programs are coordinated with a \$2 million State Department International Narcotics and Law Enforcement Bureau effort, drawn from the \$10 million allocation of Section 1207 funds that also support USAID's RMT program, to train and equip DRC mining police. These efforts are complemented by other State Department, USAID, and DOD programs in eastern DRC focused on various rule of law, workers' rights, human rights, and/or justice goals.

Outlook

How effective international and regional conflict mineral trade abatement efforts may be at curtailing or ending conflict and human rights abuses in eastern DRC—even in the minerals sector alone—is open to debate on multiple grounds. In the long run, efforts focused on ending the conflict mineral trade have the potential to play a crucial role in helping to reduce human rights violations and other crimes by reducing armed groups' access to mineral revenues. They are unlikely to succeed on their own, however. Instead, their success will almost certainly depend on diverse other efforts to achieve security and demobilization of armed groups; accountability for and prevention of human rights abuses; politically and administratively resolutions to diverse local grievances; and enhanced mineral sector production and regulatory capacity-building.

For instance, it is not clear that credible, consistent, and effective due diligence efforts to prevent the conflict minerals trade can be undertaken while widespread insecurity and periodic military clashes in eastern DRC persist. It is also not certain how durable or substantial an effect on conflict reduction the removal of armed actors' access to mineral revenues through conflict-free trading schemes might have, given the availability of alternate sources of conflict financing and the multiplicity of factors that stoke conflict. Another major challenge is the technical complexity associated with due diligence and mineral certification initiatives. Without substantial, continuing external assistance to help small-scale mining sector actors in eastern DRC with these efforts, and much greater local buy-in and participation, there is no guarantee that such efforts will be credible and sustainable.

⁴⁸ Program information provided to CRS by DRL, March 20, 2012. Congressional requestors may contact the author for more detailed program information.

The potential for such schemes may also be poor if the state military elements that have so often abetted the eastern DRC trade in conflict minerals are not substantially reformed or cut off from interaction within the mineral sector. Prospects for such an outcome are decidedly mixed. Elements of the national military and other state security forces—sometimes in league with armed non-state groups—have for years been involved in various exploitative, often coercive, illicit profit-making mining and mineral trade activities. Some have also actively hampered state attempts to better regulate the trade and impose sanctions on their criminal acts, or have stymied security sector reforms (SSR) that threaten their ability to operate autonomously and to engage in income-earning activities,⁴⁹ despite limited progress in addressing these problems.

Thus far, emergent mineral certification and due diligence schemes have demonstrated how such systems can operate in practice in central Africa, but critically, have not yet advanced beyond nascent, in some cases abortive pilot programs in conflict-affected eastern DRC—the ultimate target of these efforts. Ultimately, however, their potential for sustained success is likely to depend on efforts to ensure overall security and stability, to end impunity for human rights abuses and illicit activities, and to undertake reforms and related actions, such as:

- Military and police training and broader security sector reform;
- Use of armed force by the state to seize and maintain control of mining sites and wider areas controlled by armed groups and, ultimately, neutralize these groups, including rogue elements of the national military; ⁵⁰
- Political agreements and compromise over control of mining sites, and assured scope for civil society actors in the mineral sector to freely advocate reform policies and undertake investigations; ⁵¹
- National and international criminal prosecution⁵² for human rights violators and imposition of targeted international sanctions, in addition to U.N. sanctions already in place, possibly specifically directed at those who engage in conflict-related mineral transactions;⁵³

⁴⁹ Multiple sources, notably including the U.N.'s DRC Group of Experts, most recently in mid-2012, have documented such findings. A 2009 investigation by the NGO Global Witness reported that military involvement in the minerals trade in the Kivus "is widespread... and the system of financial rewards is well-organised: commanders are directly involved and the profits are channelled back up the military hierarchy." Such trends have been furthered by the rapid integration into the DRC military of former rebel groups that have a history of involvement in illicit mineral mining and trade. Global Witness, "*Faced with a Gun, What Can You Do?*": *War and the Militarisation of Mining in Eastern Congo*, July 2009. Group of Experts findings are contained in an October 2011 submission to the SEC and UNSC, S/2012/348, June 21, 2012, and in multiple prior Group of Experts reports.

⁵⁰ Such efforts have been attempted repeatedly in recent years, but have been dogged by weaknesses in the national military. These include ineffective command, control, logistical, and combat capabilities; military corruption (e.g., salary embezzlement and arms and field equipment sales); sexual and other human rights abuses by some troops; and involvement in illegal income earning activities by military elements, in some cases including military units made up of former rebel groups that maintain substantial autonomous command and control capacities. However, the military has withdrawn from a number of mining sites in recent months, and U.N.-trained DRC mining police have begun to be deployed to some of these sites, and rates of attacks at mining sites have gradually decreased.

⁵¹ The advocacy group the Enough Project reported in late 2011 that civil society organizers advocating conflict mineral reforms face coercive threats. Sasha Lezhnev, *A Window for Reform in Eastern Congo November's Elections and Three Achievable Steps on Conflict Minerals*, Enough Project, November 2011.

⁵² A limited but growing number of arrests and prosecutions for illicit mineral activities and other crimes, such as rape, may help reduce illicit or conflict-related mineral commerce.

⁵³ A list of individuals accused of aiding armed groups or abetting conflict are subject to U.N. travel and assets freeze (continued...)

- Institutional capacity building for trade regulation, mining, and border control and related agencies in the DRC and neighboring countries;
- Targeted sustainable employment and working condition-focused assistance for artisanal miners and mining communities affected by externally-driven due diligence initiatives and outcomes such as the de facto boycott;
- Reform of DRC mineral tax rates and revenue sharing formulas;
- Increased state and third party mineral sector and trade data reporting, as well as public and private sector adherence to international extractive sector transparency initiatives, such as the Extractive Industries Transparency Initiative (EITI);⁵⁴ and
- Reform of mining contracts and laws, taking into consideration multiple interest groups, including the state, large-scale mining concerns, and artisanal miners.

There is widespread recognition by regional and donor governments and various international organizations that such multi-faceted approaches are essential, and diverse efforts to pursue them are underway, in addition to efforts spurred by Section 1502 and the *OECD Guidance*.

