Conflict minerals – An evaluation of the Dodd-Frank Act and other resource-related measures

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List of Acronyms and Abbreviations

AFDL	Alliance des forces démocratiques pour la libération du Congo-Zaire (Alliance of Democratic Forces for the Liberation of Congo-Zaire)
ASM	Artisanal and Small-Scale Mining
BGR	German Federal Institute for Geosciences and Natural Resources
CDMC	Coopérative des Artisans Minéraux du Congo
CFS	Conflict Free Smelter Program
CFTI	Conflict-Free Tin Initiative
CNDP	Congrès national pour la defence du people (National Congress for the Defence of the People)
CTC	Certified Trading Chains Initiative
DFA	Dodd-Frank Act
DRC	Democratic Republic of the Congo
DR Congo	Democratic Republic of the Congo
EICC	Electronic Industry Citizenship Coalition
FAR	Forces Armées Rwandaises (Rwandan Armed Forces)
FARDC	Forces armées de la République démocratique du Congo (Armed Forces of the Democratic Republic of the Congo)
FDLR	Forces démocratiques pour la libération du Rwanda (Democratic Forces for the Liberation of Rwanda)
GeSI	Global e-Sustainability Initiative
GIZ	Deutsche Gesellschaft für Internationale Zusammenarbeit
ICGLR	International Conference on the Great Lakes Region
ITRI	International Tin Research Institute
iTSCi	ITRI Tin Supply Chain Initiative
LBMA	London Bullion Market Association
MLC	Movement for the Liberation of the Congo
MONUSCO	United Nations Organization Stabilization Mission in the Democratic Republic of the Congo

OECD	Organisation for Economic Co-operation and Development
ÖNZ	Ökumenisches Netzwerk Zentralafrika (Ecumenical Network Central Africa)
PARECO	Coalition des patriots résistants congolais (Alliance of Resistant Congolese Patriots)
PPA	Public-Private Alliance for Responsible Minerals Trade
RCD	Rassemblement congolais pour la démocratie (Congolese Rally for Democracy)
RCM	Regional Certification Mechanism
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RoHS	Restriction of Hazardous Substances
RPF	Rwandan Patriotic Front
SAESSCAM	Service d'Assistance et d'Encadrement du Small Scale Mining
SEC	US Security and Exchange Commission
SfH	Solutions for Hope Project
3T	Abbreviation for: Tin, Tantalum and Tungsten
3TG	Abbreviation for: Tin, Tantalum, Tungsten (3T) and Gold (G)
UNGoE	United Nations Group of Experts on the Democratic Republic of the Congo
USAID	United States Agency for International Development
WGC	World Gold Council

Executive Summary

The analysis of the Dodd-Frank Act and further resource-related measures showed that the root causes for conflicts in the eastern parts of the Democratic Republic of the Congo (DR Congo) are manifold and only secondarily related to resources. While resources such as ivory, rubber, palm oil, gold, copper and various ores have played an important role in the region's policy and conflict history since colonial times, initially, they were not a major factor for the onset of the First and Second Congo War lasting from 1996 to 2003. More importantly, political power struggles in the eastern parts of the DR Congo and the pronounced weakness of the late Mobutu regime are seen as major triggers for escalation in the 1990s. Nevertheless, within the course of these two wars, some minerals turned out to be a lucrative source of income for various armed groups operating in northern Katanga, North and South Kivu, Maniema and the eastern parts of Orientale. Illegal extraction and trade of gold, coltan and cassiterite became a profitable business and created situations in which rebel groups gained an economic self-interest in maintaining control over mining regions.

Despite the end of the Second Congo War in 2003, fighting has continued in the eastern parts of the country and – particularly in the Kivu Provinces – is still reaching levels comparable to those during the war. Lack of governance, endemic corruption, on-going political disputes (which often exploit issues around ethnicity) and a destroyed infrastructure have caused a situation in which government forces, neighbouring countries and militias fight over regional dominance. The financing through informal taxation of extraction and trade of resources – and particularly gold, coltan, cassiterite and wolframite – is widely seen as an important factor for prolonging these conflicts. This situation analysis is also confirmed by general conflict research that regards "lootable" resources as a potential factor for prolonging existing conflicts.

In this situation, the UN Group of Experts on the Democratic Republic of the Congo (UNGoE) developed the concept of due diligence, which was taken up by the OECD by establishing the *OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas* in 2011. This five-step concept provides a framework for companies that supply or use tin, tantalum, tungsten and gold (3TG) sourced from conflict-affected or high-risk areas to ensure that they respect human rights and that they do not directly or indirectly contribute to conflict or human rights abuses.

Although the general due diligence approach (from both, the UNGoE and the OECD) is voluntary in nature, the UNGoE recommended that the concept shall be incorporated into national legislation. In July 2010 – even before the final version of the OECD Due Diligence Guidance was published – mandatory due diligence requirements were enacted in the USA

by Section 1502 of the Dodd-Frank Wall Street Reform and Consumer Protection Act (short: Dodd-Frank Act). This Section requires all companies traded and listed on the US-American stock exchange market to disclose information on the use of conflict minerals, notably columbite-tantalite (coltan), cassiterite, gold, wolframite, or their derivates. Companies that use such minerals or metals refined from these minerals have to disclose annually whether any of these materials originate in the DR Congo or an adjoining country. If this is the case, the company has to provide a report describing all measures taken "to exercise due diligence on the conflict minerals' source and chain of custody", including independent auditing results. Although the final US SEC[1] rules on Section 1502 of the Dodd-Frank Act were not published before August 2012, the requirements are widely seen as a disincentive to source minerals from the DR Congo and to invest in the country's minerals extractives sector. These disincentives mainly result from the fact that every company on the US-American stock exchange market that sources directly or indirectly from the DR Congo or any adjoining country has to file a "conflict mineral report" including independent audits. In such a situation, the easiest way to comply with the requirements and to achieve a setting in which all products are "DRC conflict-free" is to avoid any sourcing from this region.

This also holds true for many European companies, which – as suppliers to US-American companies – are often strongly affected by this legislation. While all interviewed companies already undertake measures to comply with their customers' demands on conflict minerals and to prepare the required documentation, compliance is mostly achieved by making sure that no material is directly or indirectly sourced from the DR Congo or any adjoining country. This is because it is often difficult to distinguish between those sources linked to conflict and those from legitimate mining in a conflict-affected or high-risk area. To be on the safe side, it is much easier for many companies to follow the strategy of avoiding all materials that are – somehow or other – mined and traded under unclear conditions. This problem is aggravated by some customer requests demanding that no material is sourced from the DR Congo or any adjoining country – irrespective of its role in conflict financing. Although such mis-interpretations of the Dodd-Frank Act can be mitigated by the use of standardised questionnaires such as those developed by the Conflict Free Smelter Program[2], suppliers still fear disadvantages when responsibly sourced minerals from the DR Congo or an adjoining country are used in their supply chains.

Regarding the implementation of the Dodd-Frank Act, in particular manufacturers of complex products hand on the requirements to their suppliers by using own specifications and questionnaires or by referring to existing standard questionnaires. These companies collect the suppliers' confirmations in order to achieve a broad documentation of conflict mineral use

[1] United States Securities and Exchange Commission

[2] Initiated by the Electronic Industry Citizenship Coalition (EICC) and the Global e-Sustainability Initiative (GeSI): http://www.conflictfreesmelter.org/

in all stages of their supply chain. Although this strategy is already in implementation, European companies express various concerns. While some of these concerns are linked to high implementation efforts and to time expenditure for the collection of the required information, others question the level of proof that can be achieved by such documentation. Although the collected information might be correct in many cases, it does not provide a high level of certainty – at least not in companies with a large supplier base. In the implementation process of other supply chain related topics (e.g. the European RoHS-Directive on hazardous substances in electrical and electronic equipment, the European REACH-Directive on chemicals), companies made the experience that a certain share of written confirmations do not reflect the reality. But in contrast to the issues covered by RoHS and REACH, there is no analytical laboratory method to cross-check the given information. Drawing upon these experiences, many industry representatives fear that conflict minerals will continue finding market access even if comprehensive due diligence procedures are introduced.

Most industry representatives express mixed feelings regarding the implementation process of the Dodd-Frank Act: While they are well aware of the problematic situation in the DR Congo and its links with mineral mining and trade, they are yet concerned about the impacts and effectiveness of the process. As most industry representatives have heard of adverse impacts of the Dodd-Frank Act in the DR Congo, they fear that implementation efforts will remain largely ineffective in terms of banning materials from conflict-affected areas and of contributing to the stabilisation and economic recovery of the eastern DR Congo. While none of the interviewed smelters and refiners reject their responsibility regarding the origin, mining and trading conditions of ores and metals, these fears are particularly connected to downstream requirements that are often tied to embargo reactions rather than to be aiming to stimulate responsible sourcing from the Great Lakes Region.

Many industry executives emphasized the need for more direct support of conflict-free mining in the DR Congo. Although none of the interviewed companies is active in the mining business, they all welcome such initiatives and favour a system that encourages the use of responsibly sourced minerals from the DR Congo.

With regard to the metals and minerals with particular interest to the European industry, most interview partners highlight the importance of tantalum and tin reserves in the DR Congo. Some interview partners claim that responsible sourcing of tantalum and tin ores from the DR Congo could create a win-win situation for the people in the eastern DR Congo as well as the European economy.

A thorough analysis of developments within the eastern DR Congo reveals that the reported negative impacts on mining and livelihoods of mining communities cannot be exclusively blamed on Section 1502 of the Dodd-Frank Act. This is because the developments were also extensively shaped by a presidential suspension of artisanal mining activities in the conflict-affected regions of the DR Congo from September 2010 to March 2011. After the Dodd-Frank Act was signed, a combination of Congolese politics and the drawback of international buyers led to a collapse of many artisanal mining and mineral trade structures, with formally recognised ones being the most affected. Registered exports of tin, tantalum and tungsten nearly halted, apart from Katanga Province where mineral tagging was introduced in 2011 and remained unaffected by the presidential suspension. On the other side, there is strong evidence that in other provinces as well, production did not come to a complete halt, and that smuggling of ores and gold into neighbouring countries increased. This is particularly the case for tantalum and tungsten ores and gold, which are more easily smuggled, compared to tin ore.

The declining demand for tin ore had serious socio-economic impacts in mining sites as local ore prices fell from around US$ 5.5–8.0 per kg in 2010 to US$ 2.0–2.5 per kg after May 2012. As a consequence, the socio-economic situation of artisanal miners worsened and many workers lost their livelihoods. Even though coltan and wolframite mines were less affected, prices also declined by around 20%.

In addition, most registered traders in tin, tantalum and tungsten ores in the eastern DR Congo had no buyers for non-certified minerals. The only remaining large-scale buyers of untagged minerals exported to smelters in China. Meanwhile, Congolese authorities have suspended the activities of these exporters for violating legal requirements on due diligence.

In terms of security impacts, the various analysts voice different views and interpretations:

- The UN Group of Experts on the Democratic Republic of the Congo draws a widely positive conclusion: Although security issues prevail in many of the more remote mining locations, the security situation improved in many of the larger mines closely observed by international companies, mining authorities and Congolese civil society. Nevertheless, the situation remains volatile in many mining areas, and insecurity is still widespread at gold mining sites throughout the eastern DR Congo.
- In contrast, other analysts emphasize the impact of increased minerals smuggling, which – according to these experts – mainly benefit the various armed groups. According to this view, illegal mineral trade and smuggling was on the decline prior to 2010, but increased significantly after the signing of the Dodd-Frank Act and the presidential artisanal mining suspension. This view is rejected by others, who claim that the developments stimulated by the Dodd-Frank Act, while unable to stop smuggling of conflict minerals, at least reduced the demand for them and the price, thus lowering the profit to armed groups.

- Other analysts stress that the collapse of many artisanal mining structures fuelled conflict by removing economic opportunities, which made young people join the various armed groups instead. According to these views, the Dodd-Frank Act did not yet result in any measurable improvement of the security situation in the eastern DR Congo.

Interestingly, developments in Katanga Province were quite different from those in the Kivu Provinces, which are mostly regarded as the epicentre of both, conflict and conflict minerals. In contrast to North- and South-Kivu, Katanga was not included in the presidential mining suspension. In addition, an industry-led responsible sourcing project (Solutions for Hope) was launched in July 2011. Despite some dispute over organisational structure and pricing of ores, this initiative is seen as one important reason why Katanga has not experienced such a severe mining crisis as the Kivu Provinces. Interestingly, comparable projects are now starting to be implemented also in South Kivu and Maniema Province.

There are also disputes on the projections for future impacts of the Dodd-Frank Act: Some authors predict that negative impacts are likely to continue, primarily as a consequence of the US SEC rules specifying the requirements of Section 1502 of the Dodd-Frank Act. These authors argue that the rules involve extensive compliance costs for companies sourcing minerals from the Great Lakes Region. In turn, these would increase the incentives to generally abandon sourcing from the DR Congo and its neighbouring countries, resulting into a long-term de facto embargo.

In contrast, most other authors and stakeholders voice different expectations. Although they almost uniformly agree that the presidential suspension of artisanal mining had negative impacts on the local economy and livelihoods, they stress that these impacts are rather the consequence of a somehow chaotic transition phase. According to this interpretation, the Dodd-Frank Act and the related international attention had measurable impacts on the war economy and policy making in the eastern DR Congo. In particular, it is claimed that these trends have stimulated mining sector investments into a region that was experiencing massive resource plundering prior to any mandatory due diligence requirements, and have had a positive impact on natural resource governance at the local, national and international level.

Whilst there is a broad consensus that the current situation is still far from satisfactory and that certification systems and responsible sourcing initiatives still bear the risks of unintended side-effects and fraud, these voices recommend working on improvements and increased leverage of such approaches rather than abandoning due diligence efforts in general.

Apart from the OECD Due Diligence Guidance and Section 1502 of the Dodd-Frank Act, a number of other initiatives emerged that aim to cut the link between mineral extraction and conflict financing in the eastern DR Congo. While some of these initiatives focus on translating the due diligence concept by certifying smelters and refiners (e.g. Conflict Free Smelter Programme, London Bullion Market Association), other approaches, such as the iTSCi bag-and-tag system, are mainly focused on providing secure and robust chain-of-custody solutions. In turn, other approaches target the development and certification of artisanal mines (the Certified Trading Chains Initiative) and institutionalise due diligence at all levels – mines, transport routes and exporters – of in-region mineral supply chains (the Regional Certification Mechanism by the International Conference of the Great Lakes Region – ICGLR). In terms of analytical methods to cross-check chain-of-custody information, an 'Analytical Fingerprint' has been developed by the German Federal Institute for Geosciences and Natural Resources (BGR). While this tool is capable of verifying or falsifying information on the origin of tin, tantalum and tungsten ores, the method is only applicable for ores and concentrates. Once the materials are melted and refined, the mineralogical and geochemical features are lost and do not allow any more conclusions on the origin.

In addition, on-the-ground responsible sourcing projects emerged in Katanga (Solutions for Hope) and in South Kivu (Conflict-Free Tin Initiative). These industry-driven projects already have some notable impacts, including the provision of jobs and income opportunities, higher revenues, stimulus to the local economy, improved workplace safety and the payment of taxes. Furthermore, the US Government together with various companies and industry associations as well as civil society organisations launched the Public-Private Alliance for Responsible Minerals Trade. This initiative aims to increase the supply of legitimate, conflict-free minerals from the DR Congo and the Great Lakes Region and is a reaction on the de-facto embargo of Congolese minerals.

In total, there is now a broad range of tools and initiatives available aiming to support compliance with due diligence requirements in various ways. Nevertheless, it is noteworthy that smelters and refiners being certified as *conflict-free* under one of the existing smelter certification programmes mostly achieved this status by not sourcing from the DR Congo or any adjoining country. Although this strategy is compliant with the Dodd-Frank Act and the general due diligence approach, it does not directly benefit the affected region. This problem is also rooted in the fact that there is very limited material from the DR Congo available that is proved to be conflict-free. Thus, strategies and projects aiming to increase responsibly sourced minerals volumes from the DR Congo are crucial elements to achieve the policy goal of contributing towards the stabilisation of the region.

These first experiences, as well as the effects of the Dodd-Frank Act and related policy measures, show that it is very difficult to achieve the desired ban of conflict minerals without accepting a general embargo situation for any mineral produced in and around conflict-affected areas. Thus, it is of high importance to use the lessons learnt from the first years after the Dodd-Frank Act came into force, as well as to draw from experiences made by other initiatives aiming at cutting the links between resource extraction and conflict financing. By doing so, the European Union now has the chance to develop an approach that effectively contributes towards the policy goal of stabilising the DR Congo without running the risks of creating unintended and adverse side-effects on legitimate economic activities and people's livelihood in the region.

