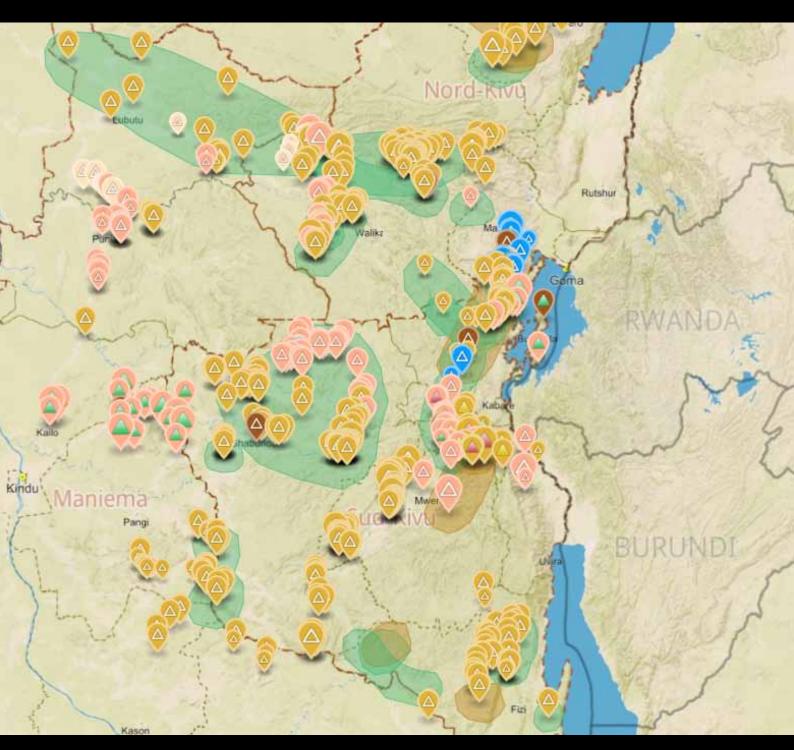
Analysis of the interactive map of artisanal mining areas in Eastern DR Congo: May 2014 update





Editorial

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IPIS dedicates this report to Germain Bikuba Assani, who was a diligent collaborator and a valued friend.

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Front Cover image: Screenshot of the interactive webmap of artisanal mining areas in Eastern DR

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Highlights

Section 1.1 discusses how the removal of M23 has generated hope that Eastern DRC will finally reach stabilisation, provided that a solution is found for the FDLR.

Section 1.2 points out that the groups that are profiting the most from the mining activities have retained (almost) all of their control.

In section 2.1 it is argued that the regulated part of the tin mining sector in Eastern DRC has already outgrown the 'problematic' part and that the number of remaining supply chains of 3T minerals in the Kivu provinces is relatively limited, which should facilitate their future management. Furthermore, it is discussed how gold is by far the most important artisanally mined mineral in eastern DRC. The sector is however much more affected by armed groups' interference.

Section 2.3 discusses the FDLR's most important source of income from natural resources.

Section 2.5 shows that the major part of Maniema's mineral production is free from military involvement. The extension of responsible sourcing programs should therefore be welcomed. The situation should however be closely monitored as some pockets of insecurity persist.

In section 2.7 it is argued that the relationship between artisanal mining and insecurity in Katanga requires further monitoring including transparent communication from all the stakeholders involved and that all would benefit greatly from collaboration and information exchange.

Chapter 3 shifts the focus to the need for companies to source responsibly, in accordance with the OECD Guidance. It provides detailed and practical guidance on how upstream companies could use the IPIS map to identify and assess risks in their supply chains.

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Background and introduction

In August 2009, the Belgian research institute 'International Peace Information Service' (IPIS), which has a long tradition in researching resource conflicts, published a map of militarised mining areas in the Kivu provinces of Eastern DR Congo.¹ At that time, Congolese minerals, especially tin and tantalum, had started to attract a lot of attention from Western consumers and governments who had learned that armed groups were financing themselves through mineral exploitation and trade. With a limited budget and the collaboration of Congolese researchers, IPIS collected coordinates of the Kivus' most important mining areas and information on the on-site security situation.

By 2012, interest in a map that could show the extent and concentration of the problem of conflict financing in the DRC had grown considerably. In previous years, international organisations such as the UN, ICGLR, the OECD, and the US with the Dodd-Frank Act had launched a series of policy initiatives to curtail international trade in 'conflict minerals' in the Great Lakes region.² The DRC government and international business had little option but to try to implement them. Although IPIS' 2009 map was still in circulation, it was out-dated and of little use to those searching for accurate information. The problem of conflict financing can shift from one area to another in the course of a few months as armed groups change positions. In addition, artisanal mining is sometimes characterised by sudden large migrations of miners, following changes in security, production and world market prices.

To find a structural solution for the need for accurate and up-to-date information, IPIS met with the Congolese mining cadastre (CAMI), the group responsible for the DRC's mining concessions, including those in official artisanal mining zones. They agreed to partner up with IPIS in organising a permanent system to monitor artisanal mining activities and the involvement of armed groups and criminal networks in mineral exploitation and trade. So as to ensure the optimal use of existing expertise, other Congolese mining services, in particular the 'Service d'Assistance et d'Encadrement du Small-Scale Mining' (SAESSCAM), were included in the collaboration along with representatives from local civil society organisations who could contribute their perspective on security and human rights issues. Finally, the World Bank, through its PROMINES programme, and the Belgian Ministry of Foreign Affairs expressed their willingness to fund the collaboration.

A first version of the map, resulting from the collaboration described above, was published in November 2013. A second version can be found at: www.ipisresearch.be/mapping-eastern-drc-2013?&lang=en. It shows the location of 150 trading centres (map) and nearly 1100 mining sites (map) in Eastern DRC. Along with the Kivu provinces, the map includes detailed information on artisanal mining in the neighbouring areas of North Katanga, Maniema and the Ituri District of Province Orientale. A few areas were not mapped, mostly because the security situation did not allow our teams to travel there, and in some cases because they had already been visited by a governmental 'qualification mission'. These areas are indicated as 'Zones inaccessibles' (map).

The map provides information about the on-site presence of armed groups and criminal elements within the Congolese army (FARDC) and their activities, as well as indicators of the relative importance of the site (see Image 1). The user can apply several filters to the data to produce maps showing specific types of minerals or specific types of military control. For some mining sites, additional information will be available on the mining and security history of the area. Users can also find whether mining sites have been 'validated' (licensed to operate) by the Congolese government; the governmental 'qualification missions' of 2014 have though not yet been included on the map. Information on industry traceability

¹ Interactive map of militarised mining areas in the Kivus with accompanying note, IPIS, August 2009.

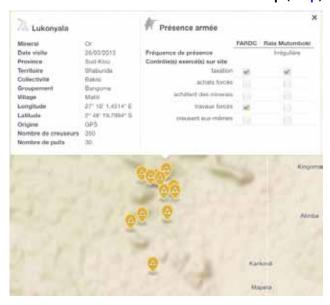
² See e.g. IPIS, *Guide to Current Mine Reform Initiatives in Eastern DRC*, April 2011, and, recently, Öko-Institut e.v., *Conflict minerals – An evaluation of the Dodd-Frank Act and other resource-related measures*, August 2013.

In the Dodd-Frank Act, Section 1502, it is stated that the Secretary of State should produce "a map of mineral-rich zones, trade routes, and areas under the control of armed groups in the DRC and adjoining countries". Several such maps have been produced since the enactment of the law in July 2010, all based on the IPIS 2009 map for the Kivus (note above) and an IPIS 2010 study, with maps, for Maniema, North Katanga and southeastern Province Orientale: IPIS/International Alert, *The complexity of resource governance in a context of state fragility. An analysis of the mining sector in the Kivu hinterlands*, November 2010.

initiatives is not (yet) available.³ Furthermore, an extra layer has been created, on the basis of a 10-km radius around mining sites, to indicate areas where a particular armed group interferes in the mining sector (map). Another layer shows C. Vogel's June 2014 mapping exercise of armed groups in the Kivu provinces (map). ⁴ Finally, a search function helps the user to locate specific mining sites and mineral trading centres.

The data was collected by nine teams each composed of SAESSCAM agents and civil society representatives equipped with GPS devices and questionnaires. It was centralised by a focal point, based in Bukavu and composed of a SAESSCAM, a CAMI and an IPIS representative, before being checked and published by IPIS on a web map. All staff involved in the data collection received specialised training from IPIS. IPIS also organised intensive training for CAMI staff, preparing them to gradually start managing the data and

Image 1: The Lukonyala gold mine as an example of information on the IPIS map (map)



publishing the maps themselves. IPIS is seeking to make further updates to the map by way of targeted field visits. These updates would entail strengthening the information flow from the field towards the central level through synergies with existing information networks, such as that of iTSCi, and through the development of crowd-sourcing networks. In such a future project, IPIS would hope to increase the geographic range of the project by extending the area of operations to Central Katanga and Bafwasende territory, Province Orientale.

This text provides a summary of the data collected by the local teams between March 2013 and March 2014 as presented by IPIS on its web map. It analyses the most striking findings, focussing on developments surrounding security.

The map is a valuable resource for companies, in particular mineral traders, conducting due diligence on their supply chains. The map can help companies' in their efforts to assess actual and potential risks in their current operations, as well as pointing out unexploited, conflict-free areas that might be eligible for sourcing.