International Mineral Sector Reform Efforts in the DRC

Conflict mineral mining and trade in the east has long posed a complex set of intractable security, governance, and human rights problems. While these are the outcome of dynamics specific to that region, they are, in part, an effect of a long history of mismanagement, corruption, lack of investment, and legal contestation over mining concession titles at the national level. There have been repeated domestic attempts to reform the sector, but these have a long and troubled past, and have frequently been characterized by allegations of massive fraud, opacity, and politicization. ⁵⁵ Given these challenges and the great unrealized potential contribution that the DRC's substantial mineral wealth can make to national economic development and growth, internationally-backed reform efforts have continued to target the national mining sector.

Examples of such programs include PROMINES, a \$90 million World Bank/DFID grant program (the DRC Growth with Governance in the Mineral Sector Project) to build institutional mineral sector management and regulatory capacity; increase sector transparency and accountability; boost mining investment and sector growth; and expand the range of socio-economic benefits produced by artisanal and industrial mining. Initiated in mid-2010, it first began disbursements in fall 2011. Another is the Communities and Small-Scale Mining (CASM) initiative, which supports

^{(...}continued)

sanctions. See Security Council Committee established pursuant to resolution 1533 (2004) concerning the Democratic Republic of the Congo >> Consolidated Travel Ban and Assets Freeze List http://www.un.org/sc/committees/1533.

⁵⁴ EITI is a voluntary scheme in which participating countries require extractive industry firms to publicly report payments to these governments, which then publish a reconcilable list of corresponding revenue receipts under a multistakeholder-monitored process. These "core" EITI requirements may be accompanied by more extensive, so-called "EITI-plus" fiscal transparency and governance reforms. The DRC is an EITI "Candidate Country" attempting to comply with the initiative, which is endorsed by the ICGLR.

⁵⁵ See *Africa Confidential*, "Congo-Kinshasa Bargain Mine Sales Draw Fire," November 18, 2011; William MacNamara and William Wallis, "Disillusioned Congo Mines Chief Quits," *Financial Times*, September 30. 2009; Global Witness, "NGOs Fear that DRC Mining Contract Review Process has Been Hijacked February 4, 2008; and Netherlands Institute for Southern Africa/International Peace Information Service, *Governance, Mining and the Transitional Regime in the Democratic Republic of Congo*, 2006, among many others.

⁵⁶ An example is the Katanga Loan Guarantee Program, a USAID Global Development Alliance (GDA) project with business and other donor partners. Under the project, USAID/DRC and Freeport-McMoRan's Tenke Fungurume copper and cobalt mine in Katanga are co-financing a \$5 million Development Credit Authority small and medium enterprise microfinance loan guarantee fund. The project aims to use the mining sector to create up to 10,000 jobs by 2013. Under another \$22 million GDA program, the Extractive Industries Alliance (2006-2009), USAID partnered with Pact and four international mining firms to promote sustainable multi-sectoral development in two DRC provinces.

donor-coordinated "integrated, multi-disciplinary solutions to the complex social and environmental challenges facing" artisanal and small-scale mining (ASM) workers and communities globally, including in the DRC. It is administered by the World Bank and funded by a multi-donor trust fund, with core funding from the UK and the World Bank, supplemented by U.S. and other donor program support. The United States supports several non-conflict minerals mining-related reform and development projects in the DRC, and the USAID/DRC Extractive Industries Technical Advisor, for instance, helps various sectoral USAID units to pursue opportunities to collaborate broadly across the mining and other natural resource sectors in promoting public-private partnerships.⁵⁶ Another effort was Trading for Peace, a 2004-2009 research and policy design project focused on the links between natural resource trade, governance, and stability in the Great Lakes supported by the UK Department For International Development (DFID), with contributions from USAID and the Common Market for Eastern and Southern Africa (COMESA).

Potential Prospective Congressional Role

In the short to medium term, interested Members of Congress are likely to closely monitor Section 1502 rule-making and the effectiveness of any eventual rule and other conflict mineralfocused programs as they are implemented. Both SEC rule-making and prospective rule implementation are likely to continue to pose complex challenges, and may spur Congress, ultimately, to revisit the approach taken in Section 1502 rule.

If the SEC issues Section 1502 rules at a scheduled August 22, 2012—which is not a given, given that the SEC has stated that this meeting will be held on "*whether* to adopt rules regardingSection 1502 [emphasis added]," rather that it, in fact, intends to adopt final rules—reactions are likely to complex.⁵⁷ Given substantial opposition to the anticipated rule by some industry actors and Members of Congress—as described previously in this report—political and possibly legal action to amend or overturn the rules may ensue. On the other hand, given that a substantial number of Members of Congress and non-governmental organizations support the law, opposition to such efforts might be expected to be stiff, and—if rules implementation is not timely and effective—may generate a separate set of political or legal actions to make it so.

Quite apart from debate within the United States over Section 1502 and the procedural, technical and legal aspects its implementation, application of the law's provisions and other U.S. and international conflict mineral abatement efforts in the region are also likely to be complex, and to draw congressional attention. While substantial financial and applied efforts are being invested in such activities, conflict in eastern DRC has long posed a complex set of intractable security, governance, and human rights challenges, which trade-focused efforts alone are unlikely to overcome. To the extent that this proves the case and conflict persists, notwithstanding enactment of Section 1502, some Members of Congress may see a need to pursue a more comprehensive approach to ending conflict and building peace in the DRC and the surrounding sub-region.

⁵⁷ SEC, "Sunshine Act Meeting," July 2, 2012.

Appendix A. Background on Conflict and Armed Actors in Eastern DRC

Armed conflict has plagued eastern DRC since the mid-1990s, notably in the border region adjacent to Uganda, Rwanda, and Burundi—primarily the provinces of Northern Kivu, South Kivu, and eastern Orientale. This conflict has spawned a large number of armed militias, some politically-oriented and some primarily criminal. Conflict in the area has varied roots and causes, but is, in large part, an artifact of two wars that began in the east. The first followed the mid-1994 takeover of state power in Rwanda by the ethnic Tutsi-led Rwandan Patriotic Front (RPF), which ended the Rwandan genocide. In the wake of the genocide, Rwandan ethnic Hutu militia forces and elements of the rump ousted Hutu-led government fled Rwanda into eastern Zaire, along with large number of Hutu refugees, and settled in border camps. This influx fueled pre-existing local ethnic tensions, sometimes violent, and competition over land and resources, trends which were aggravated by persistent predation by various Zairian state security forces.