The following recommendations aim at contributing to the discussion for such a European approach on conflict minerals. While they do not constitute a ready-to-implement strategy, they mark important aspects and suggestions that should be taken into account in the current policy development process:

- A policy on conflict minerals alone is insufficient to stabilise the DR Congo. In turn, strategies for stabilising the Great Lakes Region that do not address conflict minerals are also prone to failure. Thus, measures on conflict minerals need to be embedded into a comprehensive strategy on the DR Congo.
- The concept of Due Diligence is useful and should be supported as it helps to mitigate the risks of directly or indirectly contributing to conflict and human rights abuses. Nevertheless, extensive mandatory verification and reporting requirements can cause embargo reactions and unintended socio-economic side-effects.
  It is therefore recommended to rethink strategies aiming at extensive and mandatory due diligence, particularly in downstream (manufacturing) segments. Rather than investing into costly downstream chain-of-custody systems, these resources should better be used to directly support responsible mining within the DR Congo.
- The existing pilot projects on responsible minerals sourcing in the DR Congo have various positive impacts on the ground. If up-scaled and flanked by other policy and security measures, such responsible sourcing projects can help to establish "islands of stability". Therefore, the European Union should support responsible sourcing projects with co-operation programmes as well as with its political framework on conflict minerals.
- Investments in responsible sourcing from the DR Congo are particularly risky. While some of these risks result from the local situation, potential reputation risks also play a role. It is therefore required to develop a mechanism that systematically benefits companies who actively engage in responsible sourcing from the DR Congo. This could include preferential conditions in public procurement and a well visible positive attribute for companies fulfilling certain requirements.

- A potential European contribution has to be adjusted to the needs of affected people in the region. The European Union should enter into a process of dialogue with Congolese and European stakeholders as well as with the International Conference on the Great Lakes Region (ICGLR). The dialogue should aim to generate a common understanding of needs, challenges and opportunities of a formalised and conflict-free mineral extraction, and should lead to clear commitments from all stakeholders.
- European industry and businesses should take a proactive role by supporting, developing and expanding responsible sourcing projects in the eastern DR Congo. Apart from direct support for on-the-ground projects, commitments to purchase a defined quantity of conflict-free material from the DR Congo should also be explored. These activities should be bundled into a Congo stewardship initiative, which – presupposing an ambitious character and measurable targets – should be substantially supported by the European Union.
- Many concepts and strategies on conflict minerals aim to insure that products are to 100% conflict-free in a physical manner. While this concept makes sense in the upstream parts of supply chains, the efforts to achieve such a status significantly increase for manufacturers of complex products. As these efforts do not directly benefit people in the conflict-affected regions, it might be worth to explore alternative models for downstream industries. It is particularly recommended to explore the feasibility of concepts used for 'green electricity', which make sure that money paid by users of certified green electricity directly benefits producers of green electricity.

1 Introduction

With a constant flow of reports on the links between mineral extraction and conflict financing in the eastern Democratic Republic of the Congo, the topic of "conflict minerals" moved up the political agenda in international organisations, central African countries, North-America and the European Union. In addition, various NGO campaigns of the last years generated a broad public awareness on the fact that some of the materials mined in the conflict-affected areas in the DR Congo are used for consumer products such as computers, mobile phones and cars (e.g. FinnWatch 2007, Poulsen 2010).

While the UN Group of Experts on the Democratic Republic of the Congo (UNGoE) and the OECD developed a due diligence concept for companies using tin, tantalum, tungsten, gold or their respective ores, also industry and developing organisations started to work on approaches to solve the problem around mineral extraction as a means of conflict financing. Dynamics have increased significantly since the signature of the US-American Dodd-Frank Act in summer 2010. Section 1502 of this legislation requires companies traded on the US-American stock exchange market to exercise due diligence in such a way that it can be effectively assumed the use of conflict minerals is excluded. Although the first reporting of these requirements is only due in May 2014, Section 1502 already prompted reactions within the DR Congo and the Great Lakes Region as well as by US-American companies and their suppliers.

Under this impression, also the European Commission developed plans to introduce a *supply chain initiative for responsible sourcing of minerals originating in conflict-affected and high-risk areas*. While the exact outline of the planned policy is still unknown, an online consultation open to European and international stakeholders ended on 26th of June 2013. In addition, DG Trade circulated a roadmap document that – amongst others – lists the main policy objectives of this initiative (EC 2013):

1. To support responsible sourcing by promoting transparent supply chains of minerals originating from conflict-affected and high-risk areas.
2. To mitigate these minerals' impact on conflict in a reasonable, effective and proportionate manner for economic operators.
3. To support continued EU access to mineral markets by promoting and sustaining clean trade from conflict-affected and high-risk areas.
4. To strengthen EU consumer and investor confidence that products containing, for example, tin, tantalum, tungsten and gold do not contribute to fuelling conflicts thanks to responsible behaviour by companies.
5. To contribute to the comprehensive foreign policy and development strategy of better governance, sustainable management and law enforcement in relation to the exploi-

tation of natural resources in mineral-producing conflict-affected and high-risk countries.
6. To improve the livelihood of local communities dependent on mining activities in conflict-affected and high-risk countries.

While the objectives of this initiative are a common ground in the EU, there is some uncertainty on how to achieve them. These uncertainties are mostly attributable to various reports confirming that the Dodd-Frank Act implementation as well as the political reactions in the DR Congo have led to a pronounced decline in mining activities, irrespective of its role in conflict financing. It was further alleged that this decline had adverse impacts on socio-economic development and livelihoods of a large number of artisanal miners. While these impacts have not yet been analysed in detail, European suppliers already undertake measures to comply with the demands of US-American customers by providing information on the use and origin of tin, tantalum, tungsten and gold.

In this situation, the Federation of German Industries (BDI) approached Oeko-Institut e.V. in order to carry out an evaluation of Section 1502 of the Dodd-Frank Act as well as of other resource-related measures that aim to provide a solution to the problem of conflict minerals. The overall objective of this evaluation is to constructively contribute to the discussion about a European initiative on conflict minerals and to suggest viable and effective pathways to achieve the above listed policy objectives while reducing the risk of unintended side-effects.

In order to do so, Oeko-Institut e.V. analysed general conflict research addressing the links between resources and conflict (chapter 2), the conflict history in the DR Congo (chapter 3) and the particular role of resources in these conflicts (chapter 4). Furthermore, Oeko-Institut carried out a survey on strategies pursued by European companies addressing the issue of conflict minerals, and findings from reports regarding the impacts of the Section 1502 of the Dodd-Frank Act in the DR Congo (chapter 5). In addition, existing initiatives aiming to cut the link between mineral extraction and conflict were analysed and summarised (chapter 6). Based on these analytical steps, Oeko-Institut provides recommendations for a European policy initiative (chapter 7).

Apart from literature sources, the analysis is largely based on interviews with representatives from government and international organisations, NGOs and industry. Such interviews were conducted with representatives from the following organisations:

Government- and international organisations:

- German Federal Institute for Geosciences and Natural Resources (BGR)
- UN Group of Experts on the DR Congo (former member)
- US State Department
- World Bank

Non-government organisations:

- Bureau d'Etudes Scientifiques et Techniques (BEST)
- Centre National d'Appui au Développement et à la Participation Populaire (CENADEP)
- International Peace Information Service (IPIS)
- Ecumenical Network Central Africa (ÖNZ)
- Pole Institute

Industry:

- Brose
- H.C. Starck
- Heraeus
- Siemens
- ThyssenKrupp
- Köhle
- Wieland-Werke

While this study was commissioned by the Federation of German Industry (BDI), the content and recommendations are those of the authors and do not necessarily reflect the views of the BDI or its members.

2 The link between resources and conflict – findings from conflict research

The question how natural resources positively or negatively influence political stability and conflict has been subject to political discussion and academic research for a long time. Until the 1980s, it was widely assumed that the availability of natural resources has overall positive impacts on the development of nations. Later research, however, identified a range of negative impacts of resource availability, which are subsumed under the term "resource curse".

Some scholars see a correlation between resource abundance and slow economic growth and poverty (Auty 1993, Sachs & Warner 1995), in particular in the decades following decolonisation. According to various researchers, the mechanisms behind this relation can be explained by resource profits favouring the development of rent-seeking and corrupt elites undermining institutions and encouraging poor governance. Other authors argue that revenues from resource exports strengthen the national currency, which negatively affects the competitiveness of other sectors on the world market. This so-called "Dutch disease" in extreme cases may cause deindustrialisation and stagnating economic development.

Although both theories seem plausible in many individual cases, Brunnschweiler & Bulte (2008) stress that, from a statistical perspective, they are not robust enough to support a generalised resource curse theory. In turn, the authors conclude that resource exploitation might as well be used for socio-economic development.

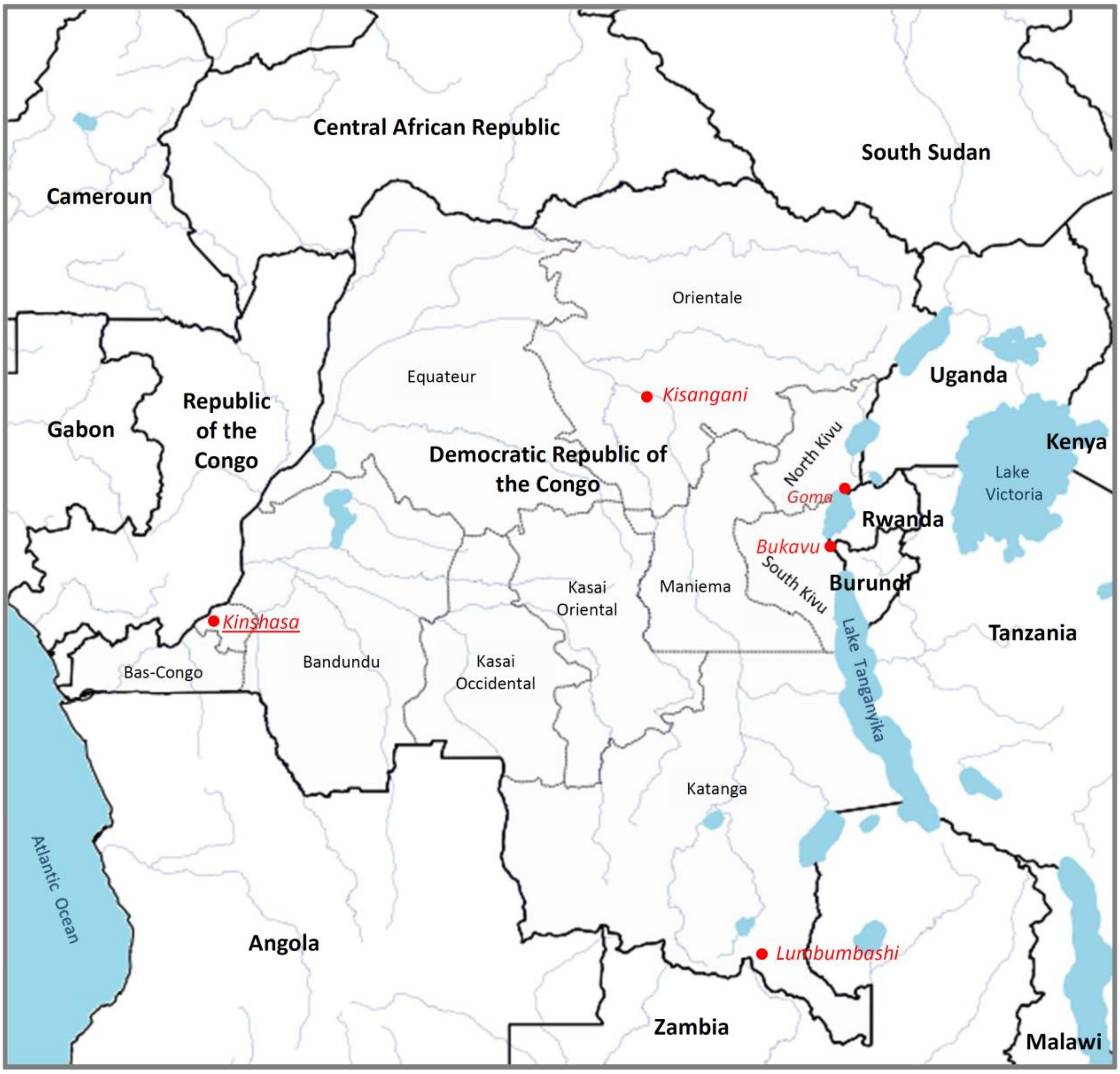
With regard to conflict, most scholars agree that the availability of resources can – under certain conditions – negatively influence the course of conflicts. While there is no uniform academic position on exact cause-effect relationships, most authors suggest that the availability and exploitation of some types of resources increases the risk of political instability and armed conflicts (Collier & Hoeffler 2004, Ross 2004). While many research emanates from a clear link between resources and conflict in human history (e.g. Diamond 2005), Le Billon (2001) stresses that in recent history revenues from commodities such as timber and minerals gained increasing importance in financing armed conflicts after the end of the Cold War. He further asserts that there are two direct relationships between resources and conflict: While resources can be used as a means to finance conflicts, there are also conflicts that are motivated by the aim of controlling access to certain resources.

Ross (2004) argues that the influence on conflicts depends on the type of resource: While there is no statistical evidence that (legal) agricultural commodities have influence on the initiation or duration of civil wars, drugs and "lootable" resources such as gemstones can prolong existing wars. This latter finding was also confirmed by other research (Fearon 2005; Lujala et al. 2005).

Generally, all authors agree that resources are typically not the only reason for starting and maintaining conflicts. In fact, resources might constitute one out of a whole variety of underlying factors, which can encompass issues such as conflict history, political rivalry and secession.

3 Conflict in the DR Congo – a brief overview

Since decolonisation and independence, the DR Congo has suffered from a series of political crises that culminated in the onset of the so-called “First Congo War” in 1996. During this war, the Rwanda- and Uganda-backed rebel group *Alliance des forces démocratiques pour la liberation du Congo-Zaire* (AFDL) invaded much of the eastern DR Congo and marched onto Kinshasa, which was taken by the rebels in May 1997. The war marked the end of the 32-year-long reign of dictator Mobutu Sese Seko. The leader of AFDL – Laurent Kabila – became the DR Congo’s next president. He held the presidency until his assassination in January 2001. The causes for the First Congo War are complex, but to a great extend rooted in various countries’ interest to overthrow Mobutu and in Rwanda’s aim to disperse the refugee camps in North- and South-Kivu that hosted many of the Hutu forces responsible for the Rwanda genocide in 1994, as well as the former *Forces Armées Rwandaises* (commonly referred to as ex-FAR) that regularly launched guerrilla attacks on Rwanda. Nevertheless, Stearns (2011 & 2012) stresses that violence that started in the eastern parts of the country in the 1990s and that is virulent until today has various underlying causes, which partly date back to colonial times.



Data Source: Natural Earth. Free vector and raster map data @ naturalearthdata.com
GIS Source: Quantum GIS Development Team (2013). http://qgis.osgeo.org

Figure 1: Map of the Democratic Republic of the Congo

In order to analyse these deeper roots, particular attention should focus on the eastern provinces of North and South Kivu, which – during the last two decades of conflict – have been major areas of conflict (see Figure 1). There, the population structure has significantly been changed by colonial administration that recruited large labour forces from Rwanda to work on plantations and in mines in the Kivus as well as in neighbouring Maniema Province. According to estimates, a total of around 150,000 to 300,000 migrants from Rwanda settled in the region between 1928 and 1956. This influx contributed to a fourfold increase of population densities in many areas, making local communities such as the Hunde, Nyanga, Tembo, Kano, Twa and Pere to minorities[3] on their own land (Stearns 2012). This development set the basis for social tensions that influence the region's development until today: While the Hutu and Tutsi that migrated to the eastern DR Congo are commonly named *Banyarwanda* (meaning literally "those of Rwandan origin"), members of communities who were living in the region already before colonisation refer to themselves as *autochtone* (indigenous). This divide into indigenous and foreign population was repeatedly aggravated by Mobutu's practice of favouring some of the groups over others, and by repeated debates on whether the Banyarwanda were in fact Congolese citizens or not. Together with a decline in government control over the eastern parts of the country, these tensions led to the so-called "Masisi War" in 1993, which marks the onset of mass-violence in the eastern DR Congo with 3,000–7,000 killed (Stearns 2012 & 2013). While the installation of an ethnically mixed administration calmed this first wave of violence in North Kivu by the end of 1993, the genocide in neighbouring Rwanda between April and June 1994 and the estimated number of 1 million refugees that were fleeing from the Tutsi dominated RPF-troops caused further tension that triggered the First Congo War already sketched in the beginning of this chapter.

After the 1994 genocide in Rwanda, approximately one Million Hutus, among them the perpetrators of systematic mass executions, fled – under French support – to the Kivu region. They were afraid of revenge killings of the new Rwandan ruling party and army RPF. These Rwandan Hutu refugees took shelter in various camps close to the Congolese-Rwandan border. As these refugee camps also hosted radical Hutu militia and ex-FAR forces that actively operated against Rwanda (UN 2010), the new Rwandan government organised a broad alliance backed by Angola, Eritrea Ethiopia, Tanzania, Uganda and Zimbabwe supporting the newly founded AFDL led by Laurent Kabila to disperse the refugees and to overthrow Mobutu. The AFDL invasion started in August 1996 and heavily relied on Rwandan government troops as well as on recruitment from Congolese Tutsi communities in the Kivus. While the AFDL, in part, were perceived as 'liberators' from the Mobutu regime, their invasion was marked by systematic violence against the Hutu population and refugees – regardless of the role individuals might have played in the Rwanda genocide or the subsequent attacks on Rwanda (UN 2010, Stearns 2011).