That said, it needs to be stressed that the map is not a substitute for a company's responsibility to conduct its own verification of the security conditions in the mining areas it sources from. In contrast to the DRC government mining site validation, or the ICGLR regional certification mechanism, the map does not offer any legal guarantees.

A second important target audience of the map is made up of local, national, regional and international policymakers. The map can provide them with guidance in implementing policy initiatives to tackle the issue of conflict financing through mineral exploitation and trade. The map particularly enables area-specific policy interventions because it identifies and demarcates both problematic zones and mining areas offering opportunities for responsible trade. As such, it can be used to avoid draconian and indiscriminate measures such as the September 2010 presidential ban on all mining and related activities in the Kivus and Maniema.

Finally, researchers, campaigners and other observers might find the map a useful tool for monitoring the performance of both mineral traders and policy makers when dealing with the issue of mineral trade from Congo's conflict-affected East.

³ Despite an encouraging verbal agreement and subsequent requests, ITRI has not shared any information with IPIS on its iTSCi scheme as of yet.

⁴ Vogel C., Mapping: The evolving Landscape of Armed Groups in the Democratic Republic of the Congo, online: http:// christophvogel.net/mapping/

1. Security developments in Eastern DRC

In a first short chapter we summarize the main security developments of the past six months in Eastern Congo. A general overview of the security situation is given along with a focus on how developments have impacted on the mining sector.

1.1 An important decrease in armed group activity

On 12 December 2013, the Kampala dialogue between the M23 rebel movement and the Congolese government concluded in Nairobi. A joint ICGLR-SADC communiqué announced that a consensus was reached between the two parties "to end the armed activities of M23". The statement confirmed the military defeat of M23 by the joint forces of the Congolese army and MONUSCO's intervention brigade in early November.

The swift and resolute removal of what had been the strongest rebel group within the DRC has generated hope among both the Kivus' population and international observers that the country's eastern region will finally reach stabilisation. Indeed, in the months following M23's defeat, the Kivus saw a spike in rebel surrenders. Whereas some of the surrendering groups were M23 allies, who had been dependent on their support, others had fought against the M23 and saw their direct enemy disappear. In addition, the robust stance by the combined DRC/UN forces against the remaining armed groups is convincing the latter to demobilise and disarm.

Continuing military operations, especially in North Kivu, have been successful in weakening armed groups and driving them out of their traditional strongholds. Most efforts have so far been concentrated against the ADF in the territory of Beni. On 14 April 2014, the Congolese government announced the capture of the "last remaining base" of the Ugandan/Islamist rebels. Another notable achievement was the FARDC capture of the APCLS (*Alliance des Patriotes pour un Congo Libre et Souverain*) headquarters in Lukweti earlier in March. In November 2013 the Congolese army had already dislodged Ntabo Ntaberi Sheka's NDC (Nduma Defense of Congo) from the town of Pinga.

For both the Kivu provinces, the crucial question remains of what course of action should be taken against the FDLR (Forces Démocratiques de Libération du Rwanda) and when. Although military operations against the FDLR have been announced on several occasions since December 2013, as of May 2014, they had yet to begin. The Rwandan rebels have bases in both North and South Kivu, where they have been present for almost 20 years. Previous military operations, such as Umoja Wetu in 2009, succeeded in weakening the FDLR, but never managed to resolve the problem.¹⁰

Beyond the Kivus, specifically in Ituri and Central Katanga, longstanding problems of insecurity persist as well. Moreover, as opposed to North Kivu, neither of the areas have seen significant improvements in their security situation in the past six months. On 31 March the FARDC command in Ituri announced another round of military operations against the FRPI, while MONUSCO promised reinforcements to support the Congolese army. The rebels have been chased from several towns/villages, such as Bavi. However, they are still present in the area, occasionally carrying out attacks on villages.

In Katanga, the Mai-Mai Bakata Katanga continue to wreak havoc in the territories of Mitwaba, Pweto, Malemba Nkulu and Manono. Humanitarian organisations reported on 27 January 2014 how the

⁵ Joint ICGLR-SADC Final Communiqué on the Kampala Dialogue, 12 December 2013.

⁶ Mueller T. & Bafilemba F., *Policy Alert: Rebels Surrendering in Eastern Congo - Time for Feingold and Robinson to Act,* Enough Project, 18 December 2013.

Olonel Albert Kahasha, for example, declared his intention to surrender soon after the M23 defeat. Since his defection from the FARDC in January 2012, the ex-Mudundu 40 rebel commander had assisted M23 in building a coalition with other armed groups in South Kivu, North Kivu and Ituri on several occasions.

⁸ Vogel C., With M23 gone, will other armed groups in Eastern DRC demobilise?, 21 November 2013.

⁹ AFP, Kinshasa annonce avoir capturé la dernière base de rebelles ougandais après d'intenses combats, 14 April 2014.

Military operations against the FDLR have never reached a conclusion. This is not surprising because they have never been combined with a (credible) diplomatic process. Despite repeated advice by Tanzanian President Kikwete, Rwanda insists that it is not willing to negotiate with the FDLR because some of its remaining commanders are suspected to have participated in the 1994 Rwandan genocide.

militias had burned 66 villages during the five previous months.¹¹ Whereas Bakata Katanga's actions were previously often characterised by symbolic operations and/or targeted attacks to obtain arms and ammunition, they increasingly include scorched earth tactics with severe impacts on the local population.

1.2 Insecure mining areas have remained largely insecure

Despite the achievements described above, it appears that the security situation in mining areas has not significantly improved. As disastrous as its impact may have been on the stability of the region, the M23 rebellion was never much involved in mining and the ADF has not been either. Their disappearance will therefore have little effect on the interference of armed groups in the mineral trade, which continues to damage the reputation of one of the most important economic activities in the region.

In total, at 591 mines of the 1088 visited by our teams the presence of at least one armed group was reported. At 96 of these two armed groups were present. Interference by the armed groups mostly involved illegal taxation, though on several occasions there were also reports of forced labour (See figure 1).

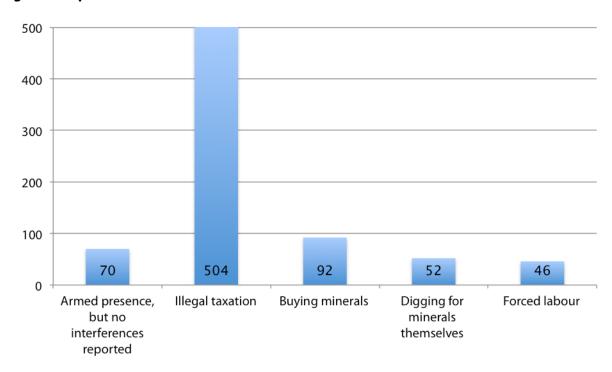


Figure 1: Reported interferences

The armed groups who profit the most from mining and mineral trade remain largely unaffected.¹³

In North Kivu, the NDC retains control over a large mining area (map). Before the militia lost Pinga to the Congolese army, it interfered in more than 80 mining sites of various sizes where a total of approximately 15,000 artisanal miners were active. The loss of Pinga is unlikely to significantly affect Sheka's involvement in the mining business, as the areas under his control are more to the west, deeper into the inaccessible interior of Walikale. Moreover, it appears that the rebel leader, who is infamous for longstanding war

¹¹ Radio Okapi, *Bakata Katanga:* 66 villages incendiés en 5 mois, 27 January 2014. Such attacks continued in the first months of 2014. On 11 April, for example, the Bakata Katanga fighters burned approximately 100 houses in the territory of Pweto, see Radio Okapi, *Des miliciens Bakata Katanga incendient une centaine d'habitations à Katendeji et Musesha*, 12 April 2014.

¹² On M23, see: IPIS, *Mapping conflict motives: M23*, November 2012. Regarding the ADF, the latest Group of Experts report states that "ADF finances its activities through a network of businesses and connections... in the towns of Butembo, Beni and Oicha." Interests in the gold business only seems to be a minor part in these networks: UN Group of Experts report S/2014/42, January 2014, §88.

¹³ IPIS, Analysis of the interactive map of artisanal mining areas in Eastern DR Congo, November 2013.

profiteering, is trying to establish his control over additional mining sites. Sheka was reported to have attacked the FDLR in the area of Fatua in early April 2014.¹⁴ Fatua is one of the mining areas producing gold for the important gold market of Kasugho in the territory of Lubero.

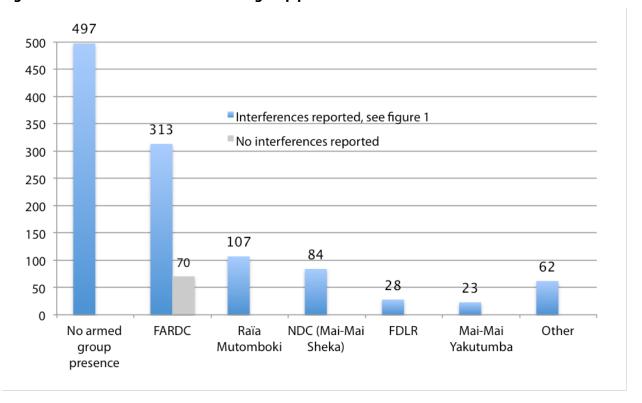


Figure 2: Number of mines with armed group presence

In South Kivu, the interference by the Raïa Mutomboki in almost 110 mining sites and several mineral trading centres remains mostly unchallenged. The rebels are virtually omnipresent in artisanal mining areas in both the north and the west of the province (map). In addition, as previously pointed out by IPIS, their interference generates an impact beyond the border with the neighbouring province of Maniema, through which some South Kivu minerals are being traded.¹⁵ That said, the Congolese army did launch an attack on 10 April against the rebels' positions in Mulungu (Shabunda).¹⁶ The town itself is a mineral trading centre where the Raïa Mutomboki were levying taxes. Immediately north they have a presence at several mining sites of the Baliga *groupement* (map).