The exiled Hutu militia forces controlled and used the refugee camps as a rear base for crossborder attacks into Rwanda. These forces, sometimes together with other local ethnic militias and the Zairian Armed Forces (FAZ), also launched attacks on Zairian Tutsis, the Banyamulenge. In response, in 1996, an RPF-backed, largely Banyamulenge force broke up the camps and forced a mass repatriation of the bulk of refugees to Rwanda. Recalcitrant militant Hutu elements and large numbers of accompanying refugees fled deeper into Zaire, pursued by the RPF-backed force, which also skirmished with FAZ elements. Simultaneously, leaders of the RPF-allied force joined with several obscure or defunct Zairian rebel groups and other restive elements to form the Alliance of Democratic Forces for the Liberation of Congo-Zaire (AFDL) in October 1996. Led by Laurent-Désiré Kabila and backed by several neighboring governments, the AFDL marched across Zaire and ousted the regime of Mobutu Sese Seko, the DRC's leader since 1965. After seizing the capital, Kinshasa, in May 1997, they assumed state power.

A second civil war began in August 1998. It was sparked by a military rebellion in the east that was ostensibly motivated by concerns over corruption and poor governance under Kabila, but was underpinned by ethnic divisions within the AFDL. In subsequent months, the war burgeoned, spawning the creation of numerous new Congolese armed factions and prompting extensive intervention by the militaries of neighboring states opposed to or supportive of the Kabila government. Kabila was assassinated in early 2001 and succeeded by his son, Joseph Kabila, DRC's recently re-elected president. Beginning in 1999, a series of peace accords were signed. They eventually led to the deployment of a U.N. peacekeeping mission and the creation of an interim Congolese government, based on a 2002 peace accord. It provided for a transition process leading to national elections in 2006.⁵⁸

This peace process nominally ended the second war, but the armed groups that had emerged during the first two wars continued to be active in eastern DRC. In subsequent years these groups, some of which have enjoyed foreign backing, continued to evolve into distinct new groups and alliances. On-going conflicts in the provinces of North and South Kivu have involved armed Congolese Tutsi factions, in some cases drawn from mutinous elements of the national military. Other actors have included armed, largely Hutu refugee groups, some closely linked or led by

⁵⁸ Accord Global et Inclusif Sur la Transition en République Démocratique du Congo, December 17, 2002.

accused Rwandan genocidaires or their associates; and elements of the Congolese military, the FARDC. Other actors have included local communal, often ethnically-based defense militias known collectively as the Mai-Mai, and other small armed groups, including some rebel elements from neighboring countries. The situation has been complicated by the integration into the FARDC of multiple former non-state rebel groups, some of whom maintain command and control capabilities that are outside the control of national military authorities. Most of the smaller militias, notably Mai-Mai groups, have links to the larger armed groups. Neighboring countries, notably Rwanda, have also periodically militarily intervened in the region, often covertly but in some cases openly, including, on occasion in joint operations with DRC government forces, as in early 2009.

In the district of Ituri, just north of the Kivus, there was a period of frequent conflict from 1999 to 2003 followed by a period of low intensity conflict until 2007. Conflicts there involved ethnic factions; FARDC troops; international peacekeepers; and criminal gangs, some with linkages to ethnic political factions. South of the Kivus, in Maniema, Tanganyika, and Haut-Katanga provinces, Mai-Mai and FARDC elements—some party to delayed disarmament processes—have periodically fought one another and attacked civilian settlements, often out of criminally-motivations.⁵⁹

Main Armed Actors in Eastern DRC Today

While some Mai-Mai groups represent legitimate communal political interests, many are made up of small numbers of fighters grouped around a local leader. Some are largely nominal entities created primarily to advance their leaders' political positions, as was reportedly the case with respect to several signatories of the January 2008 Goma Accord, a widely violated peace agreement. There are also a range of armed ostensible ethnic self-protection and interest groups that are distinct from the Mai-Mai, and a range of smaller groups that are essentially violent criminal gangs. Many of these groups have maintained fluid links with the larger armed entities, notably the mostly Hutu Forces Démocratiques de Libération du Rwanda-Forces Combattantes Abacunguzi (FDLR-FOCA, or FDLR hereafter) and the FARDC, including distinct elements of the FARDC who are formerly members of the Tutsi- dominated Congrès National pour la Défense du Peuple (CNDP).

In general, most of the groups have fallen into one or more of three categories: pro or anti-government militias; militias with origins or links to political elements with roots in neighboring countries but which primarily or frequently operate in eastern DRC; and groups that fight for communal interests or for pecuniary self interests, often through violent criminal acts. Alliances among these groups, however, are often fluid and based on shared enmities, rather than common interests; parties that have cooperated in some instances have clashed in others, and some elements of putatively opposed groups, such as the FARDC and FDLR, have a history of cooperation, especially regarding commerce. A listing and description of all rebel groups in eastern DRC is beyond the scope of this report. These groups have been numerous, and many have been created and vanished from the scene within short periods, often later emerging as new groups or parties to new alliances.

The CNDP, which formerly fought both the FDLR and FARDC and maintained control over border territory in eastern DRC east, split in early 2009, after which a majority of its forces, led by Bosco Ntaganda, the then-CNDP military chief of staff and an International Criminal Court indictee, agreed to become integrated into the FARDC. Although part of the FARDC, these former CNDP elements reportedly have maintained a distinct chain of command and control within it, as have several other former Mai-Mai or rebel groups integrated into the FARDC, notably the Patriotes résistants congolais (PARECO). In early April 2012, some former CNDP FARDC elements deserted the military, citing poor treatment and living conditions and other grievances. They were later joined by additional deserters. In early May 2012, the mutineers, who have fought pitched battles with loyalist FARDC forces, declared the creation of a new political-military movement, M23. It is named after the March 23, 2009 peace agreement between the central Government and ex-CNDP and ex-PARECO combatants that led to the integration of the latter two into the FARDC.

⁵⁹ Human Rights Watch, *Ituri: Covered in Blood*, 2003; Steven Spittaels Nick Meynen, *Mapping Interests In Conflict Areas: Katanga*, IPIS, 2007; and multiple U.N. peacekeeping mission reports on the DRC.