3 As stressed by Stearns (2011) and Van Reybrouck (2012) these ethnic terms – as well as all other ethnic terms used in this study – should not be over-interpreted in a way that they would demark homogenous social groups. In reality, many ethnic boundaries are blurred and other aspects such as class-, clan- and religious-based identities might play an equally important role in social interaction. Nevertheless, ethnicity was particularly emphasised by the colonial administrations in the DRC and Rwanda and exploited for the policy of 'indirect rule'. While these tendencies and shaped structures partly prevail until today, issues around ethnicity were repeatedly used in recent local and regional political strategies, which often resulted in an increase of ethnic tensions.

After overthrowing Mobutu in May 1997, Laurent Kabila was installed as new president. In the first months of his reign, he still relied on Rwandan forces in Kinshasa and other strategic areas, stirring up anti-Rwanda and anti-Tutsi sentiments in the Congolese population. When Kabila finally ordered the Rwandan troops to retreat in July 1998, the Rwandan and Ugandan governments fell out with Kabila and launched an invasion from the eastern border region as well as from Kitona near the Atlantic coast, which marked the onset of the Second Congo War. When Rwanda and Uganda tried to overthrow Kabila, he invited troops from Angola, Namibia, Chad and Zimbabwe to fight the insurgency. Thus, the DR Congo became a battleground for numerous national armies. Rwanda and Uganda united their forces in a newly formed rebel group called RCD.

While the Kivus were mostly under control of Rwanda and its allied RCD, the widespread insecurity in this part of the country led to the formation of various communal self-defence groups – the so-called Mai-Mai rebels – which partly launched attacks against RCD forces. In response to such attacks, RCD carried out atrocities on civilians for the purposes of retaliation and deterrence.

Within the course of the war, the Congolese government used the various Mai-Mai groups as well as Congolese Hutu militias against RCD and Rwandan forces by supporting these groups with weapons. This led to a proliferation of armed groups in the eastern DRC and an increasingly complex situation with many militias developing own interests and strategies. The fact that another major rebel group was formed – the Movement for the Liberation of the Congo (MLC) – which operated in Equateur and Orientale Provinces with Ugandan support between 1998 and 2002, further complicated the situation. Furthermore, friction between the former close allies, Uganda and Rwanda, caused a split of RCD into two fractions: Rwanda supported the RCD-Goma, with a majority of Tutsi fighters; Uganda backed the RCD-Kisangani. This finally culminated in open battles between Ugandan and Rwandan troops in May 1999 and June 2000 in the centre of Kisangani, the country's third largest town.

As most armed groups used looting as a means of supplying their troops with food and basic necessities, the war had devastating effects on the civilian population: Farmland was abandoned, entire village communities fell victim to atrocities or had to flee into the bush, and basic medical treatment and the school system broke down for years. Although the total number of fatal casualties is difficult to assess, a study by Coghlan et al. (2004) suggests that around 3.8 million people died in this Second Congo War, making it the deadliest war since the Second World War.

In January 2001, the DR Congo's president Laurent Kabila was assassinated by one of his bodyguards. His son, Joseph Kabila was installed as his successor. In the first months of his presidency, Joseph Kabila replaced many leading positions in government and administration and signalled his willingness for peace talks, which resulted into a series of negotiations in Sun City, South Africa, between February and December 2002. In parallel to this approach, international pressure – in particular from the USA and Great Britain – led to peace deals between Rwanda and the DR Congo (Pretoria Agreement) as well as between Uganda and the DR Congo (Luanda Agreement), followed by a withdrawal of most of the Rwandan and Ugandan troops (Stearns 2010).

On 17th December 2002 all major war fractions signed the so-called "Global and All-inclusive Agreement", setting the basis for a transitional government and marking the end of the Second Congo War.

In this transition period from beginning of 2003 until the elections held in 2006, all major conflict groups were represented in government and some of the Congolese rebel groups integrated into the national army FARDC. As a result, in government and army there was little common ground or vision for the DRC as a nation. Almost all observers also highlight a persisting weakness of government institutions as well as parallel command structures within the army, a situation that prevails until today.

Therefore the peace agreement did not end tension and fighting within the Kivu Provinces. While in particular many Mai-Mai group leaders felt underrepresented in the national army and formed a willing base for new rebel groups (Stearns 2012), the radical wing of the RCD – led by Laurent Nkunda – defected from the army and launched an attack on Bukavu, the capital of South Kivu in 2004. In 2006, the Nkunda-led insurgency was transformed into the CNDP militia, which benefitted from Rwandan support and was regularly in battle with government troops[4]. It is believed that one key motivation for the Nkunda-led insurgency was to maintain power within the Kivus, where the national elections showed devastating results for the political wing of RCD (Stearns 2010). The CNDP sees itself as a stronghold of Tutsi interests in the DR Congo, where the Banyamulenge[5] population and Rwandan Tutsi immigrants repeatedly faced severe oppression. Nevertheless the CNDP cannot be seen as a pure representative of the Rwandan government in the Kivus, as it follows own interests that sometimes differ from the planned strategies in Kigali.

In response to the CNDP domination in the Kivus, another rebel group formed, mainly as a result of a unification of existing Mai-Mai militias as well as Hutu forces. This new group called PARECO operated with government support against CNDP (Stearns 2012). Also radical Hutu forces, organised as FDLR, operated from the Kivus against Rwanda. Despite various peace talks and attempts to integrate these forces into the national army, the situation remains tense with numerous rebel groups of various sizes being still active in the Kivus. In addition, integration into the national army did not fully dissolve all these fractions. As maintaining parallel structures was often a pre-condition of army-integration demanded by

4 CNDP is the precursor of M23, the rebel group that took Goma, the capital of North Kivu, in autumn 2012.

5 Banyamulenge is a commonly used term for ethnic minorities of Tutsi origin in the eastern DRC.

the rebels, their structures and networks survived within the army and led to parallel command structures (UNGoE 2011). In addition, 20 years of conflict in the Kivus formed a generation of traumatised victims of violence and a large group of people who have no realistic perspective of integrating themselves into a regular life and for whom "fighting has become a way of life" (Stearns 2012).

The impacts of this prolonged and on-going war in the eastern DR Congo are far-reaching and encompass numerous cases of atrocities against civilians, widespread and systematic sexual violence, the use and recruitment of child soldiers as well as displacement of large parts of the population. Between the formal end of the Second Congo War and 2007, an estimated number of 2.1 million people died from conflict[6] (Coghlan et al. 2007). In August and September 2012 alone, M23 and its allies carried out "brutal ethnically motivated attacks, burning more than 800 homes and killing hundreds of civilians from Congolese Hutu communities in Masisi territory" (UNGoE 2012). During this period – which culminated in the invasion of Goma by M23 in November 2012 – around 700,000 people fled from fighting and militia activities (ÖNZ 2013). Although the transfer of the rebel leader Bosco Ntaganda to the International Criminal Court in The Hague in March 2013 and the signature of the Addis Ababa peace agreement of February 2013 by all ICGLR member states are widely seen as positive signals, the insecure situation widely remains unchained in many parts of the two Kivu Provinces.

[6] In total, this study suggests that 5.4 million people died from conflict between 1998 and 2007.

4 The role of resources in the conflicts in the Democratic Republic of the Congo

The exploitation and trade of natural resources, notably cassiterite, coltan, wolframite and gold in the eastern and north-eastern parts of the Democratic Republic of the Congo are commonly regarded as a major source of conflict financing in this region. Already in 2001, a panel of experts examined the exploitation of resources in the eastern parts of the DR Congo and came to the conclusion that "illegal exploitation of the mineral and forest resources of the Democratic Republic of the Congo is taking place at an alarming rate." The authors identified two major phases of exploitation: (1) Mass-scale looting of resource stockpiles in the territories conquered by the armies of Burundi, Rwanda and Uganda and (2) systematic exploitation by networks tied to Uganda and Rwanda using the structures developed in the time of the ADFL invasion, which were further improved during the Second Congo War. This systematic exploitation created "massive availability of financial resources for the Rwandan Patriotic Army" as well as "enrichment of top Ugandan military commanders and civilians" (UN 2001).

Major international attention was drawn to this issue when the *Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of the Congo* published a report addressed to the UN Security Council in October 2002 that clearly stresses the link between on-going conflict and minerals extraction and trading (UN 2002). The report was published in the phase following peace talks in Pretoria and Luanda that led to the withdrawal of Rwandan and Ugandan troops from the DR Congo in autumn 2002. While this withdrawal was widely seen as a key step to end the Second Congo War, the report firmly predicted that the removal of troops would have little effects on the criminal structures and elite networks that benefit from extraction and trading of minerals in the eastern parts of the country.

It provided a detailed documentation of networks and activities tied to the illegal extraction and trade of diamonds, cobalt, copper, cassiterite, germanium, gold and timber in those parts of the eastern DR Congo that were at that time controlled by government forces and its allies (Katanga Province), by Rwanda and allied rebel groups (Provinces of North- and South-Kivu, Maniema and the northern parts of Katanga) and by Uganda (Province of Orientale and the northern parts of North-Kivu).

The report also listed persons and companies that – according to the information available to the expert group – directly or indirectly profited from the illegal extraction and trade of resources in the DR Congo. While the reports recommended targeted sanctions for various persons and companies (those listed in Annex I and II), it also listed companies that were less directly linked to conflict in the region (companies listed in Annex III) but were suspected of having violated the non-compulsory OECD Guidelines for Multinational Enterprises. While

Annex I and II listed mostly individuals and companies based in African countries, Annex III contained also various Western companies.

In a subsequent dialogue process between many of the listed companies and the Panel of Experts, the awareness on the resource/conflict nexus was raised and many companies undertook measures to reduce their alleged conflict-related activities. According to the Panel's report from October 2003 (UN 2003), these measures included the restriction of business relations to reputable companies, ceasing of operations in the DR Congo (in particular in the field of diamond extraction and trade), abandoning of business relationships with corrupt elites in the DR Congo and closing of bank accounts used for illegal activities in the Great Lakes Region. On the other hand, the report also acknowledged that many businesses were involved in a quite indirect way, which made it difficult for businesses to know about trade flows and conflict links. Furthermore, in some of the cases, the dialogue convinced the Panel that some of the business practices "could be viewed as acceptable in that they make positive contributions to their communities in providing goods and services, as well as jobs for local people" and were not linked to conflict funding (UN 2003).

Despite these developments, the report also stated that, at the time of publication, i.e. in 2003, illegal exploitation remained "one of the main sources of funding for groups involved in perpetuating conflict, especially in the eastern and north-eastern regions of the Democratic Republic of the Congo" (UN 2003). In particular, this document stressed that illegal exploitation of resources was at that time a major means of financing arms trafficking into the region. Gold and diamonds were perceived as the most attractive resources for illegal exploitation, as they can be transported and smuggled quite easily (high revenue yields per unit weight) and because they can be used in lieu of hard currency. While the 2002 report documented illegal exploitation of resources and its links to conflict in all parts of the eastern DR Congo, the 2003 report stresses that the resource/conflict problem prevailing at that time mainly affected North- and South-Kivu as well as the Ituri-District (eastern part of Orientale Province).

Since 2003, the Democratic Republic of the Congo experienced many changes, including national elections in 2006 and 2011, a decline in violence in many parts of the country and a half-hearted attempt to reform the mining sector. Nevertheless, fighting continued particularly in North- and South-Kivu where it reached levels of violence as high as during the Second Congo War (Stearns 2012a). While political analysts agree that the roots of the conflict are manifold and some of them go back to the colonial period and the genocide in Rwanda in 1994 (see chapter 3), the illegal extraction and the trade of minerals is regularly documented and identified as a key economic driver in these conflicts. Amongst others, the Group of Experts on the Democratic Republic of the Congo reported on the following incidents and structures:

- In 2006, the Group of Exports explained that, over the last decades, “concession rights were granted without properly revoking those issued by previous leaders. This has led to multiple ownership claims, which cause complex legal battles and vacuums in which rebel groups prosper.” (UNGoE 2006).
- In its 2007 report, the Group of Experts reported that traders *(comptoirs)* of ores based in Goma and Bukavu have little knowledge of the exact sources of purchased minerals. Subsequently, it was at that time impossible to distinguish between minerals that were mined with and without interference with conflict (UNGoE 2007).
- In its 2008 report, the Group of Experts came to the conclusion that various non-governmental armed groups such as FDLR, PARECO and Mai-Mai groups profited from the extraction and trade of cassiterite, coltan, wolframite and gold. In addition, the report found evidence that also the government forces (FARDC) “is heavily involved in the minerals trade” and “that it is not in the interest of certain FARDC commanders to end the conflict in eastern Democratic Republic of the Congo as long as their units are able to deploy to, and profit from, mining areas.” The report also mentions a coltan mining site in Masisi territory (North Kivu) that was subject to repeated fighting between CNDP and FARDC / PARECO in 2006 and 2007 over control of the mine (UNGoE 2008).
- In 2009, the Group of Experts investigated the exploitation of gold and cassiterite in the Kivus by the rebel group FDLR and other militia. It concluded that armed groups – and in particular the FDLR – “may derived several million dollars of revenue each year from the [gold] trade, which therefore represents one of the most significant avenues of direct financing for them”. While official trade statistics reported gold exports in the range of just a few kilos per annum, the majority of exports were smuggled out of the country. With regard to cassiterite, coltan and wolframite, the report estimates that cassiterite generated highest revenues for FDLR, which were estimated to have ranged from “at least several hundred thousand dollars up to few million dollars a year”. While the FDLR gold networks operated via Uganda and Burundi to export to the United Arab Emirates, cassiterite was mainly exported to Malaysia and Thailand (UNGoE 2009).
- In its 2010 report, the Group of Experts described that many mining areas in the Kivus were recently brought under the control of government troops (FARDC). Nevertheless, militias still controlled hundreds of more remote mining sites and carried out pillaging and looting attacks on mineral traders and transporters. In addition, the report provided evidence that some rebel groups raised illegal taxes on mineral transport routes, charging for example US$ 4 per 50 kilo sack of cassiterite. With regard to the government forces, the report stresses that within FARDC, criminal networks are engaged in exploitation and trade of minerals, which is a clear abuse of Article 27 of the DR Congo’s Mining Code prohibiting public servants – including members of the armed

forces – involvement in mining. Within this report, the Group of Experts also recommended a five step due diligence approach, which is supported by the UN Security Council resolution 1952 (2010). This guidance is in line with the OECD approach (see section 6.1) and applies to "individuals and entities that import and/or process and/or consume minerals from red flag locations". The report recommends that these due diligence guidelines are incorporated into national legislation in the DR Congo, neighbouring countries as well as countries whose companies are active in the mining sector in the DR Congo (UNGoE 2010).

5 The Dodd-Frank Act and its impacts in the African Great Lakes Region

5.1 Section 1502 of the Dodd-Frank Act

The Dodd-Frank Wall Street Reform and Consumer Protection Act (short: Dodd-Frank Act) was signed by US President Barack Obama in July 2010. The Act was meant as a response to the economic crises around 2008/2009 and was aimed at promoting “the financial stability of the United Sates by improving accountability and transparency in the financial system, to end “too big to fail”, to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services practices, and for other purposes” (preamble of the Dodd-Frank Act).

While most sections of the Dodd-Frank Act deal with issues around financial stability, Title XV (Miscellaneous Provisions) contains three sections addressing resources and mining issues:

- Section 1502 Conflict minerals
- Section 1503 Reporting requirements regarding coal or other mine safety
- Section 1504 Disclosure of payments by resource extraction issuers

While Section 1503 requires operators of mines to report on various health- and safety-related issues, Section 1504 requires the US Security and Exchange Commission (SEC) to issue rules regarding the annual reporting of payments made by companies engaged in the extraction of oil, natural gas or minerals to government or government bodies worldwide[7]. In August 2012, the SEC published the final rules on Section 1504, specifying that all single payments or series of related payments equalling or exceeding US$ 100.000 per year need to be disclosed (SEC 2012a)[8].

Section 1502 on conflict minerals specifically deals with the exploitation and trade of minerals originating in the Democratic Republic of the Congo that is “helping to finance conflict characterized by extreme level of violence in the eastern Democratic Republic of the Congo, particularly sexual- and gender-based violence, and contributing to an emergency humanitarian situation therein”. In particular, Section 1502 requires all companies traded and listed on the US American stock exchange market to disclose information on the use of conflict minerals, which are necessary to the functionality or production of a product.

[7] According to the final rules published in August 2012 (SEC 2012a), the requirement applies to all US American and foreign companies that have to file annual reports with the SEC, i.e. all companies traded and listed on the US American stock exchange market.

[8] A comparable requirement is currently being developed within the European Union. It requires the reporting of payments above 100,000 Euros per year and project and will be subject to implementation from mid-2015 on (Ziedler 2013).

Within this context, conflict minerals are defined as "columbite-tantalite (coltan), cassiterite, gold, wolframite, or their derivates; or any other mineral or its derivates determined by the Secretary of State to be financing conflict in the Democratic Republic of the Congo or an adjoining country".

Companies that use such minerals or metals refined from these minerals have to disclose annually whether any of these materials originated from the Democratic Republic of the Congo or an adjoining country. If this is the case, the company has to provide a report describing all measures taken "to exercise due diligence on the conflict minerals' source and chain of custody", including independent auditing results (SEC 2012b).