Furthermore, the recent military accomplishments by the Congolese army against armed groups have not resolved the problem of lack of discipline within its own ranks in mining areas. Data collected within the framework of this project shows that FARDC units are present at more than 1 out of 3 mines (map), though in 70 mines no interference by these units was reported (map). Data collected in November and December 2013 shows, for example, how the FARDC have installed various systems of illegal taxation at mining sites in the territory of Mwenga, South Kivu. This affects at least 6000 artisanal miners around the gold mining centre of Kamituga alone (map). IPIS has previously pointed out FARDC exploitation and taxation at mining sites around the town of Misisi in the territory of Fizi, an area where Mai-Mai Yakutumba have economic interests as well (map). Although Yakutumba and the Congolese army appeared to have an arrangement to operate alongside each other in the mining region, on 8 April 2014 they clashed, and this resulted in six civilian casualties. Military sources have been quoted as claiming

¹⁴ Radio Okapi, *Nord-Kivu: de nouveaux déplacés affluent à Kasugho depuis 3 jours,* 8 April 2014. The Fatua mine has not yet been visited by our teams and is therefore not included on the web map.

¹⁵ IPIS (November 2013), *op. cit.,* p. 11.

¹⁶ Radio Okapi, Sud-Kivu: les FARDC délogent les Raïa Mutomboki de plusieurs localités à Mulungu, 11 April 2014.

¹⁷ IPIS (November 2013), *op. cit., pp. 11-12*.

¹⁸ OCHA, Bulletin d'information humanitaire: Province du Sud-Kivu, 16 April 2014.

that the fighting originated from the issue of army integration, but local sources pointed at the control of the mining site.¹⁹

Finally, the territory of Mambasa in Province Orientale saw a promising development in security, justice and the fight against the illegal exploitation of Congo's natural resources come to a sudden end, just two days after it transpired. Mai-Mai commander Paul Sadala, aka 'Morgan' (map), surrendered along with 42 of his combatants on 12 April 2014. In the past years, Morgan, originally a poacher, had built a terrible reputation because of the atrocities committed by his men during attacks on villages, mining sites and the Okapi Reserve ranger station in Epulu. His involvement in ivory and gold trafficking as a supplier to a wider criminal network connected to high FARDC echelons had allowed him and his accomplices to escape justice on several previous occasions.²⁰ However, before Morgan could be brought to justice and reveal details about this network, he died under suspicious circumstances while being transported by the Congolese army to Bunia. Regardless of how Morgan died, the event will have a negative impact on future security in the area. Other commanders of similar armed bands will be little inclined to surrender in the near future, and criminal networks involved in illegal trade in ivory and gold might well continue their activities undisturbed.²¹

¹⁹ Radio Okapi, Sud-Kivu: 1000 familles ont fui les combats entre miliciens et militaires à Misisi, 10 April 2014.

²⁰ UN Group of Experts report S/2012/843, November 2012, pp. 34-35.

²¹ Meanwhile Radio Okapi has reported that one of Congo's most senior military magistrates, Major-General Munkutu Kiala, has taken the lead in the investigation of Morgan's death, bringing cautious hope that justice might still be served (*Un haut magistrat à Bunia pour enquêter sur la mort de Morgan*, 16 May 2014). The judges investigating the case allegedly receive protection from the Congolese police and MONUSCO.

2. Eastern DRC's artisanal mining sector: insights and trends from the map

In this chapter we present some major developments, trends and insights on the artisanal mining sector found on the web map. Following a first section, discussing the overall trends, the analysis is organized by province. Striking findings from previous maps are summarized at the beginning of each section.

2.1 Overall trends

Recap of previous findings (period March-October 2013)

Gold mining is currently by far the most important subsector in Eastern DRC's artisanal mining business. Even though there have been previous indications of the great extent of artisanal gold mining in the region, the data collected suggest a scale that probably surpasses any previous estimate or expectation.

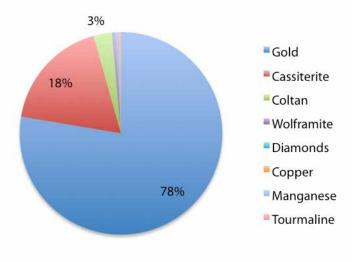
3T mining used to attract more miners. The reasons for the sharp decline are diverse: international regulation, low demand, low prices paid for the minerals, the growth of a semi-industrial mining sector and the depletion of certain deposits.

The shift of artisanal miners from 3T mining to gold has important consequences on the issue of financing of armed groups and criminal networks, because gold is widely available all over Eastern DRC and provides armed groups with ample opportunities to take their share, especially through taxation.

Different army reforms seem to have had insufficient impact on correcting the conduct of units deployed in mineral-rich areas. Illegal taxation by the Congolese army is more frequent than armed group interference in artisanal mining.

The data collected after October 2013 confirms the preponderant importance of the gold sector in comparison with the other minerals. Out of an estimated 221,500²² artisanal miners active in the mining sites visited in the framework of this research (1088 in total), 1350 were digging for tungsten (wolframite), more than 7000 for tantalum (coltan), about 32,000 for tin (cassiterite) and no less than 176,000 for gold. This means that four out of five artisanal miners work in the gold sector. (See figure 3) Further confirmation comes from the data collected at the level of the trading centres. Out of the 148 markets for minerals visited, gold was available in 136.

Figure 3: Artisanal miners/mineral, Eastern DRC



The number of miners reveals the importance of the artisanal mining sector as a livelihood opportunity. Estimating the diggers' actual revenues from artisanal mining is almost impossible though. Miners, as well as other actors in the sector, are rather reluctant to share info on their earnings, and, besides, these

The magnitude of this figure merits emphasis. To put it into perspective: the overall number of people active in artisanal mining in Eastern DRC is roughly equal to the total number of employees of mobile phone giant Samsung. Source: Samsung Electronics, Sustainability Report 2012.

earnings are extremely volatile.²³ The data gathered by our field teams, however, allow us to make some rough estimates on miners' average revenues. Multiplying the price per weight unit offered at the mining site with the estimated production at that site, divided by the estimated number of miners, reveals the value of production per miner. Assuming that miners receive between half and one-third of that value as a remuneration,²⁴ cassiterite miners would earn on average between US\$ 67 and 100 per month. For gold, the average lies somewhere between US\$ 70 and 105 per month. These figures are in line with estimates based on in-depth field research by Geenen in South Kivu, who calculates that miners might earn between US\$ 36 and 118 per month during a mine's preparatory period, and between US\$ 128 and 195 per month during periods of high production.²⁵

The high number of gold markets, mentioned above, also shows how the gold trade is spread all over eastern DRC. For other minerals, the supply chains are much simpler. In the case of tantalum, for example, there are, other than North Katanga, only 2 other major production and trade areas. Besides the well-known area of Rubaya (map) in the territory of Masisi (North Kivu), only the territory of Shabunda (South Kivu) appears to produce coltan in significant quantities, especially around Lulingu in the north.

The number of tin ore markets is fairly limited as well. Apart from Katanga (map), the regulated area of Nyabibwe in Kalehe (South Kivu) (map) and the rapidly developing tin sector in northern Pangi (Maniema) (map), the major selling points for tin ore are Mubi, Ndjingala (Walikale, North Kivu) (map) and Hombo (Kalehe, South Kivu). Considerably smaller but still important local tin hubs are the markets of Punia (Maniema) (map), Shabunda, Nzibira (Walungu, South Kivu) and Lemera (Uvira, South Kivu).

The current output of the regulated and secure part of the 3T mining sector in Eastern DRC is comparable to that of the 'problematic' part. At production levels of the second half of 2013, the total annual 3T production figure for iTSCi sites in Katanga, Maniema and South Kivu would roughly arrive at 7500 tonnes in 2014.²⁶ This is slightly more than the roughly estimated minimum production levels of 3T mines on our map that are not covered by iTSCi. Provided that the industry efforts in Nyabibwe, North Katanga and Maniema are sustained and expanded, this will greatly improve the region's reputation. The data on our map even shows that almost 74% of 3T miners are currently working in mines where no armed group involvement has been reported. As discussed above, however, the number of 3T miners has declined, as many of them have turned to gold mining. Consequently, less than 20% of artisanal miners are working in the Eastern Congolese 3T sector.

The positive developments in the 3T sector stand in contrast to the gold sector. Gold mining is Eastern DRC is plagued by security problems and fraud. According to the data gathered during our teams' field visits, 57% of gold miners are working in mines with armed group presence.²⁷

Based on the information collected by our field teams, the artisanal gold mines on the web map produce an estimated minimum of 8 to 10 tonnes of gold per year. It is however important to indicate that this figure does not include the production of gold by semi-industrial operations on Ituri's rivers, which is unrecorded, but allegedly amounts to at least 2 tonnes per year.²⁸ Furthermore, this estimate does not include production figures from the areas that could not be visited by our teams for security reasons (see areas marked 'zones inaccessibles' on the web map). As official gold exports totalled only about 200 kg in 2013, more than 98% of artisanally produced gold is smuggled out of the country.²⁹

The magnitude and spread of the artisanal gold sector, the small volume-high value ratio of gold, and the fact that it is used as a means of payment, complicate any attempts to increase and improve its

²³ Geenen S., 'Qui cherche, trouve': The political economy of access to gold mining and trade in South Kivu, DRC, IOB, University of Antwerp, May 2014, p. 173.