Appendix B. Regional and Industry Supply Certification and Due Diligence Initiatives

International Conference on the Great Lakes Region Certification

The Mineral Tracking and Certification Scheme of the International Conference on the Great Lakes Region (ICGLR),⁶⁰ also known as the Regional Certification Mechanism (RCM), is designed to act as a regional mineral certification coordinating mechanism. It provides standards that national certification systems must meet or exceed and independent monitoring of those national systems. The RCM is part of a broader ICGLR effort, the Regional Initiative against the Illegal Exploitation of Natural Resources (RINR). RINR is aimed at supporting a legal, transparent, and conflict-free intra-regional and international exports minerals trade and ensuring that the mining sector contributes to sound socio-economic development and economic growth.⁶¹

The RCM, which is at an early stage of implementation, is expected to provide a mechanism that downstream buyers (e.g., smelters, industrial producers, and manufacturers) can rely on to ensure conflict-free mineral purchases from the region and to supplement their own due diligence. The RCM is also designed to act as an early warning system, providing monitoring of mineral mining, trading, and financing-linked conflict risks in the region. The system allows for ongoing private sector initiatives, such as International Tin Research Institute's (ITRI) Tin Supply Chain Initiative (iTSCi, see below) to be used as implementing mechanisms, as long as they comply with all RCM standards and processes.⁶² The United States, among other donors, is supporting the RCM.⁶³

ICGLR Mineral Certification System

Under the RCM, ICGLR regional exports of designated minerals—currently defined as the 3TGs, in line with Section 1502 and the OECD Guidance, with which the RCM requires all firms sourcing minerals in ICGLR countries to comply—will be accompanied by ICGLR Certificates for Designated Minerals. These will be awarded only to mineral

⁶⁰ The ICGLR is an inter-governmental organization of eleven central African countries (Angola, Burundi, Central African Republic, Republic of Congo, Democratic Republic of Congo, Kenya, Uganda, Rwanda, Sudan, Tanzania and Zambia) headquartered in Bujumbura, Burundi. It seeks to promote regional peace, security, and stability; democracy and good governance; economic development and regional integration; and humanitarian, social, and rights-based aims.

⁶¹ The RINR consists of the RCM and five other emergent tools or processes: Harmonization of National Legislation; Regional Database on Mineral Flows; Formalization of the Artisanal Mining Sector; and Promotion of the Extractive Industry Transparency Initiative (EITI); and a Whistle Blowing Mechanism.

⁶² ITRI and the ICGLR have signed a memorandum of understanding (MoU) formally recognizing iTSCi as a scheme that can be used under the RCM. There may, however, be discrepancies between the two systems. A study on implementing the *OECD Guidance* reported that the iTSCi database will not be publicly available, a significant departure from the ICGLR RMC public transparency standard. ITRI/ iTSCi, "Conflict Mineral Frameworks," n.d.; OECD, *Upstream Pilot Implementation of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas Baseline Report on the Supplement on Tin, Tantalum, and Tungsten*, November 2011.

⁶³ Donors include German government-supported Society for International Cooperation (GIZ, after its German name), the Dutch government, the OECD, several non-profit donors and, prospectively, the African Development Bank. Partnership Africa Canada (PAC), an NGO that has long been active in natural resource transparency and other development work, is providing technical assistance to the ICGLR in support of RCM implementation under a three-year \$1.68 million grant funded by the Canadian Foreign Affairs Department. PAC communication to CRS December 5, 2011; and Geoffrey York, "Long road toward 'conflict-free' minerals," *The Globe and Mail*, October 22, 2011.

shipments with certified proof of "conflict free" origin, transport and processing, under a mine-based site inspection system and OECD Guidance-compliant certification standards.⁶⁴ Each designated mineral export and all associated mine-to-export chain of custody supporting documents must be examined for a certificate to be issued. There is a phase-in period for the scheme. Until December 15, 2012, export certification is optional. After that date, only certified mineral exports will be permitted, unless a member state seeks and receives a phase-in period extension.

Mine Site Inspection and Certification. Under the RCM, mine sites that produce designated minerals are mapped and identified in national and regional databases. They undergo annual government inspections that are confirmed by ICGLR-accredited independent third party audits contracted by the mine operator. The chain of custody from mine to point of export is also audited. Ongoing risk assessments of mining sites are undertaken by an ICGLR Independent Mineral Chain Auditor (known as the MC Auditor), who classifies each mine as Green Flagged (i.e., it meets all standards and produces certified mineral exports); Yellow Flagged (provisionally certified if RCM standards violations are being remedied); or Un-certified, or Red Flagged (uncertified and characterized by serious violations and subject to a mandatory production suspension).⁶⁵ The RCM lays out a detailed system of remedial actions that must be taken in response to yellow or red flagged mines, as well as a designation appeals process.

Chain of Custody Tracking. The MC Auditor, who functions independently of the ICGLR but is endorsed by it, also annually vets each member state's Chain of Custody system(s) to ensure compliance with RCM standards. The RCM allows for multiple certification systems (e.g., for each mineral or for regions) and these may be run by statedesignated private entities. Input and output data on all actors in the mineral supply chain (e.g., miners, traders, processors, smelters, etc) is reported and compiled in ICGLR-mandated national Chain of Custody system databases that feed into an ICGLR regional trade database. All national and regional databases and ICGLR reports, and decisions, and other aspects of the RCM are publicly-accessible.

System Integrity. A key guarantor of the integrity of the system is the MC Auditor. In addition to the functions described above, the MC Auditor independently investigates the reported involvement of armed groups in the mineral chain; suspected large-scale mineral smuggling cases in which mine, region or national production does not match its estimated productive capacity; and foreign downstream mineral chains, if there are signs of illicit exports from the region. The MC Auditor also drafts and publishes publicly available assessment reports on the risk of conflict related to mineral mining, trade, and finance in the region.

DRC Mining Legal Reforms and Minerals Certification Efforts⁶⁶

Inter-agency DRC government working groups, with technical assistance from donors,⁶⁷ are helping to promote DRC mining sector legal reforms and developing an ICGLR-compliant

^{(...}continued)

⁶⁴ Under the scheme, "conflict free" means that no extraction, transport, trade, handling or export of minerals by any actors involved in such activities may contribute to any direct or indirect support to non-state armed groups or public or private security forces engaged in illegal activity and/or serious human rights abuses.

⁶⁵ The main Red Flag criteria include indications of conflict links (illegal control, taxation, or extortion of mine sites, or mineral transportation routes, trade points, or any upstream actor in the supply chain by non-state armed groups or their affiliates); working condition violations (child or forced adult labor); and non-transparent or illegal transactions. The latter may include payments by mine site owner or operator to illegal or criminal organizations, political parties or political organizations [if illegal in a given state], or minerals from a red flagged site are being brought to and co-mingled with a yellow or green-flagged site. Countries can also mandate environmental and community development standards which, in cases of non-compliance, can result in Red Flag designations.