Furthermore, Section 1502 allows companies to label any product as 'DRC conflict free' if it "does not contain conflict minerals that directly or indirectly finance or benefit armed groups in the Democratic Republic of the Congo or an adjoining country". In turn, products that contain conflict minerals have to be reported and described, including all information documenting due diligence efforts.

With these provisions, the USA is generally in line with the recommendations of the Group of Experts on the Democratic Republic of the Congo laid down in its report from November 2010. This report recommends that due diligence guidelines are incorporated into national legislation in the DR Congo, neighbouring countries as well as countries whose companies are engaged in the mining sector in the DR Congo. In addition, the report presents due diligence guidelines (which are in line with those of the OECD) applicable to "individuals and entities that import and/or process and/or consume minerals from red flag locations" such as the conflict zones in eastern DR Congo (UNGoE 2010).

Although the requirements laid down in Section 1502 of the Dodd-Frank Act do not contradict these recommendations, there are some notable differences:

- While the Dodd-Frank Act applies to all companies listed on the US-American stock exchange market, the UNGoE due diligence guidelines are addressed to individuals and companies that import, process or consume minerals from the eastern regions of the DR Congo. While the term 'consume' is somehow open to interpretation, this uncertainty is further addressed in the OECD Due Diligence Guidance[9], which acknowledges that "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 the particular country, the sector and nature of the products or services involved" (OECD 2011). In order to find viable solutions to meet such challenges, the OECD Guidance suggests various measures, including participation in initiatives on responsible supply chain management and partnerships with international and civil society organisations.

9 Within the report, „the Group recommends that relevant individuals and entities refer to the OECD guidance for further details on due diligence requirements".

- Section 1502 of the Dodd-Frank Act will result in the publication of information on products containing such materials as well as the documentation of due diligence efforts. In addition, products not containing any conflict minerals can be labelled “DRC conflict free”. According to various industry representatives, this information management bears reputation risks for companies using any type of mineral from the DR Congo or any adjoining country. Thus, the information management of the Dodd-Frank Act is considered a disincentive to use material sourced from the Great Lakes Region[10]. Although the due diligence guidelines of both, UNGoE and OECD also foresee public reporting on the supply chain due diligence efforts, reporting takes place on a voluntary basis.

5.2 Reaction of European Industries

Although Section 1502 of the Dodd-Frank Act only applies to companies listed on the US-American stock exchange market, it also has significant implications for European industries. This is because US-American companies implement the requirements by asking their suppliers to make sure that no conflict minerals were used in their production or of the upstream process stages in the supply chain. Thus, suppliers all over the world are now challenged to fulfil requirements according to their customers’ needs.

According to interviews with European business representatives of various sectors, a first wave of requests related to conflict minerals and the origin of tin, tantalum, tungsten and gold was handed down to the various supply chains straight after the Dodd-Frank Act was signed mid-2010. Since that time, request frequency increased and is expected to reach another peak prior to the first SEC-reporting on Section 1502 of the Dodd-Frank Act, which is due in May 2014.

While in 2010, it was the first time that many of the smaller downstream companies[11] had to deal with the issue of conflict minerals, upstream companies and some larger downstream companies were confronted with the topic much earlier. In particular, the reports of the *Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of the Congo* published in 2002 and 2003, which listed several European upstream companies, marked the onset of various campaigns on conflict minerals and its use for consumer products (see chapter 4). As a first reaction, most European smelters

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[10] Some industry representatives also stress that Section 1502 of the Dodd-Frank Act and the related SEC rules create further disincentives “because those companies that do source from the region have to conduct due diligence, write a conflict mineral report and get an independent audit, while companies that do not source from the covered countries do not have to go through these steps” (Metal Miner 2013). According to Narine et al. (2013), these disincentives lead to a de facto embargo of minerals from the eastern DRC.

[11] In this context, *downstream companies* are companies that are positioned in the supply chain somewhere between the smelters/refiners and the final products containing tin, tantalum, tungsten or gold. In turn, *upstream companies* are active anywhere from mineral extraction (mining) to smelting/refining of tin, tantalum and tungsten ores and gold.

and refiners introduced management systems to make sure that no material from conflict-affected areas could enter their supply chain. As regards gold from primary sources (mining), these systems were integrated into broader supplier screenings, which also aim to detect other forms of illegal and unacceptable activities often associated with gold mining and trade (e.g. low environmental and labour standards, money laundering).

In fact, these first management systems were also coupled with policies of not sourcing from the DR Congo or any adjoining country in order to mitigate potential reputation risks. According to the UN Group of Experts, the reporting on conflict minerals prompted at least one mining company to refuse all business relationships linked to artisanal mining anywhere in the world. In addition, one internationally refining company refused all artisanally mined ores from the whole African continent (UNGoE 2007).

While these examples definitely mark non-representative overreactions, they already highlight a key challenge resulting from many attempts aiming at a ban of conflict minerals from industrial supply chains: While the general goal of reducing the options and pathways of conflict financing is widely supported, it is often difficult for companies to distinguish between those sources linked to conflict and those from legitimate mining. To be on the safe side, it is much easier for many companies to follow a strategy of avoiding all materials that are somehow mined and traded under unclear conditions.

This general problem is also encountered in the current implementation process of Section 1502 of the Dodd-Frank Act: Although many industry representatives expressed their willingness to also use conflict-free material from the DR Congo or any adjoining country, it is often stressed that such steps need to be clearly communicated to customers before any decision is taken. While the existing mineral certification systems such as the RCM, iTSCi and CTC can significantly facilitate this communication process (see section 6.2, 6.3 and 6.4), many industry representatives report that some customers only ask for information on geographic origin. Being confronted with such general customer demands, companies fear difficulties they might have when it comes to justifying decisions in favour of sourcing from the DR Congo.

On the other hand, industry representatives also report that well-structured standard questionnaires such as those designed by the Conflict Free Smelter Programme (see section 0) are commonly used by many customers. Generally, the interviewed companies use the following means to answer customer requests on conflict minerals:

- Letters signed by the CEO stating that no conflict minerals are used. These letters typically make reference to measures being taken in order to avoid conflict minerals. As the number of requests has steadily increased over the last years, most companies are now using standard letters.
- Answers tailored to the customer requests. Typically, this strategy is applied when customers use questionnaires to collect data on conflict minerals. Some industry representatives expressed the need for using one standard questionnaire to facilitate

and to speed up the communication process. Regarding standard questionnaires, those designed by the Conflict Free Smelter Programme seem to be the most commonly used.

- Providing certificates of smelters and refiners. This strategy is applied by smelters/refiners as well as by companies that have direct contract and supply relationships to smelters and refiners. Regarding the choice of smelter/refinery certificates, those of the Conflict Free Smelter Programme as well as those provided by the World Gold Council and the London Bullion Market Association (for gold only) enjoy a high credibility and are deemed to be sufficient for reporting purposes.

To be compliant, the interviewed companies undertook the following measures:

- Smelters and refiners use management systems that avoid any sourcing from the DR Congo or any adjoining country. The interviewed upstream companies exclusively source from the secondary (recycling) market or from well-known extractive companies that source materials from their own mines. None of these mines is located in the African Great Lakes Region. For each supplier, a thorough risk assessment is carried out. The interviewed smelters and refiners are either certified by the Conflict Free Smelter Programme or by the London Bullion Market Association.
- Manufacturers with direct contract and supply relationships with smelter and refiners make sure that all their suppliers can prove compliance with the requirements of the Dodd-Frank Act. This evidence may be provided in the form of a smelter/refinery certificate (e.g. CFS, World Gold Council, London Bullion Market Association) or other information proving that all input material is from sources not linked to conflict financing (e.g. from mines in other world region, from recycling). Many industry representatives stressed that this strategy is only applicable for downstream companies which are only one step away from the smelters/refiners (e.g. manufacturers of alloys, metal tubes and profiles).
- Companies located further downstream, hand down the requirements to their suppliers by using own letters and questionnaires or by referring to existing standard questionnaires. These companies collect the suppliers' confirmation in order to achieve a broad documentation of conflict mineral use in all stages of their supply chain. Although this strategy is currently being implemented, representatives from such companies expressed the following concerns:
  - Most supplier information is based on a written confirmation that no conflict minerals were used in the production. While this information might be true in many cases, it does not provide a high level of certainty – at least not in companies with a large supplier base. In the implementation process of other supply chain-related topics (e.g. the RoHS-Directive on hazardous substances in electrical and

electronic equipment, the REACH-Directive on chemicals), companies made the experience that a certain share of written confirmations does not reflect reality. But in contrast to the issues covered by RoHS and REACH, there is no analytical laboratory method to cross-check the given information. Drawing upon these experiences, many industry representatives fear that conflict minerals will continue to find market access even if comprehensive due diligence is introduced.

– Very often, the large number of parts and suppliers is an obstacle for achieving a full record of conflict mineral information. Sometimes, supplier responses are slow or unsatisfactory, leading to high administrative efforts and to uncertainties regarding the final products. Also some industry representatives reported that requests made by SMEs are sometimes ignored by suppliers – in particular in cases where SMEs represent only niche markets for supplying companies. In this situation it is feared that potential future mandatory requirements (e.g. third party audits) would significantly increase costs without substantially improving this situation.
– In multiple-tier supply chains, the requests have to be handed down via various steps of the supply chain. In these cases, the information base is particularly problematic, as response times are sometimes slow and uncertainties increase with every additional tier in the supply chain. In such supply chains, request and clarification-processes in the case of unclear responses might require up to several months. This can cause problems with regard to mandatory due diligence reporting such as under the Dodd-Frank Act.

Most industry representatives expressed mixed feelings regarding the implementation process of the Dodd-Frank Act: While they are aware of the problematic situation in the DR Congo and its links with mineral mining and trade, they are concerned about the impacts and effectiveness of the process. As most industry representatives have heard of adverse impacts of the Dodd-Frank Act in the DR Congo (see section 5.3), they fear that implementation efforts will remain largely ineffective in terms of banning materials from conflict-affected areas and contributing to stabilisation and economic recovery of the eastern DR Congo. While none of the interviewed smelters and refiners rejects its responsibility regarding the origin, mining and trading conditions of ores and metals, these fears are particularly tied to downstream requirements that are often tied to embargo reactions rather than stimulating responsible sourcing from the Great Lakes Region.

Many industry executives emphasized the need for more direct support of conflict-free mining in the DR Congo. Although none of the interviewed companies is active in the mining business themselves, they would welcome such initiatives and would favour a system that encourages the use of responsibly sourced minerals from the DR Congo.

With regard to the metals and minerals with particular interest to the European industry, most interview partners highlighted the importance of tantalum and tin reserves in the DR Congo[12]. Some interview partners claimed that responsible sourcing of tantalum and tin ores from the DR Congo could create a win-win situation for the people in the eastern DR Congo and the European economy.

5.3 Impacts of the Dodd-Frank Act on the DR Congo

Direct and indirect impacts of Section 1502 of the Dodd-Frank Act on the DR Congo and Great Lakes Region are somehow difficult to assess, which is partly due to a presidential suspension of artisanal mining activities in North Kivu, South Kivu and Maniema from September 2010 to March 2011. Although this suspension by President Joseph Kabila was a reaction to the newly signed Dodd-Frank Act, its general scope on all artisanal mining – irrespective of its role in conflict financing – was originally not intended by the Dodd-Frank Act. Further provisions were imposed by the Congolese government in 2011, demanding from mineral exporters to exercise due diligence in accordance with the UN and the OECD Guidance (UNGoE 2012, Johnson 2013). Non-compliance is sanctioned with the suspension of trading licence (OECD 2013b).

As the provisions by Section 1502 of the Dodd-Frank Act only became effective on 1st of January 2013, most of the impacts described below must be attributed to the unclear situation resulting from a combination of all the measures and initiatives listed above. Although this makes the identification of clear cause-effect relationships difficult, the analysis allows a description of some of the most significant impacts caused by the existing efforts for “conflict-free” mineral production and trading.

According to most observers, the five months suspension together with the uncertain market situation and disincentives caused by section 1502 of the Dodd-Frank Act led to a collapse of many artisanal mining and mineral trade structures, with formally recognised ones being those most affected (BEST 2012, Johnson 2013, OECD 2013b). This assertion is also supported by the 2012 report of the Group of Experts on the Democratic Republic of the Congo, which concludes that registered exports of tin, tantalum and tungsten nearly halted, apart from Katanga where mineral tagging was introduced in 2011 (UNGoE 2012) and which was not affected by the presidential suspension. For the Kivu Provinces, the report also stresses that production only significantly decreased for tin ore, while “tantalum and tungsten ore production has been resilient to international traceability demands, given that those minerals are more easily smuggled.” Thus, the smuggling of ores into Rwanda and Burundi increased significantly, which is reflected in the Rwandan export figures where “tantalum and

[12] Unfortunately, public available data such as by United States Geological Survey do not provide information on reserves in the DR Congo. Industry representatives provided the following reserve data for the DR Congo: Tin: 7–10%, tantalum ~ 30%, tungsten: negligible, gold: 0.2–0.4%.

tungsten have experienced a corresponding increase during 2012, while tin ore exports have decreased" (UNGoE 2012). According to the latest report by the GoE, this problem prevails until today (UNGoE 2013).

The declining demand for tin ore had serious socio-economic impacts in mining sites as local ore prices fell from around US$ 5.5–8.0 per kg in 2010 to US$ 2.0–2.5 per kg after May 2012. "The low prices negatively affect working conditions, given that there is no money to invest in basic equipment such as boots, torches and gas" (UNGoE 2012). In addition, prices for basic necessities such as flour, soap and cloths rose in many remote mining sites, a situation widely caused by reduced air and road transport from and to mining locations. Consequently, cassiterite mines were abandoned and many workers lost their livelihoods. Although coltan and wolframite mines were less affected, prices also declined by around 20% (UNGoE 2012).

The GoE reported in 2011 that most registered traders in tin, tantalum and tungsten ores in the eastern DR Congo had no buyers for non-certified minerals. At that time, only three large-scale buyers of untagged minerals existed in the eastern DR Congo, which all exported "to smelters, refineries and trading companies in China that do not require tags or evidence of due diligence" (UNGoE 2011). Meanwhile, Congolese authorities suspended the activities of these exporters for violating legal requirements on due diligence (OECD 2013).

The impacts of the Dodd-Frank Act and related due diligence policies on gold mining differed significantly from those on other mining activities. While in 2011 the GoE concluded that the artisanal gold mining and trading industry was significantly less aware of due diligence approaches (UNGoE 2011), the sector experienced no pronounced downturn between 2010 and 2012 in the eastern DR Congo. While this might be due to exceptionally high world market prices during this period, the GoE also stresses that the high unit value of gold favours smuggling activities, and estimates that several tons of gold worth hundreds of millions of US$ were smuggled from the eastern DR Congo via Uganda and Burundi. This also stimulated a migration of artisanal miners from tin, tantalum and tungsten mines to gold mining sites (UNGoE 2012).

According to Johnson (2013), Narine et al. (2013) and Wollschläger (2013), the mining ban as well as the unclear situation before the publication of the SEC rules also affected many certification and transparency initiatives within eastern DR Congo. As an example, the presidential suspension of artisanal mining led to a halt of plans to expand the iTSCi tagging system to South Kivu in 2010 (Johnson 2013, BEST 2012). In addition, Narine et al. (2013) and OECD (2013a) stress that the period between the signing of the Dodd-Frank Act in July 2010 and the adoption of the SEC's final rules in August 2012 was marked by a widespread reluctance to make economic decision with regard to traceable mineral sourcing from the DR Congo.

In terms of security impacts, the various analysts voice different views and interpretations:

- The GoE draws a widely positive conclusion: Although security issues prevail in many of the more remote mining locations, security situation improved in many of the larger mines closely observed by international companies, mining authorities and Congolese civil society. Nevertheless, the situation remains volatile in many mining areas and insecurity is still widespread at gold mining sites throughout the eastern DR Congo (UNGoE 2012). In addition, the GoE stresses that cross-border smuggling undermines due diligence efforts and jeopardizes traceability schemes, which also enables armed groups to continue to control mines and to illegally tax the trade in minerals (UNGoE 2013).
- In contrast, Narine et al. (2013) emphasize the impact of increased minerals smuggling, which – according to the authors – mainly benefit the various armed groups. According to this analysis, illegal mineral trade and smuggling was on the decline prior to 2010, but increased significantly after the signing of the Dodd-Frank Act and the presidential artisanal mining suspension. This view is rejected by Mthembu-Salter (2013), who claims that the developments stimulated by the Dodd-Frank Act, while unable to stop smuggling of conflict minerals, at least reduced the demand for them and the price, thus lowering the profit to armed groups and criminal elements in the FARDC from cassiterite and coltan.
- According to Johnson (2013), the collapse of many artisanal mining structures fuelled conflict by removing economic opportunities and "by driving young people to seek a living through violence instead". According to the author, the recent rise of rebel groups such as M23, Raia Mutomboki and various new Mai Mai militias coincided with the downturn in mining in the Kivus. In addition, BEST (2012) claims that the "drastic reduction in the [artisanal mining] activity has not prevented armed groups and certain sections of FARDC soldiers from working against the populations". Thus, this NGO suggests that the Dodd-Frank Act did not yet result in any measurable improvement of the security situation in the eastern DR Congo.