²⁴ Ibid.; Pact, PROMINES Study: Artisanal Mining in the Democratic Republic of Congo, June 2010, pp. 98-99.

²⁵ Geenen S. (May 2014), op. cit., pp. 173-174.

²⁶ Calculation based on figures from iTSCi bi-annual reports. See: iTSCi/Pact, Status Report iTSCi South Kivu Field Operations: July -December 2013; iTSCi/Pact, Status Report iTSCi Katanga Field Operations: July -December 2013; iTSCi/Pact, Status Report iTSCi Maniema Field Operations: July -December 2013.

²⁷ The total percentages of militarised mines are very likely to be even higher for both gold and 3T, as our teams could not visit several areas for security reasons.

²⁸ IPIS (November 2013), *op. cit.*, p.13.

²⁹ UN Group of Experts report S/2014/42, January 2014, §171; Partnership Africa Canada, *All that glitters is not gold: Dubai, Congo and the illicit trade of conflict minerals*, May 2014, p. 13.

regulation. A comprehensive approach is therefore indispensable.³⁰ Nevertheless, geographically targeted policies might already impact on large sections of the gold chain, as more than 50% of the gold trade appears to go through the 15 biggest trading centres.³¹ Furthermore, targeted interventions by the army hierarchy and military justice, possibly with support from MONUSCO, might address the blatant misbehaviour of some FARDC units at important mining sites. The gold mines around Kamituga (South Kivu) (map) and Musebe (Katanga) (see section '2.7 Katanga' and map), both employing around 6,000 miners, are clear examples.

2.2 Overview of the map data per province

Our teams covered the mining zones of almost the entire east of Congo. A few areas were not mapped, mostly because the security situation did not allow our teams to travel there, and in some cases because they had already been visited by a governmental 'qualification mission'. These areas are indicated as 'Zones inaccessibles' (map). By April 2014 our field teams had visited the following territories:

Province of North Kivu:

Territory of Lubero

Territory of Walikale (excluding the southeast and remote areas in the north)

Territory of Masisi (excluding the southwest, restricted access due to security situation)

Territory of Beni (excluding the east because of ongoing military operations)

Province of South Kivu:

Territory of Kalehe

Territory of Kabare

Territory of Walungu

Territory of Shabunda

Territory of Fizi

Territory of Uvira

Territory of Mwenga (excluding the southeast, restricted access due to security situation)

Province of Maniema:

Territory of Lubutu (excluding the north, restricted access due to security situation)

Territory of Punia (excluding the east, restricted access due to security situation)

Territory of Kailo

Territory of Pangi (excluding the northeast, visited by the August 2012 qualification mission)

Territory of Kasongo

Territory of Kabambare

District of Ituri (Province Orientale):

Territory of Mambasa (excluding the south and southwest, restricted access due to security situation)

Territory of Irumu (restricted access due to security situation)

Territory of Djugu

Territory of Mahagi

Territory of Aru

³⁰ Matthysen, K. & Zaragoza Montejano, A., 'Conflict Minerals' Initiatives in DR Congo: Perceptions of Local Mining Communities, IPIS, November 2013, pp. 33-44.

³¹ The top 15 on our map are Misisi, Shabunda, Manguredjipa, Mubi, Kibua, Nyange, Ngalula, Kasugho, Bunyatenge, Lubichako I & II, Mongbwalu, Ndjingala, Kamituga and Lugushwa.

Province of Katanga:

Territory of Kalemie (excluding northeast, restricted access because of security situation and ongoing military operations)

Territory of Nyunzu

Territory of Moba (excluding the south and the west, restricted access because of security situation)

Territory of Manono (excluding north and east, restricted access because of security situation and ongoing military operations)

2.3 North Kivu

Recap of previous findings (period March-October 2013)

The closest mining area to the provincial capital of Goma is Rubaya, in the territory of Masisi, which is one of Congo's major production centres of coltan (tantalum). It has been controlled by members of the Nyatura militia group, but they did not seem to be involved in the mining business.

In the territory of Walikale, the NDC has established control over a string of gold mines in the west, centre and east of the area. In central and eastern Walikale the NDC has to tolerate competition from other armed groups and the FARDC in both cassiterite (tin) and gold mining. In some areas up to three different armed groups collect taxes.

Central and southern Lubero territory are important gold production areas where the Rwandan FDLR (*Forces Démocratiques pour la Libération du Rwanda*) rebels and the local Mai-Mai forces of the UPCP (*Union des Patriotes Congolais pour la Paix*) have a strong presence. The UPCP controls the mining site of Musigha which appears to employ almost 17,000 miners producing up to 3.75 kilos of gold each week.

Except for the Mai-Mai-controlled northwestern corner, the north of the province is largely under the control of the FARDC who organise illegal taxation of mining activities. Consequently, most of Lubero's northern gold deposits could be considered for responsible sourcing, depending on whether the FARDC units stop their interference.

Some of the busiest gold trading centres of the region are located in North Kivu, especially in the territories of Walikale and Lubero. The North Kivu markets where several kilos of gold are traded on a weekly basis are: Manguredjipa, Kasugho, Bunyatenge, Ndjingala, Mubi and Kibua. Some of these markets have long been identified as important selling points for minerals. Mubi and Ndjingala, for example, are known to be the main markets for minerals from large and remote mines such as Bisie and Omate (map). However, other towns appear to be busier than previously presumed in terms of trade. The Lubero town of Manguredjipa (map), for example, is surrounded by relatively small gold mines but receives gold from other areas, including the neighbouring territory of Mambasa in the District of Ituri. Possibly the greatest surprise in terms of volume of trade is the town of Kibua in Walikale. Kibua (map) is located on the main road from Walikale to Goma, via Masisi. The NDC also profits from the town's gold trade, by levying taxes at a barrier it has installed nearby.

Overall, there have been reports of armed group involvement in 79% of the mines visited by our teams in North Kivu (map). Half of this interference can be attributed to the FARDC (map). Among the armed groups in North Kivu, the NDC clearly interferes the most in the mineral trade (map), frequenting and/ or controlling more than 80 mining sites where every week up to a total of 9 kg of gold are produced. Throughout Eastern DRC, only the Raïa Mutomboki appear to control more mines, including some in the south of Walikale (map).

Although the FDLR are militarily more than the equal of the NDC, they control considerably less 'mining assets'. The Rwandan rebels' positions³² in the resourcepoor territory of Rutshuru are, for example, clearly not linked to the presence of mining sites (map). That being said, the FDLR's most profitable area, in terms of income generated through interference in the artisanal mining sector, is located in North Kivu. More precisely, they are present in the south of the territory of Lubero around the major gold trading towns of Kasugho and Bunyatenge (map). According to the data collected by our teams, in these towns alone a total of almost 10 kg of gold is traded on a weekly basis. As previously raised by the UN Group of Experts,33 the FDLR share the control over this area with the Mai-Mai UPCP (ex-PARECO) (map).34

Regarding the presence Nyatura in Rubaya, ITRI reported that the branch of the Nyatura militia under command Lieutenant-Colonel Habarugira, which was in control of the town of Rubaya (map), had finally demobilised in November 2013.35 Other Nyatura rebels, however, are still sheltering in Masisi's forests, and some of them are digging for minerals in the Rubaya area. Allegedly, their main commander, 'general' Munyamariba, is the owner of a pit near Rubaya, on the Nyange site. Nevertheless, as opposed to

Image 2: Screenshot of North Kivu on IPIS map (map)

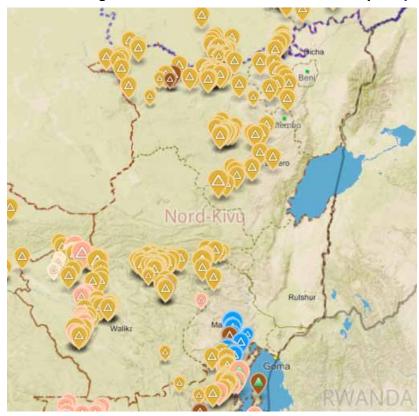
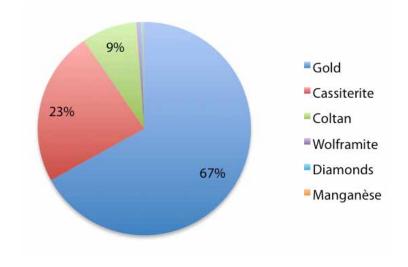


Figure 4: Artisanal miners/mineral, North Kivu



³² See the latest map on the C. Vogel's blog: http://christophvogel.net/mapping/, or see the layer on the IPIS map that shows C. Vogel's June 2014 mapping exercise of armed groups in the Kivu provinces.

³³ UN Group of Experts report S/2011/738, December 2011, p. 267.

³⁴ Our teams were not (yet) able to visit the remote northern parts of Walikale, bordering southern Lubero. Therefore, the mines under FDLR control shown on the map only represent a part of the group's economic interests.