⁶⁶ Key sources for this section include OECD, Upstream Pilot Implementation of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas Baseline Report on the Supplement on Tin, Tantalum, and Tungsten, November 2011; Paul Mabolia Yenga, DRC Minister of Mines, Bali Barume and Uwe Naeher, BGR, National and Regional Traceability and Certification Initiatives: Contributing to the Implementation of Due Diligence, November 2011; and Joanne Lebert, PAC, email communication, December 5, 2011.

⁶⁷ The Federal Institute for Geosciences and Natural Resources, a German governmental agency commonly known as BGR (its German acronym) is a key technical advisor. Other contributors include USAID, which does much of its mining and minerals work through the non-profit Pact, as well as Germany's GIZ, the EU, United Kingdom/DFID, MONUSCO, World Bank, and ITRI.

national traceability and certified trading chain (CTC) system known as the *Certification National* (CN).⁶⁸ In addition to supporting traceability, the CN supports guarantees of "legal title, work site safety, environmental practices which include and exceed the standards of the ICGLR, Dodd-Frank, UN GoE [Group of Experts] and OECD guidance."⁶⁹

Top priorities have been additions to the national mining code consisting of traceability, certification, and due diligence legal requirements, manuals, and procedures. Key reforms include a June 2010 accord providing a legal basis for iTSCi operation under the DRC's CN. DRC government decrees have also mandated the public disclosure of mineral contracts (May 2011); mandatory 3T and gold CN certification (June 2011); and compliance with the *OECD Guidance* (September 2011). Another proposed reform is the creation of a legal role for artisanal miners in eastern DRC. Most mine titles are held by formal sector firms that do not operate in the region due to insecurity and other factors, and artisanal extraction almost completely dominates mining in eastern DRC but, in many cases, is technically illegal. Concordance between provincial laws and regulations, which can vary by region, and national ones, is another possible area of reform.

In addition, in early 2011 governmental agencies, civil society and commercial mining sector actors from the provinces of North and South Kivu and Maniema signed a multi-stakeholder agreement in which they pledged to implement the DRC and ICGLR certification systems. Under the agreement, a prerequisite the lifting in March 2011 of the DRC mining ban in the provinces, signatories also agreed to participate in Mine Monitoring Commissions that are intended to implement these systems locally.

Implementation of the CN, which had been slated to be operational by late 2011, was delayed for a year due to the 2010-2011 mining ban, but is now under way. A DRC Mines Ministry working group is working on the establishment of a national mineral database. A national third party audit system under the CN was field tested in September 2011 at Nyabibwe, a cassiterite mine in South Kivu, and vetting of several other mine sites followed. Efforts are under way to assess and categorize these sites as green, yellow, or red-flagged, in accordance with ICGLR and OECD due diligence guidelines. In addition to Nyabibwe, at least eight sites in South Kivu and 11 sites in North Kivu have been given green designations.⁷⁰ The government, in collaboration with donors, has also produced several detailed maps of mining sites in the east showing which armed or other actors control them. Further mapping and related technical capacity building is ongoing, as is general CN outreach, training, and mining sector-focused public education.

⁶⁸ In addition to the objective of preventing trade in conflict minerals, the CTC approach seeks to enable certification for a range of standards, primarily relating to traceability and transparency; labor and working conditions; security; community development; and environmental protection, and potentially others. BGR has been a key participant in the design and implementation of the CTC systems in the DRC and Rwanda. BGR is also involved in efforts to help the ICGLR implement its certification system, and is funding a forensic ore identification system called the Analytical Fingerprint (AFP). The AFP consists of a reference database housing the unique geological and element composition signatures of ores from mines in the region, against which samples from mineral shipments can be compared. The BGR is helping to put in place several regional AFP labs. The AFP is envisioned as an independent validation tool that can be used to verify ICGLR certificate documentation, thus bolstering the credibility of the system.

⁶⁹ USAID response to CRS inquiry, December 7, 2011.

⁷⁰ Mine validation is being undertaken by joint assessment teams made up of representatives from DRC mining agencies, the Mining Police, DRC business (nominated by the Congolese Business Federation, or FEC), civil society, and MONUSCO, which also provides team security and logistical support. USAID supports this work. The process has often been slow due to various legal and regulatory concerns. DRC Mines Ministry, *Rapport d'Audit du site pilote de Nyabibwe du 06 au 10 septembre 2011*.

Another major facet of DRC's CN system is the establishment of mineral trading centers (Centres de Négoce, or CdN) under a project initiated by the DRC government and the United Nations Stabilization Mission in the DRC (MONUSCO) in 2009. CdNs are designed to act as trading posts where legal minerals can be reliably traded under national and regional CTC/certification systems, and are linked by fixed air or land transport routes to regional border trading hubs (e.g., Bukavu or Goma). The initial goal is to establish five CdNs in the Kivus, with an eventual 16-17 in each of the Kivus, and 72 nationwide. Four CdNs have been completed to date. A fifth is expected to be completed soon.⁷¹ MONUSCO, with USAID assistance, is in the process of rehabilitating roads to the centers.

There are also efforts to engage and train local *comptoirs* (mineral traders) and their associations in the Kivus and Maniema (see a multi-stakeholder agreement, above). Many local actors in the east, however, are reportedly not undertaking CN-required supply chain and risk assessments—in part due to the de facto buyers' boycott discussed in the body of this report—posing a serious threat to prospective CN success. In addition, limited state institutional capacity, funding, a history of state corruption, and varying levels of political will in various government agencies and jurisdictions may pose challenges to CN implementation and effectiveness, but many key local actors are undergoing CN training and appear to support the system. Furthermore, in contrast to eastern DRC, certified trading is reportedly working effectively in the southern province of Katanga, largely due to the greater formalization and structure of the 3Ts industry in the province, as well as stable security conditions; see text box.