Interestingly, developments in Katanga were quite different from those in the Kivu Provinces, which are mostly regarded as the epicentre of both, conflict and conflict minerals. In contrast to North- and South-Kivu, Katanga was not included in the presidential mining suspension. In addition, Motorola Solutions and AVX Corporation launched *Solutions for Hope (SfH)* in July 2011.[13] This project developed a closed-pipeline supply chain for coltan sourced from three mining sites in northern Katanga (Mai Baridi, Kisengo and Luba) (see section 6.7). While the

[13] Today, many more companies joined the SfH project, including AVX, F&X, FairPhone, Flextronics, Foxconn, HP, Intel, Motorola Mobility, Motorola Solutions, Nokia and Research in Motion.

project uses iTSCi mineral tagging to secure the chain of custody (see section 6.2), the company Mining Mineral Resources (MMR)[14] is acting as joint between artisanal mining co-operations and the smelter located in China. Although MMR claims to pay world market prices for the mined ores[15], miners complained about low and non-transparent pricing from the side of the co-operative buyer CDMC[16], which led to tension and unrest in the Kisengo location between 2010 and 2012 (UNGoE 2012, Johnson 2013, OECD 2013).

Basically, this initiative is seen as one important reason why Katanga has not experienced such a severe mining crisis as the Kivu Provinces (UNGoE 2012). Nevertheless, some observers also stress that this new minerals sourcing model created monopolies and made it difficult to impossible for artisanal miners to negotiate ore prices (UNGoE 2012, Johnson 2013).

In recent months, more such direct engagement projects were launched in the eastern DR Congo:

- In October 2012, the Conflict-Free Tin Initiative started a tin sourcing program in South Kivu. The project is supported by the Dutch government and encompasses various industry players, including Philips, Tata Steel, Motorola Solutions, Alpha, AIM Metals & Alloys, Malaysia Smelting Corporation, Traxys and Fairphone. The project already sourced 210 tonnes of ores worth approximately US$ 1.7 million (also see section 6.8).
- The iTSCi tagging system (see section 6.2) expanded to Maniema Province in November 2012. Thus, this chain-of-custody approach is now implemented not only in Rwanda and Katanga (DR Congo), but also in South Kivu and Maniema.

Regarding projections for future impacts of the Dodd-Frank Act, Narine et al. (2013) forecast that negative impacts are likely to continue, primarily as a consequence of the SEC rules specifying the requirements of Section 1502 of the Dodd-Frank Act. The authors argue that the rules involve extensive compliance costs for companies sourcing minerals from the Great Lakes Region. This would in turn increase the incentives to generally abandon sourcing from the DR Congo and its neighbouring countries, resulting into a de facto embargo.

In contrast, most other authors and stakeholders voice different expectations. Although they almost uniformly agree that the presidential suspension of artisanal mining had negative

[14] The company Mining Minerals Resources SPRL (MMR) holds the mining concession. More information on the project is laid-out in section 6.7.

[15] Although world market prices are used, deductions are made by MMR to cover costs for technical and material support, as well as the costs of the tagging procedure. After all, this pricing structure was observed to be lower than in comparable coltan mining sites in the eastern DRC (UNGoE 2012).

[16] CDMC (Coopérative des Artisans Minéraux du Congo) is the biggest mining cooperative in northern Katanga and the only organisation buying ores in the MMR mining sites.

impacts on the local economy and livelihoods, they stress that these impacts are rather the consequence of a somehow chaotic transition phase. According to this interpretation, the Dodd-Frank Act and the related international attention had measurable impacts on the war economy and policy making in the eastern DR Congo. In particular, it is claimed that these trends have stimulated increased mining sector investments into a region that experienced massive resource plundering prior to any mandatory due diligence requirements and have had a positive impact on natural resource governance at the local, national and international level (Mthembu-Salter 2013).

Whilst there is a broad consensus that the current situation is still far from satisfactory and that certification systems and responsible sourcing initiatives still bear the risks of unintended side effects and fraud, these voices recommend to work on improvements and increased leverage of such approaches rather than abandoning due diligence efforts in general (Wollschläger 2013, Mthembu-Salter 2013).

There is broad agreement that due diligence efforts and related implementation projects alone are insufficient to bring peace and stability to the region. In 2010, the UN Group of Experts – who played an important role in developing the due diligence concept for conflict minerals – was already "aware that due diligence on its own is unlikely to stop conflict in the area" (UNGoE 2010). Thus, to be effective, due diligence policies need to be embedded in broader strategies for the DR Congo and the Great Lakes Region that also encompass issues such as security sector reform, stability of the law, governance and accountability.

6 Existing Initiatives on conflict minerals

With increased international awareness, various actors started initiatives to cope with the risk of conflict-financing within supply chains. While some of the systems focus on management systems on company and supply chain level, others aim at implementing minimum standards regarding conflict-involvement and transparency. Furthermore, some efforts aim at improving artisanal mining schemes on the ground. The following sections give an overview on some of the most important of these initiatives.

6.1 The OECD Due Diligence Guidance

Since 2004, the Group of Experts on the Democratic Republic of the Congo has investigated the illegal exploitation of natural resources in the DR Congo, and provided a five-step approach for due diligence efforts related to conflict minerals in 2010 (UNGoE 2010). In its resolution 1952 from November 2010, the UN Security Council supported the promotion of this concept and "call[ed] upon all States to take appropriate steps to raise awareness of the due diligence guidelines […] and to urge importers, processing industries and consumers of Congolese mineral products to exercise due diligence […]" (UN-SC 2010). Subsequently, the approach was adopted by the OECD, which published the *Due Diligence Guidance on Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas* in 2011 (OECD 2011).

This concept provides a framework for companies that supply or use tin, tantalum, tungsten and gold (3TG) sourced from conflict-affected or high-risk areas, to ensure that they respect human rights and that they do not directly or indirectly contribute to conflict. In parallel to the UNGoE approach, the Guidance follows a five-step approach:

1. Establish strong company management systems;
2. Identify and assess risks in the supply chain;
3. Design and implement a strategy to respond to identified risks;
4. Carry out independent third-party audit of supply chain due diligence at identified points of the supply chain;
5. Report on supply chain due diligence.

While the Guidance is voluntary in nature, companies supplying or using tin, tantalum, tungsten and their ores or mineral derivates and gold are encouraged to integrate this five-step approach into corporate management systems. In particular, the affected companies should make sure that the materials' origin is known due to a robust chain of custody and/or a traceability system that has been implemented, that risks related to conflict financing, human rights abuses, forced and compulsory labour and worst forms of child labour[17] are identified and evaluated, and that the identified risks are mitigated by effective strategies (OECD 2011).

Between 2011 and 2013, the OECD Secretariat conducted a pilot project on the implementation of the Guidance, which resulted in two evaluation reports in 2013. Sixty-nine companies active in the upstream part of the minerals' supply chains (from mine to smelter/refinery) and 30 companies and four industry associations involved in the downstream part (from smelter/refinery to product) participated in the project (OECD 2013a & b). The project report concluded that both, upstream and downstream companies have made significant improvements in their understanding of the conflict mineral issue as well as in the implementation of the first steps of the OECD Guidance. Generally, it should be stressed that the companies' activities were also influenced by the recently signed Dodd-Frank Act (see section 5.1) as well as by the adoption of the final SEC rules on conflict minerals in August 2012. The project report also states that – despite a general willingness to source from the African Great Lakes Region in a responsible manner – a widespread reaction on the conflict minerals debate is to generally avoid any minerals sourcing from the region (OECD 2013a & b). Nevertheless, another analysis also concludes that "the OECD guidance has already proved to be effective in stopping economic actors that operate illegally in the country [DR Congo], especially in the Kivus" (IPIS 2012).

6.2 The ITRI Tin Supply Chain Initiative (iTSCi)

The ITRI Tin Supply Chain Initiative (iTSCi) was launched by the International Tin Research Institute (ITRI) in 2009. ITRI is an industry association who claims its members account for 80% of the world tin ore purchases (UNGoE 2012).

The aim of the iTSCi system is to assist upstream companies (from mine to the smelter/refinery) in sourcing conflict free ores from the African Great Lakes Region in conformance with the OECD Due Diligence Guidance (see section 6.1). Generally, iTSCi consists of three elements which are (a) chain of custody data collection (traceability), (b) risk assessment and (c) third party audits (ITRI 2013).

Members of ITRI are operating at all stages of the supply chain: smelters, processors, miners, traders and users. A traceability system allows mineral purchasers to receive information on production and trade and to keep track of it from the pit to the export (IPIS 2012). The system includes two types of bar-coded tags, a mine tag and a trader/processor tag. Each tag is attached to the bags of minerals at the respective point of the supply chain ("bag-and-tag system"). The mine tag is attached at the pit whereas the trader/purchaser tag is added where a trader or processor takes ownership of the ores. The tags are

[17] The definitions for *forced and compulsory labour* as well as *worst forms of child labour* follow the internationally recognised definitions laid down in the ILO core labour standards No. 29, 105, 138 and 182.

characterised by a unique reference number as well as an entry in the iTSCi logbooks that record (following IPIS 2012):

- Mine of origin
- Quantity
- Date and method of extraction
- Location of consolidation, trade, processing and upgrading
- Identification of all intermediaries, consolidators or other actors in the upstream supply chain

The aforementioned data are recorded in the iTSCi online database.

(a) Risk Assessment

To participate in iTSCi, every supply chain operator and every mine site has to accept risk assessment by an independent risk assessor. This also covers publishing the company's policy regarding conflict minerals which includes due diligence practices (ITRI 2013).

(b) Independent third party audit

The iTSCi system is systematically applied in 450 tagging sites (corresponding to around 250 mining sites) in Rwanda. In addition, it is used in various mining sites in the Katanga province in the DR Congo. Recently, the iTSCi system was also introduced in a limited number of mining sites in South Kivu and Maniema. The iTSCi "bag and tag" system is also used by some other initiatives to secure the chain of custody. Amongst others, the Solutions for Hope Project and the Conflict-Free Tin Initiative make use of iTSCi tagging system (see sections 6.7 and 6.8).

In the past, there were some reports on misuse of iTSCi tags as well as criticism on the level of fees charged (UNGoE 2012, Johnson 2013, OECD 2013).

It is noteworthy that the iTSCi system concentrates on traceability and risk assessment with regards to conflicts and third party audits. Thus, iTSCi does not address broader development targets such as governance structure and livelihood support. Consequently, it cannot be regarded as a comprehensive strategy to address social, development and environmental concerns of ASM (IPIS 2010). However, it is currently the only system that enables companies to source minerals from the DR Congo at significant quantities and in line with due diligence requirements.

6.3 The Certified Trading Chains Initiative (CTC)

The Certified Trading Chains Initiative is based on the idea of introducing minimum standards in artisanal and small-scale mining (ASM) as well as transparent supply chains instead of boycotting minerals from conflict-affected or high risk areas. Hence, buyers can use their market power to trigger changes in the conditions of upstream mineral extraction to improve the particular circumstances.

CTC follows a progressive approach, firstly, by concentrating on selected pilot mining sites to demonstrate feasibility. Secondly, the scheme is aimed at up-scaling regarding the number of sites and related actors across the mining sector by local authorities in the respective country. Finally, CTC standards shall be adopted and implemented within national law using lessons learnt from pilot projects (BGR 2012). CTC projects set and enforce standards for ASM and subsequently certify minerals as well as metals from ASM on the basis of five basic principles (IPIS 2012). Each standard is scored on a scale from 0-4. The following principles are covered by CTC:

1. Origin of minerals and transparency (Traceability)

   Mineral traceability implies that both, origin and volumes of produced and traded minerals are traceable along the mineral trading chain. A typical mineral trading chain is schematically described in Figure 2.
2. Fair Working Conditions:

   Fair working conditions in CTC also imply prohibition of child labour and constant improvement of health and safety measures (IPIS 2012).
3. Security and human rights

   Both, mine site and company security as well as respect for human rights are covered by CTC (BGR 2012).
4. Community development

   Community development means that community consultations are carried out prior to or during mining operations and that a constant dialogue regarding gender, socioeconomic and relevant aspects of development is maintained (IPIS 2012).
5. Environment

   The commitment of continual improvement of environmental performance by the mineral producer is demanded by CTC (BGR 2012).

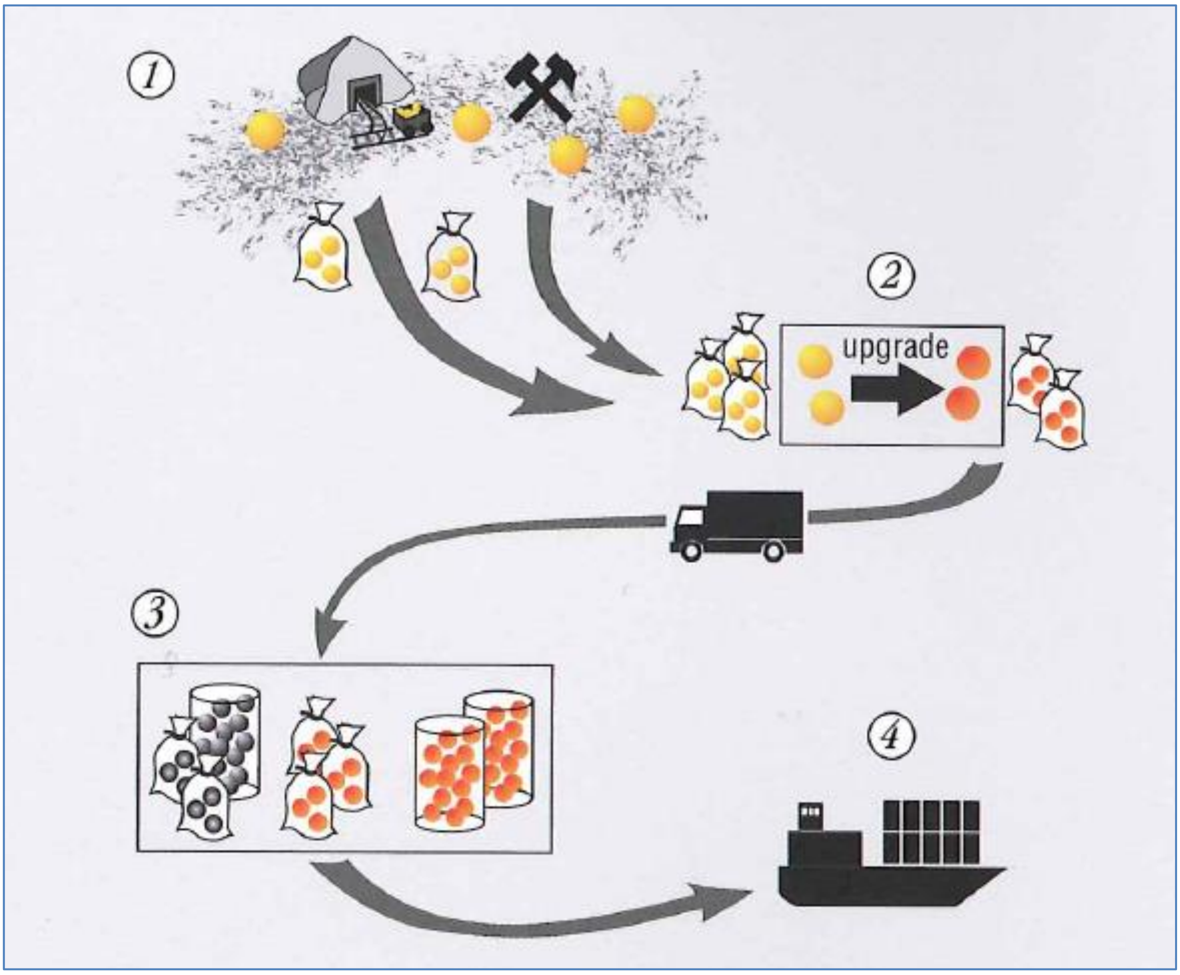

Figure 2: Illustration of the upstream supply chain of minerals from the mine to the export (1 = artisanal extraction, 2 = central company storage / processing facility, 3 = mineral hub, 4 = exit port). Source: BGR 2012.

CTC depends on a compliance system including an independent audit (compliance audit). A particular focus is set on the first standard (origin and production volume as well as traceability) as a higher score (4) is a mandatory requirement as compared to an average level of 3 that is required for all other CTC standards listed above. CTC also includes an integrated improvement dimension through facilitating a prior baseline audit, and supporting the companies/cooperatives towards becoming compliant.

CTC was first piloted in a project in Rwanda that was funded by the German government and implemented by the Federal Institute for Geoscience and Natural Resources (BGR). National partners were the Geology and Mining Department (GMD) as well as five local cassiterite, coltan and wolframite mining and processing companies (IPIS 2012). The pilot project was finalised in 2011. BGR currently implements another CTC-related program in the mineral sector of the DR Congo on behalf of the German Federal Ministry for Economic Cooperation and Development. The project concentrates on developing a *CTC system in DR Congo* in co-operation with partners on the ground, which are responsible for adapting the concept to the local conditions. In addition, CTC already has been incorporated in national regulations. Partners in the DR Congo are the DRC Ministry of Mines and the Service d'Assistance et d'Encadrement du Small Scale Mining (SAESSCAM). The latter is in charge of formalising and assisting artisanal miners (BGR 2012).