³⁵ Meanwhile, after a validation mission in February 2014, ITRI reported that it would soon launch its iTSCi traceability scheme in Rubaya, following the improvement of the security situation and the approval of the concession holder Mwangachuchu Hizi International (MHI) as a full iTSCi member. Source: Channel Research, iTSCi Governance Assessment: Rubaya, North Kivu, commissioned by ITRI, November 2013.

the gold mines of Beni, Lubero and Walikale, Masisi's 3T mines seem to be largely free from military involvement.

Finally, it is worth pointing out that several diamond mines are located in Walikale. Similar to the diamond mines in northeastern Maniema, the Congolese army levies taxes on the mining activities (map). As we have explained in previous analyses, as opposed to the gold and 3T sectors, it is not prohibited under Congolese law for a diamond trader to do business in areas where the army interferes in the trade.³⁶ Consequently, where a gold trader at the Kasakana mine should disengage when military control of the mine persists, his colleague in the nearby diamond mine of Makula can continue to buy diamonds (map). This inconsistency sends mixed signals to the soldiers and traders involved and should be addressed.

2.4 South Kivu

Recap of previous findings (period March-October 2013)

Armed conflict in South Kivu has been mostly low-intensity in nature in the past years. Nevertheless a wide range of armed groups control pockets of territory, including some mining areas. Armed group interference is particularly prevalent in Shabunda, where Raïa Mutomboki interfere in virtually all stages of the mineral trading chain. In addition, the Raïa control mining areas in neighbouring territories, such as the Nindja chiefdom of Kabare territory.

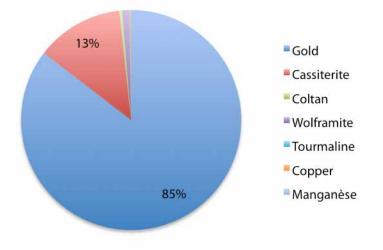
In both the territories of Kalehe and Shabunda the interference of militia groups presents a risk to the ongoing closed-pipeline initiatives. For example, each month at least an estimated 12 tonnes of coltan and 8 tonnes of cassiterite arrive in Kindu from within the rebel-controlled area of Penekusu in southwestern Shabunda. On the other hand, the relatively low intensity of the conflict also presents an opportunity to enlarge the area for responsible sourcing to other sites, provided these are further secured and civilian control is re-established.

Civilian control is critical because several FARDC units abuse their presence to collect 'war contributions' from the miners and mining communities. This is particularly striking in the territory of Fizi, where 12,500 diggers are working under the de facto control of army units from the 112th and 113th regiment levying illegal taxes and exploiting mining pits themselves. The Mai-Mai Yakutumba control 6 gold mines in Fizi as well, but their grip on the sector is much smaller than the FARDC's.

Armed group presence has been observed by our teams in 58% of South Kivu's mines (map). Unlike in neighbouring North Kivu, there is no noticeable difference in interference by armed men between gold and 3T mines. The gold mining sector is though much bigger in South Kivu.

Raïa Mutomboki interference in artisanal mining and mineral trade activities appears to have remained largely unchallenged (map). The only reported FARDC operation against the Raïa was launched on the 10th of April at the mineral trading town of Mulungu (Shabunda)

Figure 5: Artisanal miners/mineral, South Kivu



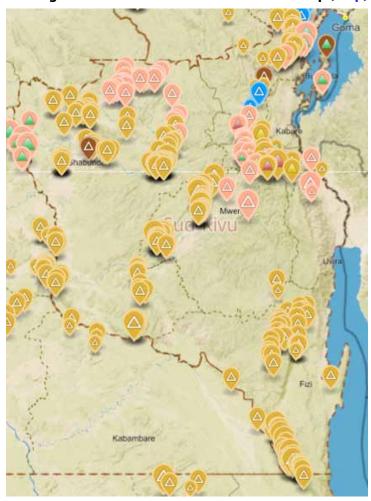
³⁶ IPIS (November 2013), *op. cit.*, p. 12.

(map). Interestingly, our teams have reported how, prior to that operation, the armed group was demanding all state services in Mulungu to hand over no less than 40% of their tax income to them. This constituted of course a serious further erosion of Kinshasa's authority over the area. The Raïa use a similar system of laying claim to taxes in other areas under their control, but mostly stick to a more moderate 20%, the tariff they use, for example, in the mining area of Lulingu (map).

FDLR control over mining areas in South Kivu seems rather limited, especially in comparison to the extensive control by the Raïa Mutomboki and the Congolese army. Apart from a few isolated sites in Kalehe territory, the Rwandan rebels retain positions in the northeast of Mwenga territory and in the Itombwe forest.³⁷ They are active at both gold and cassiterite mines and sometimes work as miners themselves (map).

The accord between the Mai-Mai Yakutumba and the Congolese army in several mining areas in the territory of Fizi (map) appears to have fallen apart. The rebels and the FARDC clashed on

Image 3: Screenshot of South Kivu on IPIS map (map)



several occasions in and around the major gold trading hub of Misisi (map) in April 2014. While FARDC sources reported that Yakutumba's attacks were intended to force Kinshasa to negotiate the rebellion's integration in the national army, underlying competition over Misisi's mineral trade should not be excluded as a possible motive for the attacks. After all, during previous attempts to force Kinshasa's hand, the Mai-Mai attacked administrative centres, notably Baraka. Moreover, the Mai-Mai Yakutumba have a reputation when it comes to gold smuggling and launching economically motivated attacks.³⁸

Although the interference of civilian authorities is an issue beyond the scope of this project, and therefore does not feature on our map, our teams have often reported cases of illegal taxation by state agents throughout Eastern DRC. Their reports are confirmed by several other sources. For example, specifically for the case of Fizi, a commission of inquiry from the provincial assembly of South Kivu has looked into the extent and the impact of such systems of illegal taxation in gold mining and trade.³⁹ The picture of parallel taxation and personal enrichment by state services painted in its report is startling. Moreover, its findings are highly relevant to the issue of army interference as well, because any attempt to change the FARDC's attitude and behaviour towards the artisanal mining sector can only be successful if the problem of illegal taxation is tackled as a whole. It is a matter of state authority to change a system that benefits criminal networks. If that does not happen, Congolese army units deployed in the field will continue to interfere, either on request or on their own initiative.

³⁷ Due to the insecurity, our team could not enter the Itombwe forest (map), or the Bashimwenda 2 *groupement* (the site of, for example, the Lukatu mine).

³⁸ Stearns J., Mai Mai Yakutumba. Resistance and racketeering in Fizi, South Kivu, RVI Usalama project, pp. 37-48.

³⁹ Commission d'enquête de l'assemblée provinciale de la province du Sud-Kivu, *Rapport de mission sur les activités minières dans le territoire de Fizi*, February 2014.

2.5 Maniema

Recap of previous findings (period March-October 2013)

Maniema's mining sites are largely free from militarisation. Therefore, responsible sourcing from the province, even beyond the sites where industry tagging is ongoing, seems to be feasible.

Nevertheless, there have been some reports of illegal taxation of mining activities by the FARDC in the northern territories of Punia, and particularly Lubutu. Gold mining is especially affected, but there has also been some interference in cassiterite and diamond mining. Furthermore, 'General' Mando's Mai-Mai Simba have been involved in gold mining in Maiko National Park.

Maniema's gold production is almost entirely destined for Bukavu. In the southern territories of Kabambare and Kasongo (map), gold mainly passes by the trading centres of Salamabila (map) and Bikenge (map), near the South Kivu border, before heading on to Bukavu. Kampene, in the south of Pangi territory, also hosts some gold from surrounding mining sites.

Almost all miners in southern Maniema are currently digging for gold. The busiest area is the tail of the gold belt running from Twangiza, over Kamituga and Lugushwa (South Kivu) to Namoya. The Canadian company Banro Corporation holds several concessions in this gold belt, including the Namoya area. The mines around the village of Matete, to the east of Salamibala, host up to 3000 miners (map). Many of them arrived there after they were displaced by Banro's local branch in Namoya.

Nord S Nord S Nord S Nord S

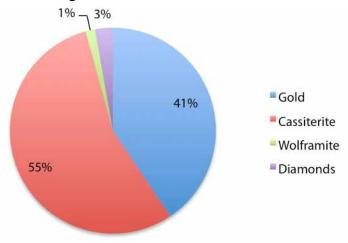
Image 4: Screenshot of Maniema on IPIS map (map)

Gold mining is not only flourishing in the south, but also the northern part of the province, in Lubutu territory and the northern part of Punia (map). Diamonds also continue to attract hundreds of miners in Lubutu. These diamonds are transported to Kisangani, passing by Lubutu town. The area's mineral sector is however affected by military involvement. Armed group presence was reported in 40% of the mining sites visited in Lubutu (map).

Regarding cassiterite, the town of Punia seems to be the main trading centre in the northern part of the province. Cassiterite arrives in the town from all over the territory, and from the southern part of Lubutu (map). In 2012 the provincial government decided that the minerals should be transported from Punia to Kindu, in order to distinguish Maniema's mineral production from that of the Kivus. In Kindu the minerals should be loaded onto a train taking them to the port of Kalemie on the shores of Lake Tanganyika.

The main cassiterite hub is however located in the centre of the province, around the towns of Kailo and particularly

Figure 6: Artisanal miners/mineral, Maniema



Kalima (map). The mines surrounding Kalima alone employ at least five to six thousand miners. The area has been covered by the iTSCi traceability project since December 2012.