Katanga's Conflict-Free Tantalite Supply Chain: Integrating Due Diligence Systems⁷²

In the southern DRC province of Katanga, which has largely been stable since the rise of the conflict mineral problem in eastern DRC, a firm called Mining Mineral Resources (MMR) has sponsored a roll-out of the iTSCi tagging program at its mining sites in 2011 and is seeking to expand OECD-compliant due diligence efforts. MMR is a relatively large firm owned by a larger mining firm active in Katanga's industrialized copper and cobalt sector. It is helping to build a hybrid industrial-artisanal 3Ts industry by training and equipping artisanal miners and partially mechanizing their work, and is building tin smelting facilities to add value to mineral exports. It works through a miners' cooperative, and also undertakes social responsibility projects in its area of operations, in line with provincial regulations. It has its own dedicated due diligence department, trains and subsidizes suppliers and government officials. They undertake mineral tagging for the firm at over 17 centers province-wide, 12 of which are at MMR mine sites, using a computerized iTSCi tag barcode system and an MMR mineral tracking database. MMR buys only tagged minerals, undertakes all mineral transport, and ships almost exclusively to South Africa. It has been audited twice for compliance with the *OECD Guidance*. MMR has been able to implement this system largely due to its exclusive buying rights at the four largest tin, tantalum and tungsten mining sites in Katanga under a March 2010, five-year contract with provincial authorities. The latter have sought to promote international investment and large-scale mining, and separate their more highly regulated mining economy from that in the east.⁷³

MMR's contract allows it to maintain a closed-pipe supply line (control of the mineral chain from mine to export site) making it attractive to conflict-free smelters and other buyers. It also sets due diligence efforts in Katanga apart from those in eastern DRC, where mining is almost totally artisanal and undertaken by thousands of individual actors and small firms. Despite such progress, the U.N. sanctions monitors report that MMR's mine site and buying rights are actively enforced and its properties guarded by a provincial military prosecutor. He "actively tracks down any

⁷¹ The initial CdN locations are, however, reportedly impracticably sited in relation to mineral sources, as they were built on available government-controlled land, and some lack dedicated depot areas.

⁷² OECD, Upstream Pilot Implementation; and UNSC, S/2011/738, December 2, 2011.

⁷³ Katangese authorities have also banned the transit of untagged 3T minerals through the province, and are requiring mineral trade houses to become larger-scale processing entities ("entites de traitement"), and to make large (\$0.5 million) contributions to a provincial social fund. In part to impose oversight over the MMR/iTSCi scheme provincial authorities are creating a formal supervisory role for an existing provincial iTSCi implementation entity, the "Comite provincial de pilotage du systeme iTSCi."

infringing traders, jails them, sometimes for several days, and delivers the seized minerals" to MMR. On at least one occasion, his forces, along with police elements, reportedly suppressed a miners' protest against the MMR buying monopoly using deadly force.⁷⁴

MMR production is the source supplier for two closed-pipe, conflict-free tantalum sourcing projects. The first is the "Solutions for Hope" project, which was announced in July 2011 by Motorola Solutions Inc., a large communications equipment manufacturer, and AVX Corporation, a top tantalum electronics capacitor manufacturer. Solutions for Hope was later joined by other firms.⁷⁵ The second is "Make Africa Work," a vertically integrated supply chain initiated by the KEMET Electronics Corporation, an electronics capacitor manufacturer.

Both programs are operational. Under Solutions for Hope, MMR ore is being exported to South Africa and onward to F&X Smelter in China, a CFS compliant processor. In March 2012, AVX announced that it had "shipped the world's first tantalum products manufactured from validated conflict-free tantalite ore" from the DRC to Motorola Solutions.⁷⁶ The project allows pre-identification of all supply chain actors (mine operator, exporter, processor, component manufacturer and end user), and represents a working integration of the iTSCi, CFS and DRC CN system, all in reported compliance with the *OECD Guidance*.⁷⁷ Under KEMET's initiative, KEMET ships MMR-produced coltan to a South African mineral processor called Tantalite Resources (TR), which produces potassium fluorotantalate (an intermediary tantalum product know as K-salt) exclusively for KEMET. TR received its first Katanga shipment in September 2011. KEMET and TR, in collaboration with MMR, are abiding by CFS and iTSCi system requirements, and TR is undergoing CFS auditing prior to anticipated CFS validation. KEMET initially shipped its Tantalite Resources K-salt to the F&X smelter, but plans to rechannel future production to its newly acquired tantalum powder manufacturing facility in Nevada. The facility, run by a subsidiary, KEMET Blue Powder, is slated to undergo a CFS audit once it begins receiving TR K-salt. The MMR-TR-KEMET relationship provides the basis for KEMET's guarantee that its capacitors are manufactured from conflict free tantalum.⁷⁸

Industry Pilot Certification Systems

ITRI Tin Supply Chain Initiative79

iTSCi (ITRI Tin Supply Chain Initiative), initially developed for the tin industry, and more recently for tantalum and tungsten, is the sole traceability system currently being used by most upstream actors in the DRC and Rwanda.⁸⁰ The U.S. technical assistance non-profit Pact, a key

⁷⁷ AVX, "AVX Commits to 'Solutions for Hope Project' Through Use of Conflict-Free DRC Tantalum Ore," September 8, 2011; Motorola, "Motorola Solutions Announces Project to Source Conflict-Free Tantalum from Democratic Republic of Congo," July 7, 2011; AVX, "Nokia Joins AVX in the 'Solutions for Hope' Initiative, Uses Validated Conflict-Free DRC Tantalum in Products," February 23, 2012; and RESOLVE, "Solutions for Hope' Project Offers Solutions and Brings Hope to the People of the DRC," n.d. and "Current Progress as of March 7, 2012."

⁷⁸ KEMET, "KEMET Blue Powder Corporation Meets All Conflict-Free Smelter Site Requirements (March 1, 2012), "KEMET Implements Conflict Free Tantalum Sourcing Plan That Includes Economic and Social Sustainability Elements (January 13, 2012), KEMET Policy on Conflict Minerals (February 22, 2012); KEMET, "Make Africa Work': KEMET's Vertically Integrated Conflict Free Tantalum Supply Chain," May 14, 2012; and extended oral exchange between KEMET and CRS, May 14, 2012.

⁷⁹ This section draws from ITRI, *ITRI Tin Supply Chain Initiative - iTSCi*, Version 2, 2009; iTSCi, *iTSCi Project Overview*, n.d.; and Gisa Roesen and Estelle Levin/for EICC and GeSI, *Conformance and Compatibility Analysis: CFS, iTSCi, and the OECD Due Diligence Guidance*, November 2011.

^{(...}continued)

⁷⁴ U.N. Group of Experts report, S/2011/738, December 2, 2011.

⁷⁵ They include Intel, HP, Foxconn, Nokia, Motorola Mobility, Research In Motion, Robert Bosch GmbH, and others, and more firms may also join. Solutions for Hope, "List of Participating Companies," as of July 6, 2012.