In 2012, IPIS assessed the CTC scheme and came to the conclusion that it is an instrument that allows — paired with development efforts — to possibly distinguish "conflict" from "clean" minerals. Beyond transparency issues (transparency of mineral flows and associated payments), the assessment of the pilot project in Rwanda produced positive effects on working conditions, security and human rights as well as on community consultation and gender (IPIS 2012). According to reports, tailored measures such as workshops for companies concerning anti-corruption standards have also been implemented. Similar improvements have been reported regarding control over production and tax payments of the companies.

Hence, it has to be stressed that CTC is not an instrument focussing on certification of conflict-free minerals alone, but goes far beyond, by including working conditions, security issues, tax and prices issues and encouragement of collective action at mine sites by cooperatives and businesses. Importantly, the CTC standards were developed prior to the formulation of the OECD Due Diligence Guidance, rather building on a combination of certification of origin with standards of the OECD Guidelines for Multinational Enterprises (adapted to the artisanal and small-scale mining sector). Therefore, while CTC includes several due diligence aspects, especially at the mine site level, it is rather focusing on responsible mining practice and thus acts complementary to other due diligence schemes.

6.4 The ICGLR Regional Certification Mechanism (RCM)

The International Conference on the Great Lakes Region (ICGLR) is an intergovernmental organisation with the focus not only on one country but on the region of the Great Lakes as a whole[18]. Its establishment dates back to the year 2004 and gained importance when the so-called Pact for Security, Stability and Development in the Great Lakes Region was adopted at the end of 2006 (IPIS 2012). Among the numerous regional issues that are covered by the ten legally binding protocols, the illegal exploitation of natural resources sets out a legal basis for a "regional certification mechanism for the exploitation, monitoring and verification of natural resources in the Great Lakes Region" (ICGLR 2013a). In the following process, this mechanism was translated into the Regional Initiative on Natural Resources (RINR), which was finally adopted in 2010 by all member states within the so-called *Lusaka Declaration*.

[18] According to ICGLR (2013a) by May 2013, the following countries are member states of the ICGLR: Angola, Burundi, Central African Republic, Republic of Congo, Democratic Republic of Congo, Kenya, Uganda, Rwanda, Sudan, Tanzania, Zambia.

The RINR is characterized by six tools which are designed to face the challenges of natural resources in the region:

(1) The Regional Certification Mechanism (RCM) for cassiterite, wolframite, coltan and gold

(2) Harmonisation of national legislation

(3) Formalisation of the artisanal mining sector

(4) A regional database on mineral flows

(5) Promotion of the Extractive Industries Transparency Initiative (EITI)

(6) A whistle-blowing mechanism[19]

The core tool of RINR is the RCM which shall certify that due diligence has been performed on a given supply chain (including mining sites, chain of custody tracking, and export certification), as well as the appropriate management of conflict risks. The RCM is mainly implemented by the individual ICGLR member states, with additional independent oversight coordinated through the ICGLR secretariat. Implementation of the scheme at the member state level is supported by BGR in Rwanda and Burundi. The implementation of the scheme at the ICGLR level is supported by several partners such as USAID, Pact and GIZ. Both BGR and GIZ are operating in the framework of a joint German support program funded by the Federal Ministry for Economic Cooperation and Development.

The RCM standards are described in the ICGLR Regional Certification Mechanism – Certification Manual adopted in November 2011. These standards were incorporated into national regulations in the DR Congo (February 2012) and in Rwanda (March 2013). According to these standards, each potential “conflict mineral” mine site in the Great Lakes Region will be inspected by government authorities. Additionally, the ICGLR formulated standards on chain of custody tracking that may be operationalized through different schemes (such as iTSCi). However, no chain of custody scheme has been found compliant with the RCM standards yet. Finally, the member states are required to verify each mineral export’s chain of custody and track it back to certified mine sites prior to issuing an ICGLR certificate. At this stage, data will be exchanged with the ICGLR secretariat in Bujumbura (Burundi) where the data is integrated into a regional database. As such, an ICGLR certificate serves as proof of due diligence for the respective shipment.

Independent oversight and credibility on the RCM shall be provided through coupled individual supply chain assurance (through third party audits) and system-level assurance (through the Independent Mineral Chain Auditor), both also serving as on-going risk assessments in the sense of the OECD Due Diligence Guidance. The Analytical Fingerprint method to independently verify 3T mineral origin is integrated into this assurance system (see in section 6.6).

[19] A variety of channels like Internet or SMS can be used (see ICGLR 2013).

Once integrated into the extraction and mineral trade processes, it is hoped particularly that the practice of recording all payments will lead to significant improvements in the fields of corruption and informal taxation. This is due to the fact that traders and exporters have to keep track of all fees, royalties and any other payments. Additionally, the Regional Database on Mineral Flows (see above) can play an important role in tackling cross border smuggling. In addition, independent auditing and risk assessments aim to ensure the credibility of the process. The whistle blower mechanism under RINR is regarded as another tool which can have a positive impact on a bundle of issues including corruption, livelihoods and inclusion of marginalised groups (IPIS 2012).

A key advantage of the ICGLR approach – in the general opinion – is the fact that it is a regional body that is recognising the need for multi-stakeholder governance. Finally, IPIS (2012) stresses the fact that ICGLR RCM can bring other schemes already operating in the region under one common standard.

6.5 The Conflict Free Smelter Program (CFS)

The Conflict Free Smelter Program (CFS) is an industry-led initiative launched by a working group of companies, mostly members of the Electronic Industry Citizenship Coalition (EICC) and the Global e-Sustainability Initiative (GeSI), in early 2011 (EICC 2013, CFS 2013). It aims at providing assurance on the sources of strategic resources used in electronics and is one of the industry responses to concerns on conflict minerals from the Great Lakes Region in Africa.

Detailed auditable protocols define documentation and traceability requirements of mineral shipments arriving at smelters/refineries. Compliance with the program implies that "processors must not accept materials from known or plausible conflict regions". If material from the DR Congo or any neighbouring country is purchased, detailed documentation (e.g. by using the iTSCi system) must prove that the minerals were mined under conflict-free conditions.

Young et al. (2012) report that some of the world's largest metal producers located in Australia, Canada, China, Germany, Japan, Kazakhstan, Russia, Thailand and the USA have been evaluated. Facilities identified as "conflict-free" under the program are listed on the CFS website (CFS 2013). Notably, CFS is a voluntary instrument, however, based on potential pressure of customers downstream the supply chain in the electronic industry.

The protocols of CFS require:

- Implementation of conflict-free policy embedded into internal operating requirements
- Mechanisms for tracing origins of purchased materials back to the sources (including shipping documents, information on assays and mine identification)
- Tracking of paperwork (internal and external) to the smelters
- Criteria to exclude low-risk materials (e.g. recycled materials)

- Procedures for dealing with minerals and metals that are inventoried

The protocols are differentiated according to the risk in the respective country: Low risk countries are classified as Level 1, higher risk countries as Level 2a or 2b. The DRC is classified as Level 3 (highest risk of conflicts related to 3TG minerals) (CFS 2013).

CFS's work is complemented by other upstream initiatives in the Great Lakes Region such as iTSCi, CTC, ICGLR (see sections 6.2, 6.3, 6.4). According to Young et al. (2011 and 2012), the advantage of auditing at the smelter/refiner level lies in the fact that the number of actors is comparably low at this stage of the whole supply chain from the mine to the end user. The smelter/refiner is the point in the supply chain where raw materials are processed into high purity metals: In the case of tantalum, tin and tungsten, this process takes place at the smelter, in the case of gold at the refiner. Therefore, Young et al. (2012) refer to the targeted smelter as "gates" where the "metal shipments can be controlled and audited".

Young et al. (2012) report that CFS has demonstrated its ability to identify sources of metals at a smelter/refiner level. However, the authors refer to data provided by Apple showing that facilities compliant with the provisions of the program, notably gold, tin and tungsten refiners, represented only a small fraction of the worldwide market volume in 2012, with the exception of a significant number of compliant tantalum smelters (Apple 2012, CFS 2013). Concerning the latter, by mid-2012, a total of 18 countries was identified as suppliers of conflict-free tantalum, "including mines in the DRC" (Young et al. 2012).

According to Young et al. 2012, the presence of metal traders without processing activities represents a problem for the scheme, as these dealers add to the complexity of the supply chains. It is notable that most of the facilities successfully complying with the program process materials from low-risk countries. This situation is sometimes illustrated by ironically renaming of the Conflict Free Smelter Program into "Congo Free Smelter Program". Although this ironic expression does not fully reflect reality, it points towards the problem that provisions from downstream companies to source only conflict-free metals can easily cause embargo reactions of all materials sourced from the Great Lakes Region.

6.6 The Analytical Fingerprint (AFP)

The Analytical Fingerprint (AFP) is an instrument developed by the German Federal Institute for Geosciences and Natural Resources (BGR) that allows the identification of the origin of a 3T mineral concentrate. The technical process includes laboratory analysis based on the characteristic mineralogical and geochemical features of the ores. Samples of known provenance are stored in a mineral reference database (BGR 2012). A key element in the identification of the mineral origin is the comparison of the test results obtained and the data af the known reference sample that is stored in a database.

The Analytical Fingerprint was designed as a complementary technique to any document based procedure aiming at the provision of an independent verification method concerning the origin of minerals.

It allows narrowing down specific characteristics of a sample to a single mining site. According to BGR, in the case of coltan, the technique is capable to reliably differentiate between mining sites located as close as 100 meters from each other. Nevertheless, practical difficulties may arise when materials generated from various sources are mixed, which is a common practice in many small-scale mining sites in the DR Congo. Moreover, the method is suitable only for ores and concentrates. Once the materials are melted and refined, the mineralogical and geochemical features are lost and it is no longer possible to draw conclusions on the origin. Therefore, the analytical fingerprint can only be used in the upstream part of supply chains (from mines to smelter/refiner).

Initially, the analytical fingerprint was developed for coltan. To date, the method is also applicable to cassiterite and wolframite (BGR 2012). BGR is currently implementing a cooperation program in Burundi, Rwanda, and Tanzania aiming to facilitate a complete transfer of skills, technique, and ownership of the AFP method into the region. All processes are managed by an AFP Management Unit directly attached to the ICGLR secretariat in Bujumbura (Burundi). This program module works complementary to a second module where BGR supports RCM implementation in Burundi and Rwanda (see sections 6.3 and 6.4).

The analytical fingerprint is not intended to be used as a regular standard procedure as part of a mineral certification system. However, it shall provide the possibility to verify or falsify the claimed origin of minerals from the Great Lakes Region. Thus, the AFP should be seen as a tool that can support chain-of-custody approaches by offering a robust possibility to cross-check supply chain information.

6.7 Solutions for Hope (SfH)

The Solutions for Hope Project was announced in July 2011 by Motorola Solutions and AVX Corporation, a manufacturer of electronic components (AVX 2013, SfH 2013). The Pilot Project aims at sourcing conflict-free tantalum from the DR Congo. Tantalum is mainly used in capacitors for electronic products and is a derivative of the mineral coltan. Hereby, the Solutions for Hope Pilot Project shall create and test a program of responsible sourcing of coltan from the DR Congo, resulting in the promotion of economic stability in the region (SfH 2013).

The approach of the project is characterized by a “closed-pipe supply line” defining a set of key suppliers from the mines (including artisanal cooperatives) via processors, smelters and component manufacturers to the end users. They were identified prior to the initiation of the project (SfH 2013).

Three mining sites (Mai Baridi, Kisengo and Luba) are covered by this project. All these sites are located in northern Katanga, DR Congo. The mining concessions are held by Mining Minerals Resources SPRL (MMR) that concluded an agreement with Coopérative Des Artisanaux Miniers du Congo (CDMC 2013), a cooperative organising the local artisanal miners. There, MMR operates the mines as a semi-mechanised process facilitating a “more efficient and safer mining environment”. For example, heavy equipment is used to remove the overburden exposing the ore body for the artisanal miners. In the following, the minerals are collected, weighed and logged according to iTSCi’s traceability process (see section 6.2). After they have been logged by the local SEASCAM agent, the minerals are transported to a MMR depot in Kalemi, DR Congo. At this stage of the supply chain, ownership over the ores is transferred to AVX Corporation. Then, the minerals are shipped to and processed at F&X Electro-Materials Limited (F&X 2013) in Guangdong, China, compliant to the Conflict-Free Smelter (CFS) program (see section 0). The resulting tantalum powder and wire for AVX is then shipped to the Czech Republic where the tantalum capacitors are manufactured. Finally, the capacitors are shipped to manufacturers such as Motorola Solutions, HP, Intel, Nokia, Foxconn and other participators in the pilot project (SfH 2013).

The pilot project highlights compliance with several due diligence steps. Firstly, the “conflict-free” status of the mine was reviewed by the iTSCi process. Secondly, the traceability process of bagging and tagging was implemented. In the following, an independent audit was carried out by Gregory Mthembu-Salter, former member of the UNGoE, in line with the OECD Due Diligence Guidance. Finally, as highlighted above, F&X Ltd. complies with the Conflict-Free Smelter Program (CFS), as attested by annual smelter audits.

Although the Solutions for Hope Project faced difficulties regarding the pricing structure of ores in the past, it may, however, be regarded as an important key factor for northern Katanga, which thus far has not been subject to such a severe mining crisis as experienced by the Kivu Provinces. More information on these developments is presented in section 5.3.

6.8 The Conflict-Free Tin Initiative (CFTI)

In October 2012, the Conflict-Free Tin Initiative started a tin sourcing program in the DR Congo. The program sources conflict-free cassiterite (tin ore) from one mine in South Kivu (Kalimbi). While the Dutch government (The Netherlands Ministry of Foreign Affairs) played an important role in initiating the project, partners include companies along the supply chain as well as government bodies and NGOs. Downstream industry partners are Alpha, Blackberry, Fairphone, HP, Motorola Solution, Nokia, Royal Philips Electronics. Further upstream the supply chain, the companies AIM Metals & Aloys, Malaysia Smelting Corporation Berhad (MSC), Traxys and Tata Steel participate in the initiative. The initiative is flanked by NGOs and research organisations such as Pact (USA) and the International Tin Research Institute (PACT 2013, ITRI 2013).

Between 24 October 2012 and 24 January 2013, 210 tonnes of material were produced in the Kalimbi mine in South Kivu, amounting – in monetary terms – to approximately US$ 1.7 million. Exports of 'conflict-free' tin ore to a smelter in Malaysia started in January 2013. According to the project's website, the initiative already has brought about some notable improvements in and around the Kalimbi mine:

- The number of jobs in mining increased from 100 to about 1,200.
- The income of miners more than doubled from US$ 2-4 to around US$ 6 per kilo of cassiterite.
- Due to the higher income of miners, local trade of other goods increased, which provides jobs and income to many other people located around the mine (in particularly women).
- Workplace safety improved considerably due to measures such as the use of helmets, boots, wooden piles to stabilise mining shafts and pumps for drainage.
- Increased transparency allows the Congolese government to collect taxes for the traded ores.

According to the initiators, the program "demonstrates how the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas can be implemented on the ground with positive results" (CFTI 2013).

6.9 Public-Private Alliance for Responsible Minerals Trade (PPA)

The Public-Private Alliance for Responsible Minerals Trade (PPA) was initiated by the US Government after first reports on negative impacts of Section 1502 of the Dodd-Frank Act were published. The Alliance is a joint initiative among government bodies, companies and civil society organisations to support solutions to conflict minerals challenges in the DR Congo and adjoining countries in the African Great Lakes Region.

The PPA supports pilot projects that aim to increase the supply of legitimate, conflict-free minerals from the DR Congo and the Great Lakes Region (PPA 2013a), and is meant as a contribution to balance out some of the embargo reactions stimulated by the Dodd-Frank Act (see Chapter 5). If a company or industry association wants to become a member of the Alliance, it will be requested to provide financial support for the efforts of the Alliance to implement on-the-ground projects. To date, the contribution payments of 26 companies and four associations to the PPA amounted US$ 1.2 million (PPA 2013b).

In the first year of its existence, the PPA used this appropriation to fund two projects: The goal of the first project is to initiate a conflict-free artisanal gold supply chain from the DR Congo, while the objective of another project is to support civil society organisations in the DR Congo in actively participating in the regional traceability and conflict-free certification mechanism. In addition, the US Government invested funds of US$ 3.5 in a traceability project implemented by the International Organization for Migration (PPA 2013b).

By launching another request for project proposals in June 2013, the PPA aims to identify further promising projects that are eligible for funding by the Alliance.

Although the PPA is a new organization and it is not possible to draw any conclusions on its effectiveness and impact at this stage, its limited financial leverage might restrict the PPA's role in supporting conflict-free minerals sourcing from the Great Lakes Region.