In February 2014, ITRI announced that it had extended iTSCi into the territory of Punia, to cover the mines surrounding the towns of Punia and Kasese. The extension of iTSCi should be welcomed, but the situation in Punia ought to be closely monitored. Although cassiterite mines surrounding Punia town are currently free from any military involvement, the FARDC have been levying illegal taxes in the territory's gold mines (map). The area of Kasese should also be closely watched. It has traditionally been heavily militarised, with several FARDC units and Mai-Mai movements disputing the control of mines.⁴⁰ There is now also a threat from the Raïa Mutomboki. They are active in the neighbouring territories of Shabunda and Walikale and clashed with the FARDC last year near Kasese.⁴¹ Furthermore, since late 2013, another armed group, called Mai-Mai Kem, has been operating in the border area between the territories of Kailo, Punia and Shabunda. They have allegedly been involved in gold mining.⁴² Consequently, due to the security situation, our local team could not visit the eastern part of Punia territory (map).

2.6 Ituri

Recap of previous findings (period March-October 2013)

Ituri's artisanal mining sector revolves almost entirely around the exploitation of gold. On a yearly basis the district produces at least 2 tonnes of gold, excluding the unrecorded semi-industrial operations on Ituri's rivers.

The bulk of the district's gold production originates from Djugu territory, which seems to be free from military involvement. The gold mines in Irumu territory, on the other hand, do play an important role in conflict financing. Cobra Matata's FRPI rebellion in particular was renowned for its involvement in the gold mines around Bavi. In October 2013, it was however reported that the FARDC had driven the FRPI away from several towns.

Mambasa has been especially affected by the activities of the Mai-Mai Morgan. They have mostly been known for poaching, but also for extortion at and pillaging of mining sites.

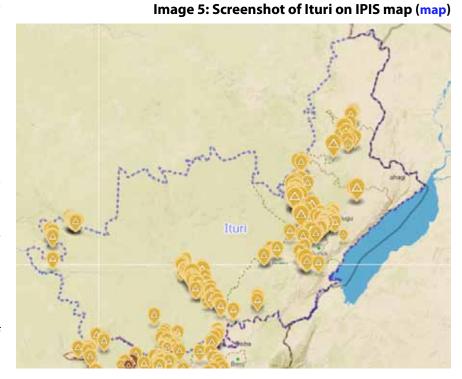
⁴⁰ IPIS/International Alert, *The complexity of resource governance in a context of state fragility. An analysis of the mining sector in the Kivu hinterlands*, November 2010, pp. 30-31, 37-38.

⁴¹ Radio Okapi, *Maniema: la population de Punia dans le dénuement, deux mois après les combats entre militaires et miliciens,* 12 April 2013; Radio Okapi, *Kindu: les combats entre FARDC et Raïa Mutomboki font 2 morts,* 15 November 2013; Radio Okapi, *Maniema: incursion des miliciens Raïa Mutomboki à Kibeleketa, 1 mort,* 26 November 2013.

⁴² Radio Okapi, *Maniema: 5 000 personnes fuient les exactions des Maï-Maï Kem's à Kalima*, 22 November 2013.

Regarding the security situation, lturi's mining experienced areas have some notable developments in recent months. On 31 March, after a two-month DDR sensitization campaign, which persuaded over 100 FRPI fighters to surrender, **FARDC** launched the another round of military operations against FRPI.⁴³ Furthermore, as noted above, Mai-Mai commander 'Morgan' surrendered together with 42 of his combatants on 12 April 2014 in the territory of Mambasa.

While the involvement of FARDC units in the mining business in Ituri's southern territories of Irumu and



Mambasa is still worrying (map), the security situation at the mining sites in the northern territories of Mahagi and Aru is similar to that in Djugu, with no reports of armed group involvement as noted by our team's visit in February 2014 (map).

More than 5,300 workers have been counted in the mines of the territories of Mahagi and Aru. As opposed to Djugu territory, most of these miners' production does not pass through Bunia. After being traded in local trading posts, and then passing by urban centres such as Djalasiga and Aru, it leaves the country through Ariwara. This is also an important point of export for gold from the Haut-Uele district.

Production and trade figures were harder to obtain in Mahagi and Aru, as a significant number of local interviewees were reluctant to share data, or seemed to underrate gold production and trade. When

compared to the numbers of workers at other mining sites, however, Mahagi and Aru probably have fewer than the other Ituri territories. Almost 6,300 miners were counted in Irumu alone, and more than 8,000 in Mambasa. Djugu, however, remains by far the most important gold producing territory with 28,000 people working in the mines.

Semi-industrial gold production on Ituri's rivers with so-called *dragues* (dredges), small machines mounted on boats or rafts, remains a controversial issue. For several years these boats have been exploiting gold in Ituri, for example in Mambasa.⁴⁴ In recent years they have become quite controversial in Irumu territory as well, as many of them allegedly extract gold

7% 4% 13% - Irumu - Mambasa - Djugu - Mahagi - Aru

Figure 7: Gold miners/territory, Ituri district

⁴³ Radio Okapi, Ituri: plus d'une centaine de miliciens se sont rendus depuis fin janvier, 19 March 2014; Radio Okapi, Province Orientale: appuyée par la Monusco, l'armée lance son opération contre la FRPI, 1 April 2014.a

⁴⁴ IPIS/International Alert (November 2010), op. cit., p. 48.

illegally. The provincial government, local authorities and the local civil society have heavily criticised the companies who do this. Protests have even degenerated into local security incidents.⁴⁵ Our teams have encountered the Chinese operators Fametal, Coomid and Gold Dragon Resources using these rafts in Irumu territory. Furthermore, such rafts have also been observed by our local teams on the river Osso, on the border between Lubutu territory (Maniema), and Walikale (North Kivu).

2.7 Katanga

Recap of previous findings (period March-October 2013)

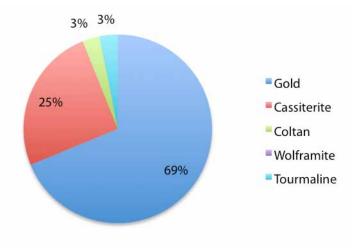
Tin and tantalum mining in North Katanga is no longer affected by armed group or army interference. The combined pressure from provincial authorities and industry has led to the disengagement of the FARDC from 3T mines. Despite these important achievements, the efforts have not led to an overall change in the FARDC's general disposition towards artisanal mining. For example, the 61st Brigade has installed an extensive system of biweekly tax collection at a string of gold mines in the east of Kalemie territory.

The FARDC have also taken an interest in the booming Musebe gold mine. Here, over a few months, the population of miners grew to 15,000-30,000.⁴⁶ It is not the first time that North Katanga has seen large shifts of miners, nor will it be the last. Therefore, the DRC government and other stakeholders should develop a response strategy to tackle the negative health and security impacts.

In the territory of Moba, insecurity is again on the rise with 'Kata Katanga' combatants present in the west. However, up till now, the east has been virtually free from interference of rebels or army in the mineral trade. The area, producing at least 3 kg of gold each week, is therefore suitable for organising official gold trade from a responsible supply chain.

Our team's December 2013 visit to the tin mining area at the border area between Manono and Malemba Nkulu (map) shows that further research on artisanal mining activity in the lesserknown Katangan territories of Manono, Malemba Nkulu, Mitwaba, Bukama and Pweto is required. In the northeastern tip of Malemba Nkulu, where the iTSCi scheme is installed, large quantities of tin are produced with good security. However, our teams report that further to the east, in eastern Manono, at least one medium-sized tin mine, Kabunda, has suffered repeated attacks from a group of Mai-Mai (map). While iTSCi asserts that incidents around Kabunda have not impacted on ongoing tagging

Figure 8: Artisanal miners/mineral, North Katanga



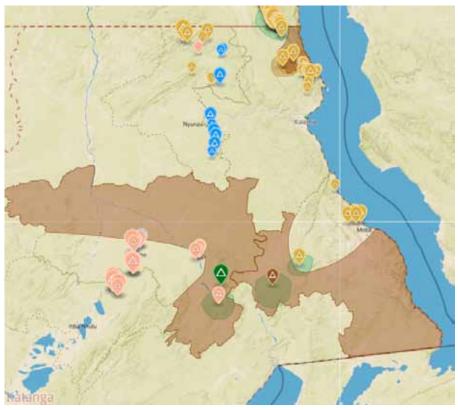
⁴⁵ Radio Okapi, *Province Orientale: des sociétés chinoises accusées d'exploiter illégalement de l'or à Irumu, 26* October 2012; Radio Okapi, *Province Orientale: une entreprise chinoise sommée d'arrêter l'exploitation de l'or à Irumu, 27* October 2012; Radio Okapi, *Province Orientale: marche des habitants de Soleniama contre les sociétés d'exploitation de l'or, 17* November 2013; Africa Mining Intelligence, *Fametal is SOKIMO's partner, 26* March 2013.

⁴⁶ 15,000 was the number reported by our local teams that visited the site on the 30th of March 2013. About 3 months later, the mining population appeared to have doubled: Radio Okapi, *Katanga: 4 personnes succombent à des maux de tête et à la toux à la mine Musebe,* 25 June 2013.

operations,⁴⁷ our team reports that at least one mining cooperative, ACM, was attacked.

The security situation in Katanga (and its impact on artisanal mining) requires further monitoring and transparent communication from all stakeholders involved. Success stories regarding responsible mineral sourcing from this area should not be an excuse for avoiding open and frank communication regarding the province's difficulties. The UN Office for the Coordination of Humanitarian **Affairs** (OCHA) was recently cited as reporting 35 attacks by Mai-Mai 'self-defence militias' in the Katangan

Image 6: Screenshot of North Katanga on IPIS map (map)



territories of Kalemie, Manono, Mitwaba, Pweto, and Moba, including the burning down of villages, kidnapping of civilians, rape, killings, and pillaging in the first four months of 2014 alone.⁴⁸ Industry should increase efforts to report more extensively on these incidents.