⁷⁶ AVX, "AVX Delivers World's First Validated Conflict-Free Tantalum Capacitors," March 26, 2012.

⁸⁰ According to the U.N. Group of Experts, ITRI asserts that its membership purchases 80% of global tin supplies. iTSCi is a joint effort initiated with the Tantalum-Niobium International Study Center in 2008. In general, upstream refers to elements of the mineral chain closest to the mine or point of origin, while downstream refers to those nearest (continued...)

USAID DRC minerals project implementer, helps local organizations in the DRC and Rwanda to run the scheme in collaboration with government officials and local stakeholder groups. Only large-scale mineral traders and other mineral chain actors may undergo a risk assessment and become iTSCi members, although the scheme incorporates data from smaller-scale actors in the mineral chain. iTSCi is designed to help upstream businesses—notably including small and medium-size enterprises, co-operatives, and artisanal miners—to comply with and implement the *OECD Guidance*, the ICGLR RCM, and national mineral certification system requirements. It is designed to comply with the Conflict-Free Smelter (CFS) program (see below). The two programs are expected to provide a joint mechanism enabling Section 1502 compliance, although there are some incompatibilities (primarily technical and definitional) between the systems.

iTSCi has been in development since 2008. Since 2011, iTSCi has been implemented in Rwanda and the southern DRC province of Katanga, but is currently not in operation elsewhere in the DRC. iTSCi was piloted at Kalimbi mining area in South Kivu in 2010, but the 2010-2011 mining ban prompted suspension of the project. A pilot project in the Kivus, initially at one mine, is planned, but depends on several outcomes. These include the availability of funding, assurance of operational security, and the confirmation that prospective Dodd-Frank compliant buyers will re-enter the market. Rwanda's iTSCi program runs under the aegis of its broader national mineral CTC system.⁸¹ iTSCi may be extended to Burundi and Uganda and eventually to the entire Great Lakes Region.

iTSCi, funded through industry levies, employs an *OECD Guidance*/ICGLR RCM-compliant mineral tagging and source monitoring chain of custody and database tracking system. In addition to shipment tracking, it emphasizes tax and border fee payment verification. This requirement can reportedly slow and otherwise hinder trading, as collections officials are often absent from their posts, and the reduction in earnings, for some, may be high enough to prompt abandonment of iTSCi participation. Two other key components are independent third party audits of iTSCi members, small-scale upstream actors in the mineral supply chain, and iTSCi data; and independent third party conflict risk assessments of vetted mines and transport routes, and conflict risks in the larger regional environment. In both DRC and Rwanda, government entities are responsible for affixing iTSCi tags to mineral bags.⁸²

The role of state agencies reportedly has reportedly induced a few instances of illicit iTSCi tag sales by corrupt officials. There have also been reports that the iTSCi tags have been stolen, and that some independent traders accept stolen Rwandan ore and ore from the DRC that enters Rwanda through various means, including through the use of falsified iTSCi tags, without paperwork, or through smuggling. This ore may illicitly either transit Rwanda or be integrated into its trade stream through various means, leading the Group of Experts to conclude that

^{(...}continued)

end uses. In practice within due diligence schemes, upstream usually refers to the mineral supply chain from mine to smelter.

⁸¹ The Rwandan CTC focuses on five broad goals: mineral chain traceability and transparency of taxation and payments; working conditions (no child labor, minimum wages paid, worker health and safety observed); security at mining ensured, jointly with human rights; local communities needs and views are taken into account in mining areas; and negative environmental impacts are minimized. iTSCi, "DRC Ministry of Mines Extends Co-operation with ITSCi Due Diligence Programme," March 13, 2012; and Shawn Blore for BGR, *Project Review: Implementing Certified Trading Chains (CTC) in Rwanda*, March 2011.

⁸² In DRC, the entity is the Service d'Assistance et d'Encadrement du Small Scale Mining (SAESSCAM) and in Rwanda, it is the Geology and Mines Authority.

"fraudulent tagging and the transit of untagged minerals through the country are threatening the credibility of Rwanda's certification system," although they also report that Rwandan border officials regularly seize illicit imports, as do DRC authorities, albeit to a lesser extent.⁸³

The standard iTSCi model employs a tagged consignment logbook recording system that is reportedly somewhat cumbersome and expensive to implement. It is manually intensive at the field level—although a paper-based system is arguably a technically sustainable, user-friendly format for use in underdeveloped eastern DRC—and this data must then be transferred into a computer database overseas. Its cost is reportedly high enough to act as a disincentive for participation by some smaller commercial actors. In late 2011, the iTSCi cost in Katanga and Rwanda was \$500 per tonne of minerals. The price is fixed, regardless of commodity price changes, which could reportedly hurt artisanal miners' already thin profit margin. By contrast, the CTC system in Rwanda reportedly costs \$200 per tonne of minerals. Several firms working under the iTSCi system or the Rwandan national ICGLR-compliant CTC system have developed a computer-based system that use iTSCi tags (which have a barcode) or radio-frequency identification (RFID) chip tags. These are placed on consignments, scanned on site, and the resulting data can immediately be uploaded to a server. The model is reportedly less costly and as technically robust as other traceability systems, but in some cases lacks market recognition.⁸⁴

Conflict-Free Smelter (CFS) Program⁸⁵

The Electronic Industry Citizenship Coalition (EICC) and Global e-Sustainability Initiative (GeSI) Conflict-Free Smelter (CFS) Assessment Program, initiated in 2009, supports conflict-free mineral sourcing through evaluation of the origin and status of smelter mineral input under an independent, CFS-vetted third party system. It allows a smelter to verify to buyers that it produces "conflict-free" metals. The main CFS elements are a review of an applicant firm's policies and practices on conflict minerals. The second is an assessment of smelter input materials to verify that they are conflict-free via vetting of mineral source locations; and, if the input material is not raw ore, vetting of compliance with CFS "recycled" materials standards.

CFS, a voluntary program, currently covers tantalum and gold, but is slated to also cover tin and tungsten. EICC/GeSI assert that the CFS protocol is *OECD Guidance*-compliant. It is not publicly available, however; it is accessible only to select actors (certain NGOs, governments and the OECD). It will again be reviewed and updated once Section 1502 rules are issued. Its sponsors seek to create a single, cross-industry, vetted conflict-free supply process. There are currently 17 CFS compliant smelters, owned by 11 firms. A CFS-vetted smelter can remain compliant for a year at a time before having to be vetted anew.