6.10 PROMINES

The programme Growth with Governance in the Mineral Sector (PROMINES) is implemented by the government of the DR Congo and funded by the World Bank and the UK Department for International Development (DFID). The programme's objectives are "to strengthen the capacity of key institutions to manage the minerals sector, improve the conditions for increased investments in and revenues from mining, and help increase the socio-economic benefits from artisanal and industrial mining in project areas". The programme encompasses five components:

- Ensure access to resources
- Build sector management capacities
- Enhance transparency and accountability
- Build up sustainable development settings
- Project coordination and management

Project implementation is done by a dedicated Project Implementation Unit established within the Ministry of Mines of the DR Congo (WB 2013b). With a total volume of US$ 90 million (WB 2013a), the project has significant potential to stimulate changes in the addressed fields. The project was approved in 2010 and implementation started in June 2012 (IPIS 2012, WB 2013a), which means that it is still too early to measure impacts from the programme's activities.

6.11 The Trading Centres Initiative (CdN-Initiative)

In 2009, the Government of the DR Congo, the International Organization for Migration and the United Nations Organization Stabilization Mission in the Democratic Republic of the Congo (MONUSCO) launched the Trading Centres (CdN) initiative.

The core of this initiative is the establishment of trading centres within the conflict-affected regions in the eastern DR Congo. It is aimed that these trading centres can serve as a hub for conflict-free ores from artisanal mining. While artisanal miners can bring ores from surrounding mines to the centres where traders offer fair and transparent prices, mines police units, with support of MONUSCO, secure mining sites and access roads to prevent armed groups from involving into the trade.

Although four trading centres have already been built, most of them are not yet operational as one prerequisite – the validation of the surrounding mining sites – has not yet been conducted in all areas. In addition, there is a legal controversy regarding privately owned mining concessions. While most of the exploration and exploitation permits are held by private companies, artisanal miners often source from such sites, which gives rise to discussions on the legality of such artisanal mining (IPIS 2013).

6.12 World Gold Council

The international gold industry is organised in the market development organisation World Gold Council (WGC) based in the United Kingdom. The World Gold Council has 23 members comprising the world's leading gold mining companies (WGC 2013).

The World Gold Council has launched the Conflict-Free Gold Standard, which is a voluntary industry-led approach aiming at avoiding potential misuse of mined gold to fund armed conflicts[20]. According to the World Gold Council, member companies, governments, civil society and other supply chain participants were involved in developing the WGC standard, which was published in October 2012. The ultimate aim of the standard is to promote responsible mining practices throughout the gold mining industry. Therefore, companies following the standard have to report on the following elements:

- Conflict Assessment
- Company Assessment
- Commodity Assessment
- Externally Sourced Gold Assessment
- Management Statement of Conformance

The standard is a tool for gold mining companies and other entities involved in the extraction of gold and should insure conformance of such companies with the OECD Due Diligence Guidance (see section 6.1). Therefore, complying companies have to publish a Conflict-Free Gold Report that is to be assured by an external assurance provider. The assurance guidance in turn is also meant to operationalize OECD Due Diligence Guidance (WGC 2013). In addition, the standard is meant to support refinery-based certification processes such as the LBMA Responsible Gold Guidance (WGC 2012) (see section 0).

[20] While the Conflict-Free Gold Standard is voluntary in nature, the standard as well as the LBMA Responsible Gold Guidance (section 6.13) and the Chain-of-Custody Standard by the Responsible Jewellery Council (section 6.14) have high market relevance and compliance with at least one of these schemes is prerequisite in many business relations.

6.13 London Bullion Market Association (LBMA)

The London Bullion Market Association (LBMA) is a trade association representing the wholesale market for gold and silver. Members include central banks that hold gold reserves, investors, mining companies, producers and refiners. Amongst others, the London-based association maintains the LBMA Good Delivery List, which is a widely accepted de facto standard for the quality of gold and silver bars. Refiners on this list are regularly monitored against the various LBMA standards. In order to be eligible for this list, refiners need to fulfil certain basic criteria. They have to produce – amongst other things – a minimum quantity of ten tonnes of refined gold and 50 tonnes of refined silver per year (LBMA 2013a).

Since January 2012, refineries on the LBMA Good Delivery List need to comply with the LBMA Responsible Gold Guidance, which is now available in its 5th version. The Guidance follows the OECD Due Diligence Guidance and is tailored to the specific situation of gold production, trade and refining (LBMA 2013b).

All gold refiners on the LBMA Good Delivery List proved to exercise due diligence in line with the OECD Due Diligence Guidance (see section 6.1). There is mutual recognition between the LBMA Responsible Gold Guidance and the Conflict Free Smelter Program (see section 0). Thus, gold refineries only have to go through the auditing processes of one of these schemes.

6.14 Responsible Jewellery Council

The Responsible Jewellery Council is a non-profit organisation with 440 members, mostly companies active in the supply chain of jewellery from mine to retail (RJC 2013). All members commit to the Council's Code of Practice and are periodically audited by accredited independent auditors. The Code of Practice is applicable to gold and diamond producers and traders, as well as manufacturers, wholesalers, retailers and assayers and laboratories (RJC 2009). It encompasses various topics and principles in the fields of business ethics, human rights and social performance, environmental performance and management systems.

In addition, the Responsible Jewellery Council developed a Chain-of-Custody Standard for gold and platinum group metals, which can be voluntarily applied by its members. It specifically targets issues such as management systems, internal material controls, eligibility of mined materials, chain-of-custody information and transfer documents and conflict-sensitive sourcing. The standard aims to support responsible supply chains. Once companies are certified against this standard, the certification document can be used as proof to comply with the OECD Due Diligence Guidance (RJC 2012).

7 Summary and recommendations

The analysis showed that the root-causes for conflict in the eastern parts of the Democratic Republic of the Congo (DRC) are manifold and are only secondarily related to resources. Today, ten years after the end of the Second Congo War, fighting and violence continues in the eastern parts of the country and – particularly in the Kivu Provinces – still reaches levels comparable to those during the war. Lack of governance, endemic corruption, on-going political disputes (which often exploit issues around ethnicity), unsolved problems of the social inclusion of minorities and migrants and a destroyed infrastructure have caused a situation in which government forces, neighbouring countries and militias fight over regional dominance. The financing via informal taxation of extraction and trade of resources – and in particular gold, coltan, cassiterite and wolframite – is widely seen as an important factor prolonging these conflicts. The various attempts to address this conflict mineral issue, such as a European approach, are thus highly welcomed. Cutting the links between resource extraction and conflict financing, as well as sustainable socio-economic development in the conflict region are important aspects of any strategy aiming at stabilising the DR Congo.

On the other side, first experiences with approaches regulating conflict minerals from the African Great Lakes Region show that it is very difficult to achieve the desired ban of conflict minerals without accepting a general embargo situation for any minerals produced in and around conflict affected areas. Thus, it is of high importance to use the lessons learnt from the first years after the Dodd-Frank Act came into force, as well as to draw from experiences made by other initiatives aiming at cutting the links between resource extraction and conflict financing. By doing so, the European Union has now the chance to develop an approach that effectively contributes towards the policy goal of stabilising the DR Congo without running the risks of creating unintended and adverse side-effects on legitimate economic activities and people's livelihood in the region.

The following recommendations aim at contributing to the discussion for such a European approach on conflict minerals. While they do not constitute a ready-to-implement strategy, they mark important aspects and suggestions that should be taken into account in the current policy development process.

Measures on conflict minerals need to be embedded into a comprehensive strategy on the DR Congo

Due to the complexity of the situation, it is clear that any strategy aiming to stabilise the region should integrate various approaches and policy fields in a coherent manner. While the issue of conflict minerals undoubtedly needs to be addressed, it is also clear that an isolated focus on conflict minerals and due diligence alone will not be able to bring peace and stability to the region. It is of particular importance that strategies on conflict minerals are embedded into a wider policy for the DR Congo that also entails bi- and multilateral co-operation in the fields of security sector reform, human rights, corruption control, infrastructure development, institution building and stability of the law. With regard to conflict minerals, it is also important to highlight the problem of unclear concession rights within the conflict affected regions. Without legal clarity on mining and concession rights, it will be very difficult to turn the mineral extractive industry in the eastern country parts into a formalised and stabilising part of the economy. It is therefore highly recommended that any European initiative on conflict minerals is accompanied by official co-operation measures on the above mentioned issues.

Key message:

A policy on conflict minerals alone is insufficient to stabilise the DR Congo. In turn, strategies for stabilising the Great Lakes Region that do not address conflict minerals are also prone to fail. Thus, measures on conflict minerals need to be embedded into a comprehensive strategy on the DR Congo.

Rethink strategies on extensive and mandatory downstream due diligence

The Due Diligence approach taken by the UN Group of Experts on the Democratic Republic of the Congo as well as by the OECD is well structured and helps companies to mitigate the risks of directly or indirectly contributing to conflict and human rights abuses. In addition, it provides a framework for many other supply chain related initiatives such as the Conflict Free Smelter Program, the ICGLR Regional Certification Mechanism, the iTSCi bag-and-tag system as well as the various initiatives taken by the gold industry. While the UN Group of Experts recommended implementing due diligence requirements into national legislation, such steps need some caution with regard to verification and reporting systems: Recent experiences show that extensive verification and reporting requirements can easily lead to the discrimination of all ores sourced from a certain region – independently from their role in conflict financing. Although such embargo situations might be useful in hot conflicts, they can turn counter-productive in post-war situations, which typically require economic development and the creation of legal and regular income opportunities.

In the case of the DR Congo, this problem is currently aggravated by the fact that there is very limited material available, which is proved to be conflict-free according to the OECD Guidance. With this limited supply, mandatory requirements to use only conflict-free material are currently prone to cause embargo reactions as the certification efforts for new conflict-free sources do not stand in a favourable relation to expected resource volumes. This is particular the case for tungsten and gold, where the DR Congo hosts less than 1% of the proven global deposits[21].

It is therefore recommended to rethink strategies aiming at implementing extensive and mandatory downstream due diligence. While upstream due diligence based on the OECD Guidance is already widely practised by European smelters and refiners, downstream efforts are less developed. Rather than investing into costly downstream chain-of-custody systems across the supply chains for a broad range of products and industries, these resources should better be used to directly support responsible mining within the DR Congo and to effectively increase the volume of the production of conflict-free minerals in the eastern parts of the country.

From our point of view, this is currently the only feasible way to implement the recommendation of the UN Group of Experts for international buyers, processors and consumers of minerals to “remain[...] engaged in the country and in the regional market while implementing supply chain due diligence” (UNGoE 2011). While a tight definition of due diligence should be common sense for the upstream part of supply chains (from mines to smelters/refiners), the downstream segments (from smelters/refiners to final product) should oblige themselves to use increasing amounts of conflict-free material sourced from the DR Congo rather than to avoid any metals from the region.

Key message:

The concept of Due Diligence is useful and should be supported as it helps to mitigate the risks of directly or indirectly contributing to conflict and human rights abuses. Nevertheless, extensive mandatory verification and reporting requirements can cause embargo reactions and unintended socio-economic side-effects.

It is therefore recommended to rethink strategies aiming at extensive and mandatory due diligence, particularly in downstream (manufacturing) segments. Rather than investing into costly downstream chain-of-custody systems, these resources should better be used to directly support responsible mining within the DR Congo.

Use existing sourcing projects as model cases

With the Solutions for Hope Project (SfH) and the Conflict-Free Tin Initiative (CFTI), industry already proved that responsible sourcing projects can be implemented in the DR Congo and that they can have positive impacts on the ground. Thereby, it is remarkable that the positive

[21] Unfortunately, public available data such as by USGS do not provide information on reserves in the DR Congo. Industry representatives provided the following estimated resource data for the DR Congo: Tin: 7–10%, tantalum ~ 30%, tungsten: negligible, gold: 0.2–0.4%.

impacts go significantly beyond delivering conflict-free ores and also include investments, improved safety standards, transparent pricing and payment of taxes.

The European Commission should acknowledge the positive impacts of such projects and develop a system that encourages expanding these or comparable initiatives in the eastern parts of the DR Congo.

It is believed that such responsible sourcing projects can considerably contribute to the stabilisation and socio-economic development of the DR Congo. Appropriate development of mining areas can create income opportunities and “islands of stability” – at least if accompanied by other political and security measures. As a future vision, such islands of stability will grow in number and size and thereby gradually reduce the combatted regions and mining areas

Therefore, the European Union should make sure that such responsible sourcing projects are supported by both, its co-operation programmes with the DR Congo, as well as with its political framework on conflict minerals.

Key message:

The existing pilot projects on responsible minerals sourcing in the DR Congo have various positive impacts on the ground. If up-scaled and flanked by other policy and security measures, such responsible sourcing projects can help to establish “islands of stability”. Therefore, the European Union should support responsible sourcing projects with co-operation programmes as well as with its political framework on conflict minerals.

Create positive incentives for responsibly sourced minerals and related initiatives

A system encouraging European industries to use conflict-free and responsibly sourced material from the Congo – rather than installing further barriers for any Congolese ores – is generally desirable. Many industry representatives voiced the need for appropriate positive incentives. In particular, most players would like to have some kind of insurance that efforts taken into the direction of *responsibly sourcing from the DRC* are widely accepted as positive contribution and are not suspected of financing conflict or being blamed as “neo-colonial resource grabbing”. This is because efforts to source conflict-free material from the DR Congo still provide various risks:

- The investment and business climate is quite difficult in the DR Congo. The country ranks 181 (out of 185) on the World Bank’s Doing Business Index (WG 2012) and 160 (out of 174) on the Corruption Perception Index (WB 2013, TI 2013). In addition, many concession rights are unclear, making investments into mining and certification activities a particular risky business.

- Even if a mine is conflict-free at a certain point in time, conditions can change. As an example, militias might set up a road block asking for informal taxes. Such incidents – even if limited to few cases – can endanger the reputation of any responsible sourcing project and "contaminate" up to a one-year production volume.
- Many customers within the supply chains of products containing tin, tantalum, tungsten and gold fear the consequences of any negative reporting related to conflict and sourcing from the DR Congo. While on the one side they are aware of reputation risks, the Dodd-Frank Act requirements are for many companies a further reason to exclude material sourced from the DR Congo or any adjoining country.

Regarding these obstacles it is therefore required to introduce positive incentives for industries sourcing conflict-free material from the DR Congo. While such positive incentives could use the vehicle of product labelling[22], it is believed that voluntary labelling is not powerful enough to compensate the business-risks associated with sourcing from the DR Congo.

Moreover, a mechanism that systematically benefits companies who actively engage in responsible sourcing from the DR Congo should be developed. This could include, but is not limited to, preferential conditions in public procurement and a well visible positive attribute for all companies fulfilling certain requirements (e.g. by a website listing committed companies).

Key message:

Investments in responsible sourcing from the DR Congo are particularly risky. While some of these risks result from the local situation, potential reputation risks also play a role. It is therefore required to develop a mechanism that systematically benefits companies who actively engage in responsible sourcing from the DR Congo. This could include preferential conditions in public procurement and a well visible positive attribute for companies fulfilling certain requirements.

Engage into a process of dialogue with Congolese and European stakeholders

The issue of conflict minerals is closely tied to the conflict situation in the eastern parts of the DR Congo. Thus, a potential European contribution has to be carefully adjusted to the needs of affected people in the region. It is therefore highly recommended that the European Union enters into a process of dialogue with stakeholders from government, civil society and industry in the DR Congo and the EU. In addition, such a process should involve the

22 In Europe, the European Ecolabel could be progressively enriched with criteria on conflict-minerals. Rules and procedures of EU Ecolabel are specified in Regulation (EC) No 66/2010 on the EU Ecolabel.

International Conference on the Great Lakes Region (ICGLR), which has taken the lead in developing a *Regional Certification Mechanism* for conflict minerals.

Such a dialogue should be used to generate a common understanding of the local situation, the positions of stakeholders from civil society, government and businesses, as well as the needs and chances of a formalised and conflict free mineral extraction. The debate should outline the long term potential from responsible minerals sourcing for all actors and should become a starting-point for activities aimed at cutting the links between minerals extraction and conflict-financing and at creating a win-win situation for the population as well as international investors.

Based on this discussion, clear commitments from all stakeholders should lead to a process that effectively leads to a growing volume of conflict-free mining in the eastern parts of the DR Congo.

Key message:

A potential European contribution has to be adjusted to the needs of affected people in the region. The European Union should enter into a process of dialogue with Congolese and European stakeholders as well as with the International Conference on the Great Lakes Region (ICGLR). The dialogue should aim to generate a common understanding of needs, challenges and opportunities of a formalised and conflict-free mineral extraction, and should lead to clear commitments from all stakeholders.

Develop and expand business solutions for conflict-free sourcing from the DR Congo

Although it is clear that responsible sourcing projects in the DR Congo need to be accompanied by the Congolese Government and the European Union, industry plays the crucial role in developing business solutions such as the Solutions for Hope Project (SfH) and the Conflict-Free Tin Initiative (CFTI).

European industry and business partners are therefore advised to take a proactive role by supporting, developing and expanding responsible sourcing projects in the eastern DR Congo. While these projects should be supported by the European Union and should fit into the framework to be developed in a multi-stakeholder dialogue (see recommendations above), industry should offer potential contributions already in an early stage of the process. Thereby they could influence and profit from the creation of new structures that are profitable not only for the local communities, but also for European industries.

For example, downstream users can commit themselves to purchase a certain quantity of conflict-free material from the DR Congo at a defined market price. Such commitments will help to reduce investment risks into responsible sourcing projects by securing future market access of conflict-free minerals from the DR Congo.