Of course, the area to be monitored is vast and its scope cannot be compared to an area such as Nyabibwe, on which iTSCi reports in greater detail. The range of action of the Bakata Katanga spans virtually all eastern Katangese territories with significant artisanal mining activity. While the UN Group of Experts has reported about their presence in the northern territories of Kalemie and Nyunzu,⁴⁹ their March 2013 'attack' on the provincial capital of Lubumbashi in the very south was widely reported in the media. In the centre west, Mitwaba has been the fiefdom of the movement's (symbolic) leader Gédéon, and in December 2013 a Mai-Mai faction threatened to attack the town of Moba in the very east of the province.⁵⁰ On the map this vast region appears to be almost as big as both the Kivu provinces together. Consequently, all stakeholders would benefit greatly from collaboration and information exchange.

Finally, no industry initiative will be sustainable without a sincere change in attitude within the Congolese security forces. In the gold mining site of Musebe (map), where the number of diggers in March 2014 reportedly had dropped to around 6000, army involvement appears to continue, as well as interference from the mining police and the *Agence Nationale de Renseignement* (ANR).⁵¹ In December 2013 it was reported that security forces clashed over "a sum of money given by the miners".⁵² Furthermore, our map shows how the FARDC (from Manono) controls a big tourmaline mine, Kyoboyi, in the territory of Manono, where they collect taxes (map).

⁴⁷ iTSCi/Pact (July-December 2013), op. cit.

⁴⁸ HIS Jane's Intelligence Weekly, *Increasing Mai-Mai attacks in Katanga raise security risks to DRC mining operations and road cargo*, 5 May 2014.

⁴⁹ UN Group of Experts report S/2012/843, November 2012, p. 198.

⁵⁰ Ngoy Amisi G., Incursion de Mai Mai Kata Katanga dans trois villages de Moba et un Mai Mai de Yakutumba arête par l'ANR de Kongolo, RFI blog, 28 December 2013.

⁵¹ Mthembu-Salter G., *Baseline study one: Musebe artisanal mine, Katanga*, draft version, Phuzumoya Consulting, OECD, May 2014

⁵² Ngoy Amisi G., *Altercation entre militaires de FARDC et elements de Police des Mines dans le site minier de Musebe*, RFI blog, 16 December 2013.

3. Responsible sourcing of 3Ts and gold: Using the map to assess risks in the supply chain

While recognising the vital contribution that private sector involvement would make to the development of the DRC and the broader Great Lakes region, the international community has become increasingly concerned with the adverse impacts of companies' operations.

Notably, companies involved in the mining and trading of minerals have the potential to generate revenues, sustain local livelihoods and foster economic and social development. However, in an environment where armed conflict is still ongoing, impunity is rife and governance is weak, the same companies can easily become implicated in conflict financing and human rights abuses.⁵³

The starting point of this chapter is that no economy operates in isolation, either in war or in peace, and distant conflict regions become interconnected with the rest of the world through globally stretched supply chains. The challenge for companies purchasing minerals from Central Africa is therefore to ensure that these interconnections do not fuel the region's conflicts.

Companies as global governance actors in conflict zones

While it is important to acknowledge that peace processes are bound to be political, it is also critical to understand how private sector development interacts with the economic drivers of conflict. In war-torn countries or high-risk areas where weak or failing state authorities create major regulatory gaps, companies are increasingly considered to be governance actors – or 'political actors'. Over the past decade, policymakers have reached out to businesses to get them involved in contributing to peace and security in conflict-affected areas.

The very first policy dialogue of the UN Global Compact explored the role of the private sector in zones of conflict, offering a forum for businesses to discuss the risks associated with their operations in these areas. In 2004 the UN Security Council established a working group on the role of business in prevention, peacekeeping and peace-building. In 2006 the OECD published a set of guidelines for companies operating in weak zones of governance. Other sector-specific or context-specific examples come from the experience of the Kimberley Process Certification Scheme (KPCS) and the Voluntary Principles on Security and Human Rights, jointly developed by the UK and US governments in partnerships with oil giants such as BP and Shell.

The first reports concerning conflict minerals came out several years ago,⁵⁵ but the problem is far from being solved. In their latest report from January 2014, the UN Group of Experts on the DRC stated, "armed groups and FARDC continue to control many mining sites and to profit from mining and the minerals trade [...] During 2013, minerals - particularly tin, tantalum and tungsten - continue to be smuggled out of Eastern DRC".⁵⁶

As shown by the latest updates of the IPIS map, the DRC remains a difficult business environment, as many mines in the East are still controlled by either armed groups or the FARDC, making it particularly problematic for international buyers of 3Ts and gold (3TG) to ascertain whether they are purchasing

⁵³ Human rights abuses are defined as: i) any forms of cruel, inhuman and degrading treatment; ii) any forms of forced or compulsory labour, which means work or service which is exacted from any person under the menace of penalty and for which said person has not offered himself voluntarily; iii) the worst forms of child labour (as per ILO Convention 182); iv) other gross human rights violations and abuses such as widespread sexual violence; v) war crimes and other serious violations of international humanitarian law, crimes against humanity or genocide.

⁵⁴ Ruggie J., Corporate Social Responsibility and the Global Compact, in Journal of Corporate Citizenship, 5, pp. 27-36, 2004.

⁵⁵ See a.o. UN Group of Experts report S/2010/596, November 2010, explaining how armed groups support themselves through the minerals trade. See also a.o. Global Witness report, *The hills belong to them: the need for international action on Congo's minerals trade*, December 2010, underlining the role of the Congolese army in the conflict minerals business.

⁵⁶ UN Group of Experts report S/2014/42, January 2014.

'conflict' or 'conflict-free' minerals. Buying conflict minerals does not necessarily alter the pattern of the pre-existing war economy, but companies might find themselves sustaining a pattern where mineral exploitation has long provided funding for rebel activities or extra income for criminal networks within the national army.

According to the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, companies need to be scrupulously careful when assessing risks in their supply chains, and the risk of sustaining the 'conflict minerals' pattern is one to be prioritised and promptly managed.

This chapter seeks to show how the IPIS map could help to address the disjuncture between the risk assessment requirements and the upstream companies' ability to pinpoint risks on an operational level. After introducing the OECD risk-based due diligence framework and defining what 'risk' means in this context, this chapter provides detailed and practical guidance on how upstream companies could use the IPIS map to identify and assess risks in their supply chains. It also briefly elaborates on how the map could be relevant when upstream companies explore new mining and trading options and plan operations in new areas.

3.1 The OECD Guidance and other initiatives for responsible business conduct

A mix of legal and policy actions taken at the international, regional and national level is currently trying to ensure that conflict minerals do not enter companies' value chains. Recent legislative and regulatory initiatives require companies to prove that their minerals are either not from conflict-affected areas (proof of origin) or that their sourcing and trade have been conducted with due diligence.

The US financial sector reform law adopted in July 2010, the Dodd-Frank Act, includes an important provision regarding trade in conflict minerals from the DRC and adjoining countries (known as 'covered countries'). The provision, to be found in Section 1502 of the Act, requires companies registered on US stock exchanges that use minerals from the Great Lakes region of Africa to file annual reports to the Securities and Exchange Commission (SEC) describing what measures they have taken to ensure that their mineral purchases do not support armed groups in the DRC, i.e. what due diligence they have done on their supply chains.⁵⁷ The rule clearly specifies that due diligence must be conducted in accordance with a nationally or internationally recognised framework.

At present, the only such framework is the OECD Guidance. The Guidance is articulated in five steps, as follows:



⁵⁷ At the time of writing, companies affected by the US Dodd Frank Section 1502 are in the process of preparing their reports. It is estimated that 6,000 issuers will be subject to Dodd- Frank Section 1502.

In 2011-2012, a pilot project was conducted to implement the OECD Guidance and its Supplement on 3Ts in the Great Lakes region. IPIS was contracted by the OECD to assist 67 companies based in the region to implement the 5-step framework throughout their business operations. The pilot led to the creation of islands of traceability in the DRC and Rwanda, and helped to strengthen cross-border governance of the mining industry. 9

On the business side, industry groups took steps to ensure that their mineral supply chains would not continue to stoke conflict in the DRC. Different initiatives target different actors/sections of the supply chain. The iTSCi scheme plays a key role in the upstream section of the chain, aiming to guarantee traceability of 3T bags leaving selected areas in the Great Lakes, while the efforts led by the Conflict-Free Sourcing Initiative (CFSI) mostly tackle the challenges arising downstream, for instance by providing guidance to companies on due diligence reporting requirements.⁶⁰

At the regional level, in 2010 the member states of the ICGLR adopted the 'Lusaka Declaration to Fight the Illegal Exploitation of Natural Resources in the Great Lakes Region' – an instrument that includes a certification mechanism.⁶¹ In November 2013, Rwanda became the first ICGLR country to certify its mineral exports under the ICGLR certification mechanism.⁶² The DRC followed in February 2014 with the first Congolese mineral batch being certified in Kalindi, South Kivu.⁶³

3.2 Assessing conflict and human rights risks in accordance with the OECD Guidance

With the spread of multi-stakeholder initiatives on business & human rights, and encouraged by the ten-year-long debate on corporate responsibility, companies are increasingly looking at human rights risks, and are starting to understand their responsibilities and obligations beyond their core business. Traditional company risk assessment reviews the potential adverse impacts on a company, seeking to answer the question: 'How could political, security, legal and reputational factors hinder or otherwise negatively affect this business?' Conflict and human rights risk assessment processes (such as those required by the OECD Guidance or the UN Guiding Principles on Business & Human Rights) require businesses to frame the question differently: 'How could my business operations negatively affect other people, for instance by exacerbating conflict or contributing to human rights abuses?'