The CFS incorporates a tiered country categorization system, but makes a major distinction between smelters that source from the DRC or adjoining countries and those that do not. The

⁸³ UNSC, S/2011/738, December 2, 2011; see also the more recent Group of Experts report, S/2012/348, June 21, 2012.

⁸⁴ Examples of firms using these technologies reportedly include Rutongo Mines and Phoenix Metals (Rwanda), Lynceus Group (South Kivu), and Mining Mineral Resources (MMR, Katanga). The CTC is being implemented in collaboration with BGR. Volker Steinbach/BGR, *Certified Trading Chains (CTC): Pilot Project Rwanda*, March 17, 2011; Joanne Lebert, PAC, oral communication, December 5, 2011; OECD, *Upstream Pilot Implementation*; and UNSC, S/2011/738, December 2, 2011.

⁸⁵ The following account draws from EICC/GeSI, *EICC/GeSI Conflict-Free Smelter (CFS) Assessment Program Frequently Asked Questions*, January 30, 2012; and Gisa Roesen and Estelle Levin/for EICC and GeSI, *Conformance and Compatibility Analysis: CFS, iTSCi, and the OECD Due Diligence Guidance*, November 2011.

latter are immediately eligible to participate in a CFS assessment. To become CFS-eligible, the former must provide verified CFS-compliant/conflict-free custody/traceability documentation of the entire upstream (mine to smelter) supply chain. To a large extent, the CFS program is dependent on upstream due diligence schemes. In practice, it is aligned and works almost exclusively with iTSCi, with which it is largely congruent, despite some technical incompatibilities between the two systems. The CFS is complemented by a standard reporting and data analysis platform, the *Conflict Minerals Reporting Template and Dashboard*, which allows smelters and suppliers and buyers with whom they or their clients do business to prepare and share consolidated data on their mineral supply chains.⁸⁶

Gold Industry Due Diligence Initiatives

In June 2011, the World Gold Council released a draft chain of custody and conflict-free gold standards designed ensure that gold purchases do not enable, fuel, or finance armed conflict. Compared to 3T-related industries, the gold industry appears to be at an earlier stage of developing conflict mineral-related due diligence. There are no clear indications that any applied, field-based pilot or other due diligence gold programs are yet being implemented.⁸⁷

In March 2012, the Responsible Jewellery Council (RJC) also launched a voluntary Chain-of-Custody (CoC) Certification for gold and other precious metals aimed at helping firms support responsible sourcing and conflict-free due diligence in supply chains. The CoC lays out an independent, third party audit-based certification process and is aimed at enabling certified compliance with the *OECD Guidance* and Section 1502.⁸⁸

Another reported gold industry due diligence effort is a London Bullion Market Association (LBMA) system "requiring third-party audit of all accredited refiners of gold bullion who are on the London Good Delivery list."⁸⁹

⁸⁹ LBMA, *Responsible Gold Guidance*, October 11, 2011; Ruth Crowell/LBMA, "LBMA Responsible Gold Guidance: Structure & Implementation," May 1, 2012; and other presentations from the LBMA Responsible Gold Forum 2012.

⁸⁶ A separate EICC/GeSI web-based tool, the E-TASC (Electronics-Tool for Accountable Supply Chains), may also be adapted to help firms manage due diligence. It is designed to support commercial supply chain corporate responsibility relating to environmental practices, health and safety standards, ethical conduct, and labor practices. EICC/GeSI, "GeSI and the EICC Launch Conflict Minerals Reporting Template and Dashboard," August 3, 2011, and related EICC/GeSI materials; and Fiona Donaldson, Achilles, "E-TASC Supplier and Information Management Process," ICGLR-OECD-UN Meeting due diligence presentation, May 5-6, 2011

⁸⁷ The conflict-free gold standard lays out a detailed system revolving around assessments on the existence of conflict; a given implementing company's policies and performance on issues such as transparency, respecting human rights, operations in conflict zones, security; and commodity, focusing on production, transport, and refining, and the relative risk of a relation to conflict of each of these processes. See World Gold Council, *World Gold Council Standard Chain of Custody*, Version 3.5, June 2011; *World Gold Council Standard Conflict-Free Gold*, Version 5.3, June 2011; "The World Gold Council Unveils Initiative to Combat 'Conflict Gold'," June 17, 2011; and "Conflict Free Standards," n.d.

⁸⁸ It works through a detailed system laid out in a Certification Handbook and other tools and guides focused on commodity management system policies and practices, in particular the segregation of CoC and non-CoC materials. Under the system, mined gold must be mined by a CoC certified entity or on the concession of one by small scale miners, or under "a Recognised Responsible Mining Standard" or due diligence system that credibly guards against conflict-related sourcing. The conflict-sensitive sourcing provision requires a "formal policy for the supply chain of Materials from Conflict Affected Areas"; assessments of non-compliance risks by suppliers, and risk prevention or mitigation measures; a complaints mechanism; and "Know Your Customer" (KYC) procedures for all sourced gold and conflict-sensitive due diligence for all mined gold supplies. Fiona Solomon, "Responsible Jewellery Council (RJC) Chain-of-Custody Certification Overview," January 2012.

Related Initiatives

There are a variety of other standards of practice focused on human rights, social development, good governance, natural resource transparency, corporate operations, fair trade, labor rights, environment, corporate activities in unstable or conflict-prone zones, and other issues that firms can adapt to help ensure due diligence on the sourcing of minerals. These are sponsored by various industry and non-governmental coalitions. The collective goals of such initiatives are reflected in the work of the Global Reporting Initiative (GRI), an organization that produces a comprehensive "sustainability reporting" framework for application globally. Its core goals include the mainstreaming of disclosure on environmental, social and governance performance.⁹⁰

Author Contact Information

Nicolas Cook Specialist in African Affairs ncook@crs.loc.gov, 7-0429

⁹⁰ Most of these are listed in OECD, Preliminary List of Useful Resources for Due Diligence in the Mining Sector, n.d. Some have been criticized on the basis of claims that they are often not very specific or rigorous, lack measureable benchmarks and independent assessments of performance, allowing firms to claim adherence to them without having to prove how they are doing so, and their voluntary nature. See Global Witness, *Oil and Mining in Violent Places: Why Voluntary Codes For Companies Don't Guarantee Human Rights*, October 2007.