Generally, these activities should be bundled into a *Congo stewardship initiative*, which – presupposing an ambitious character and measurable targets – should be substantially accompanied by a coherent political agenda and development policy by the European Union for the DR Congo and the Great Lakes Region.

Key message:

European industry and businesses should take a proactive role by supporting, developing and expanding responsible sourcing projects in the eastern DR Congo. Apart from direct support for on-the-ground projects, commitments to purchase a defined quantity of conflict-free material from the DR Congo should also be explored.

These activities should be bundled into a Congo stewardship initiative, which – presupposing an ambitious character and measurable targets – should be substantially supported by the European Union.

Consider alternative engagement models for downstream actors

Some industry representatives argue that complex downstream supply chains are a significant obstacle for such an engagement in responsible sourcing projects. According to their argumentation, manufacturers of products such as electronics, cars and machinery cannot commit themselves to purchase a defined quantity of conflict-free material from the DR Congo, as they do not have direct contract relationships with smelters or any other player in the upstream part of the supply chain. In addition, the verification of conflict-free requirements via paper-documentation is complex and independent laboratory verification impossible – at least in the downstream parts of supply chains.

These difficulties mostly result from the underlying concept that conflict-free products or companies are to 100% conflict-free in a physical manner – meaning that no conflict-material is able to enter the production at any point of the supply chain. While this concept is inspired by campaigns using slogans such as “no blood in my mobile”, its practicality is limited in many downstream parts of complex supply chains. After all, it requires sealing off complex supply chains against any influx of material of unknown origin.

As a research institute with multiple experiences in environmental research, we see a striking similarity with certification challenges in the power sector. Also here, a guaranteed use of green electricity would at first sight require a complete parallel system of power generation, regulation and transmission: As the product – the electric power delivered to households and businesses – cannot be differentiated on the basis of physical or chemical properties, one could argue that the only means of ensuring a green electricity supply would be a closed pipe generation and distribution system. Of course, such a system would be extremely costly and a strong argument against any green power market. In reality, these argumentations are obsolete as certified green electricity uses the same distribution system as conventional electricity without distinguishing between “green” and “conventional” electrons. The difference is that the consumers of green electricity pay directly to the producers of an equivalent amount of certified green electricity and thereby increase the percentage of produced “green electricity” on the market.

This model could be used to simplify the conflict mineral debate in the downstream parts of supply chains. While it is clear that many industries need tin, tantalum, tungsten and gold for their products, tracing and tracking of material-origin requires high efforts and produces costs that do not directly benefit the people in the DR Congo. To make things worse, metals for industry applications are highly standardised, which means that the documented origin cannot be crosschecked by physical or chemical analysis.

In this situation, it might be worth thinking about a system in which downstream industries are exempted from mandatory chain of custody requirements. Alternatively, downstream industries using tin, tantalum, tungsten and gold should commit themselves to make a more direct contribution to solve the conflict mineral problem directly in the Central African region. Amongst others, a steady support of responsible sourcing projects could be a viable means to do so. Thereby such projects ensure that the amount of conflict-free material from the DR Congo is growing and creates a measurable positive impact for stability and development in the region that benefits the local population.

Key message:

Many concepts and strategies on conflict minerals aim to insure that products are to 100% conflict-free in a physical manner. While this concept makes sense in the upstream parts of supply chains, the efforts to achieve such a status significantly increase for manufacturers of complex products. As these efforts do not directly benefit people in the conflict-affected regions, it might be worth to explore alternative models for downstream industries.

It is particularly recommended to explore the feasibility of concepts used for ‘green electricity’, which make sure that money paid by users of certified green electricity directly benefits producers of green electricity.

References

Abrams 2012	Abrams F.; U.S. Conflict Minerals Regulations and Electronics Industry, Proceedings of the Electronic Goes Green Conference Berlin 2012.
Apple 2012	Apple Supplier Responsibility 2012 Progress Report, Internet: http://www.apple.com/supplierresponsibility/pdf/Apple_SR_2012_Progress_Report.pdf (retrieved: 03.07.2013).
Auty 1993	Auty, R.M.; Sustaining Development in Mineral Economies: The Resource Curse Thesis. London, 1993.
AVX 2013	AVX Corporation, Company's official Website; Internet: www.avx.com (retrieved: 03.07.2013).
BEST 2012	Bureau d'Etudes Scientifique et Techniques; BEST's position on §1502 of the Dodd-Frank Act. Bukavu 2012.
BGR 2012	BGR Support for Mineral Certification in the African Great Lakes Region, Federal Institute for Geosciences and Natural Resources (BGR), Hannover, 2012.
Brunnschweiler & Bulte 2008	Brunnschweiler, C.N.; Bulte, E.H.; Linking Natural Resources to Slow Growth and More Conflict. In: Science 320 (2008) 616-617.
CDMC 2013	Coopérative Des Artisanaux Miniers du Congo, Company's Official Website, Internet: http://www.cdmc-cooperative.com/english/index.html (retrieved: 03.07.2013).
CFS 2013	Conflict Free Smelter Program; Project Website. Internet: http://www.conflictfreesmelter.org/cfshome, (retrieved: 29 May 2013).
CFTI 2013	Conflict-Free Tin Initiative: Project Website. Internet: http://solutions-network.org/site-cfti/ (retrieved: 16.05.2013).
Channel Research 2012	iTSCi Governance Assessment: Katanga Province, Channel Research for iTSCi, 2012.
Coghlan et al. 2004	Coghlan, B.; Brennan, R.; Ngoy, P.; Dofara, D.; Otto, B.; Stewart, T.; Mortality in the Democratic Republic of Congo: Results from a Nationwide Survey. Burnet Institute & International Rescue Committee. Melbourne, 2004.
Coghlan et al. 2007	Coghlan, B.; Ngoy, P.; Mulumba, F.; Hary, C.; Bemo, V.N.; Stewart, T.; Lewis, J.; Ba.manhartrennan, R.; Mortality in the Democratic Republic of Congo – An ongoing crisis, Burnet Institute & International Rescue Committee. Melbourne, 2007.
Collier & Hoeffler 2004	Collier, P.; Hoeffler, A.; Greed and grievance in civil war. In: Oxford Economic Papers 56 (2004) 563-595.
Diamond 2005	Diamond, J.; Collapse. How societies choose to fail or succeed. New York, 2005.

Drimmer et al. 2012	Dimmer, J.C.; Phillips N.J.; Sunlight for the Heart of Darkness: Conflict Minerals and the First Wave of SEC Regulation of Social Issues. In: Human Rights & International Legel Discourse, Vol.1, 2012.
EC 2013	European Commission: Roadmap for a comprehensive EU supply chain initiative for responsible sourcing of minerals originating in conflict-affected and high-risk areas. Brussels, 2013.
EICC 2013	Electronic Industry Citizenship Coalition (EICC), Information Document on the Conflict Free Smelter Program; Internet: http://eicc.info/documents/Conflict-FreeSmelterFAQ.pdf, (retrieved: 29 May 2013).
Eichstaedt 2011	Eichstaedt, P.; Consuming the Congo: War and Conflict Minerals in the World's Deadliest Place, Lawrence Hill Books, 2011.
F&X 2013	F&X Electro-Materials Limited, Company's Official Website, Internet: http://www.fxelectro.com/en/page.asp?id=11 (retrieved: 3 July 2013).
Fearon 2005	Fearon, J.D.; Primary commodities exports and civil war. In: Journal of Conflict Resolution 49 (2005) 483-507.
FinnWatch 2007	FinnWatch; Connecting components, dividing communities. Tin production for consumer electronics in the DR Congo and Indonesia. Helsinki, 2007.
ICGLR 2013a	International Conference on the Great Lakes Region. Website. Internet: https://icglr.org/spip.php?article94 (retrieved: 28 May 2013).
ICGLR 2013b	ICGLR Regional Certification Mechanism (RCM) – Certification Manual, Internet: http://www.oecd.org/investment/mne/49111368.pdf, (retrieved: 28 May 2013).
IPIS 2012	International Peace Information Service; The formalisation of artisanal mining in the Democratic Republic of the Congo and Rwanda. Bogor, 2012.
ITRI 2013	International Tin Research Institute (ITRI), Institute Website. Internet: https://www.itri.co.uk/index.php?option=com_zoo&task=item&item_id=2192&Itemid=189 (retrieved: 29 May 2013).
Johnson 2013	Johnson, D.; Bo Kivu, no conflict? The misguided struggle against "conflict minerals" in the DRC. Pole Institute. Goma, 2013.
LBMA 2013a	London Bullion Market Association; About the LBMA. Internet: http://www.lbma.org.uk/pages/index.cfm?page_id=9&title=about_the_lbma (retrieved: 18.07.2013)
LBMA 2013b	London Bullion Market Association; LBMA Responsible Gold Guidance. Version 5. London, 2013.
Le Billon 2001	Le Billon, P.; The political ecology of war: natural resources and armed conflicts. In: Political Geography 20 (2001) 561-584.
Lujala et al. 2005	Lujala, P.; Gleditsch, N.P.; Gilmore, E.; A diamond curse? Civil war and a lootable resource. In: Journal of Conflict Resolution 49 (2005) 538-562.

Metal Miner 2013	Metal Miner; Conflict minerals: Building responsible manufacturing supply chains. Internet: http://www.agmetalminer.com/wp/wp-content/reports/MetalMiner-Building-Responsible-Manufacturing-Supply-Chains-v2a.pdf (retrieved: 14.05.2013).
Mthembu-Salter 2013	Mthembu-Salter, G.; (Phuzumoya Consulting and former member of the UN Group of Experts on the Democratic Republic of the Congo): Telephone interview. 16.05.2013.
Narine et al. (2013)	Narine, M.; Frazer, J.; Pham, J.P.; Brief of amicus curiae experts on the Democratic Republic of the Congo on support of petitioners. US Court of Appeals/District of Columbia Circuit, USCA Case #12-1422, Document #1416913, 23 January 2013.
OECD 2011	Organisation for Economic Co-operation and Development; OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. Paris, 2011.
OECD 2013a	Organisation for Economic Co-operation and Development; Downstream Implementation of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. Final downstream report on one-year pilot implementation of the Supplement on Tin, Tantalum, and Tungsten. Paris, 2013.
OECD 2013b	Organisation for Economic Co-operation and Development; Upstream Implementation of the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas. Final Report on one-year pilot implementation of the Supplement on Tin, Tantalum, and Tungsten. Paris, 2013.
ÖNZ 2013	Ökumenisches Netz Zentralafrika; Dossier: Der Rahmenvertrag für Frieden, Sicherheit und Zusammenarbeit zur DR Kongo von Addis Abeba – Auftakt zum nachhaltigen Frieden in der Region der Großen Seen? Berlin, 2013.
PACT 2013	Pact: Official Website. Internet: www.pactworld.org (retrieved: 06.06.2013).
Poulsen 2010	Poulsen, F.P.; Blood in the Mobile. Documentary film. Denmark, 2010.
PPA 2013a	Public-Private Alliance for Responsible Minerals Trade; Official Website. Internet: http://www.resolv.org/site-ppa/ (retrieved: 05.08.2013).
PPA 2013b	Public-Private Alliance for Responsible Minerals Trade; General information document. Internet: http://www.resolv.org/site-ppa/files/2012/06/PPA-Overview-06-24-131.pdf (retrieved: 05.08.2013).
RJC 2009	Responsible Jewellery Council; Principles and Code of Practices. London, 2009.
RJC 2012	Responsible Jewellery Council; Chain-of-Custody (CoC) Standard. London, 2012.

RJC 2013	Responsible Jewellery Council; Official Website. Internet: http://www.responsiblejewellery.com/ (retrieved: 26.07.2013).
Ross 2004	Ross, M.L.; What do we know about natural resources and civil war? In: Journal of Peace Research 41 (2004) 337-356.
Rudahigwa 2012	Rudahigwa, P.P.; Seventy-two hours at the mining sites of Bisie. In: Pole Institute (Publisher): Blood Minerals – The criminalization of the mining industry in eastern DRC. Goma, 2012.
Sachs & Warner 1995	Sachs, J.D.; Warner, A.M.; Natural Resource Abundance and Economic Growth. NBER Working Paper 5398. Cambridge, 1995.
SEC 2012a	United Sates Security and Exchange Commission; Disclosure of Payments by Resource Extraction Issuers. Internet: http://www.sec.gov/rules/final/2012/34-67717.pdf (retrieved: 21.03.2013).
SfH 2013	Solutions for Hope Pilot Project, Project Website. Internet; http://solutions-network.org/site-solutionsforhope/ (retrieved: 03.07.2013).
Spitals 2010	Spitals, S.; The Complexity of Resource Governance in a Context of State Fragility: An Analysis of the Mining Sector in the Kivu Hinterlands", IPIS/International Alert, November 2010.
Stearns 2011	Stearns, J.; Dancing in the glory of monsters. The collapse of the Congo and the great war of Africa. New York, 2011.
Stearns 2012	Stearns, J.; North Kivu: The background to conflict in North Kivu province of eastern Kongo. Rift Valley Institute, Nairobi, 2012.
Stearns 2013	Stearns, J.; PARECO – Land, local strongmen and the roots of militia politics in North Kivu. Rift Valley Institute, Nairobi, 2013.
TI 2013	Transparency International; Corruption Perception Index 2012. Internet: http://cpi.transparency.org/cpi2012/ (retrieved: 25.06.2013).
UN 2001	Final report of the Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of the Congo. United Nations Security Council Document S/2001/357. New York, 2001.
UN 2002	Final report of the Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of the Congo. United Nations Security Council Document S/2002/1146. New York, 2002.
UN 2003	Final report of the Panel of Experts on the Illegal Exploitation of Natural Resources and Other Forms of Wealth of the Democratic Republic of the Congo. United Nations Security Council Document S/2003/1027. New York, 2003.
UN 2010	United Nations High Commissioner for Human Rights: Report of the Mapping Exercise documenting the most serious violations of human rights and international humanitarian law committed within the territory

	of the Democratic Republic of the Congo between March 1993 and June 2003. Geneva, 2010.
UNGoE 2006	Final report of the Group of Experts on the Democratic Republic of the Congo. United Nations Security Council Document S/2006/525. New York, 2006.
UNGoE 2007	Final report of the Group of Experts on the Democratic Republic of the Congo. United Nations Security Council Document S/2007/423. New York, 2007.
UNGoE 2008	Final report of the Group of Experts on the Democratic Republic of the Congo. United Nations Security Council Document S/2008/773. New York, 2008.
UNGoE 2009	Final report of the Group of Experts on the Democratic Republic of the Congo. United Nations Security Council Document S/2009/603. New York, 2009.
UNGoE 2010	Final report of the Group of Experts on the Democratic Republic of the Congo. United Nations Security Council Document S/2010/596. New York, 2010.
UNGoE 2011	Final report of the Group of Experts on the Democratic Republic of the Congo. United Nations Security Council Document S/2011/738. New York, 2011.
UNGoE 2012	Final report of the Group of Experts on the Democratic Republic of the Congo. United Nations Security Council Document S/2012/843. New York, 2012.
UNGoE 2013	Midterm report of the Group of Experts on the Democratic Republic of the Congo. United Nations Security Council Document S/2013/433. New York, 2013.
UN-SC 2010	United Nations Security Council: Resolution 1952 (2010). United Nations Security Council Document S/RES/1952. New York, 2010.
Van Reybrouck 2012	Van Reybrouck, D.; Kongo – Eine Geschichte. Berlin, 2012.
WB 2010	World Bank; Project Information Document (PID). Report No.: AB5302. Internet: http://www-wds.worldbank.org/external/default/WDSContentServer/WDSP/IB/2010/04/19/000262044_20100420091223/Rendered/PDF/PID0appraisal0april016.pdf (retrieved: 29.07.2013).
WB 2013a	World Bank; DRC-Growth with Governance in the Mineral Sector. Project information. Internet: http://www.worldbank.org/projects/P106982/drc-growth-governance-mineral-sector?lang=en&tab=overview (retrieved: 26.07.2013).
WB 2013b	World Bank & International Finance Corporation: Doing Business – Measuring Business Regulations. Internet: http://www.doingbusiness.org/rankings (retrieved: 25.06.2013).

WGC 2012	World Gold Council: Conflict-free Gold Standard. Internet: http://www.gold.org/download/cfgs/Conflict_Free_Gold_Standard_English.pdf (retrieved: 04.07.2013).
WGC 2013	World Gold Council: Official Website. Internet: www.gold.org (retrieved: 04.07.2013).
Wollschläger 2013	Wollschläger, M.; Telephone interview. 14.05.2013.
Young et al. 2011	Young, S, B., Dias G.; LCM of metals supply to electronics: tracking and tracing “conflict minerals”, in LCM 2011 –Towards Life Cycle Sustainability Management, 2011.
Young et al. 2012	Young, S, B., Dias G.; Conflict-free minerals supply-chain to electronics, Proceedings of the Electronic Goes Green Conference Berlin 2012.
Ziedler 2013	Ziedler, C.; Rohstoffkonzerne sollen ehrlich werden. News article in Der Tagesspiegel 11.04.2013. Internet: http://www.tagesspiegel.de/wirtschaft/rohstoffkonzerne-sollen-ehrlich-werden/8047754.html (retrieved: 29.04.2013).