To effectively address this overarching question, companies need to switch from the lens of 'financial risk' (i.e. any risk that might prevent the company from turning a profit) to the lens of 'non-financial risk'. Far from being a labelling or CSR exercise, this switch presents a complex task and requires that the imperative of not funding conflict or abuses is broken down into a set of sub-questions that analyse all actual and potential adverse impacts which could come about within a company's value chain.

⁵⁸ OECD, 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, January 2013.

⁵⁹ Chatham House, Liberti, L. & Crowell, R., *The Search for a Normative Framework Governing Conflict Minerals,* September 2012, p. 8.

⁶⁰The Conflict Free Sourcing Initiative (CFSI) is an initiative of the EICC and GeSI, and offers a range of guidance documents for companies about best practices and various standards on addressing conflict minerals in the supply chain and reporting. See also: OECD, Downstream 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, January 2013; and IPIS, Guide to Current Mining Reform Initiatives in Eastern DRC, April 2011.

⁶¹ Shortly afterwards, Partnership Africa Canada published a detailed report outlining key recommendations for implementing the certification scheme. See: ICGLR Regional Certification Mechanism (RCM) Certification Manual: http:// www.oecd.org/investment/mne/49111368.pdf.

⁶² AllAfrica, Rwanda Gov't issues first ICGLR mineral export certificate, 6 November 2013.

⁶³ Radio Okapi, Sud-Kivu: la CIRGL certifie les minerais de Kalindi, 9 February 2014.

⁶⁴ Several factors have played a role in diffusing these practices into the business sector, from NGOs 'naming and shaming' campaigns to human rights lawyers litigating companies for their misbehaviour to market incentives such as investors beginning to rate companies in accordance with their 'sustainability' performances. For an overview of some of these processes, see: Waddock S., Corporate responsibility/ corporate citizenship: The development of a construct, in Scherer A.G. and Palazzo G. (eds.), Handbook of Research on Global Corporate Citizenship, 2008, p. 52.

Risk assessment: Step 2 of the OECD Guidance in a nutshell

The primary focus is on the identification of risks that contribute to the perpetuation or instigation of armed conflict.

The Guidance also identifies a broader set of risks, including: serious abuses associated with the extraction, transport or trade of minerals providing direct support to non-state armed groups and public or private security forces; bribery; fraudulent misrepresentation as to the origin of minerals; money laundering; illegal taxation and corruption.

The OECD was sensitive to the risk that artisanal miners would be further marginalised by measures designed to promote transparency and responsible sourcing, and decided to make risk assessment for artisanal mining enterprises more flexible.

One crucial element is therefore the identification of problems along the supply chain. While downstream companies need to identify potential risks surrounding sourcing conflict minerals, upstream companies and mines need to ensure they are up to standard in order to place their minerals on the international market. Until now, building due diligence into the upstream industry has been quite arduous. At the very local level, most businesses survive as they can, adopting a variety of coping mechanisms to keep afloat. The leverage that downstream companies can wield over upstream players is quite limited, especially in the gold sector. As for 3Ts, most buyers rely on the iTSCi traceability system to determine whether the ores that enter their chains are conflict-free.

According to the OECD Guidance, upstream companies are expected to clarify the circumstances of mineral extraction, handling, trade and export.⁶⁵ In practice, this means that they are required to assess the risks deriving from the context in which they operate and map out the activities and relationships of all their suppliers.

In broad terms, during the due diligence process a company should look at its operations and relationships in their social, political and economic contexts. It should then analyse these observations in light of the OECD standards and other relevant norms. To capture the full picture, a risk assessment process should combine desktop research and analysis of relevant documentation, with data verification in the field.

After having reviewed the applicable standards⁶⁶ by which the company's conduct must be assessed, the assessment team is expected to start with the details of Step 2 of the Guidance.

Desktop research is needed to gather information on the company's operational context and key suppliers and identify areas where there are discrepancies between factual circumstances of 3TG mining/trading practices and the standards set out in the Guidance and in any other relevant applicable instruments.

To know more about the operational environment, the risk assessment team is tasked with reviewing the available relevant documentation. This can include reports from the UN Group of Experts or other investigative reports compiled by organisations such as Human Rights Watch, Enough, Global Witness or IPIS. For example, IPIS' map could be used. It offers very valuable insights when it comes to tracking the history of mining sites and the current security situation in and around a specific site and it includes transportation routes and points where minerals are traded. It is an interactive tool, allowing assessors to select specific mine/trading centres and filter out information on them. It can contribute to several aspects of the risk assessment process (see Box below).

⁶⁵ OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas, Second Edition, 2012, p. 41.

of the OECD Guidance, (b) national laws of the countries where the company supply chain policy, consistent with Annex II of the OECD Guidance, (b) national laws of the countries where the company is domiciled or publicly-traded (if applicable), of the countries from which the minerals are likely to originate, and of transit or re-export countries, (c) legal instruments governing company operations and business relations, such as financing agreements, contractor agreements, and supplier agreements, (d) other relevant international instruments, such as the OECD Guidelines for Multinational Enterprises, international human rights law and international humanitarian law. See: OECD Guidance, op. cit., p. 42.

After the desktop analysis, a tentative list of conflict and human rights risks should be drawn up. Ideally, the list should cover a description of the nature of the harm involved, the affected people and the potential link to the company's sourcing or trading practices.

The desktop research and the tentative list should be corroborated by verifiable, reliable and up-to-date evidence gathered on the ground during field visits by the assessment team.⁶⁷ Amongst other matters, the team should be able to obtain first-hand evidence of the factual circumstances of mineral extraction, trade or export, thus verifying in person whether the mine sites, transportation routes or trading centres are militarised.⁶⁸

Using the map to answer key risk assessment questions (3Ts)

The OECD Guidance identifies a set of key questions to be answered through a thorough risk assessment process.⁶⁹ These questions relate to common circumstances found in the supply chain of 3T ores.

The following are the questions for which the map can provide valuable input:

1. Does one know the context of the conflict-affected and high-risk area of mineral origin, transit or export?

Together with its accompanying report, the map is a key source of recent information and it allows for a very high level of detail. The user can zoom in on specific sites/areas, and immediately access factual information regarding armed groups' presence and level of involvement in mining activities

2. Does one know the conditions of mineral extraction?

The map enables risk assessors to find out whether non-state armed actors or the FARDC levy illegal taxes on miners or benefit from the mining activities through other avenues, for instance by engaging in mining themselves when 'off-duty'. The map also indicates – for every site covered - whether there are cases of forced labour.

The map does not currently offer extensive coverage of other issues relating to conditions of extraction, such as child labour, or human rights violations or abuses such as widespread sexual violence on mine sites. Nor does it address violations of international humanitarian law. However, the platform does offer the possibility to add such information in the future.

3. Does one know the conditions of mineral trade?

The map enables the user to see where the main trading centres are located, whether any armed groups or the FARDC are present and provides them with a description of the exact level of involvement of state/non-state military actors. In addition, this accompanying report and the previous one⁷⁰ highlight patterns of conflict and abuse in the areas surrounding the centres.

Also, knowing the location of trading centres, the minerals handled at every centre and having an overview of the area(s) supplying them is valuable for the assessors, who will be able to check how a specific mine site fits into the broader trading landscape (i.e. What is the closest trading centre? What minerals are traded there?).

⁶⁷ Appendix: Guiding Note for Upstream Company Risk Assessment, in OECD Guidance, op. cit., p. 54.

⁶⁸ *Ibidem*, p. 55.

⁶⁹ *Ibidem*, pp. 54-60.

⁷⁰ IPIS, Analysis of the interactive map of artisanal mining areas in Eastern DR Congo, November 2013.

Using the map to answer key risk assessment questions (gold)

As far as gold is concerned, the map could shed light on the factual circumstances of ASM gold extraction and trade, and could help the risk assessors spot actual and potential 'red flags'. A list of red flags is provided in the Gold Supplement of the Guidance⁷¹; notably, the map could be helpful in identifying whether the gold originates from or has been transported through a conflict-affected area, and whether gold producers are known to have sourced gold from a red flag location in the last 12 months.

The OECD Guidance clearly lists the information companies should collect when investigating their ASM gold supply chains⁷².

The following are the areas where the map and its accompanying report can provide valuable input:

- 1. Information on the government, political or military affiliations of ASM gold producers and suppliers, in particular affiliation with non-state armed groups and/or the FARDC;
- 2. Information on any direct or indirect support to non-state armed groups or to the FARDC through the extraction, transport and trade of gold;
- 3. Some instances of conflict or tensions in the relationship between medium and large-scale miners and ASM communities.

3.3 Business development: Exploring new opportunities in Eastern Congo

One of the key objectives of the OECD Guidance is to create economically viable opportunities for responsibly sourced 3TG while avoiding the stigmatisation of specific resources, commodities or countries. The focus is therefore on the creation of clean supply chains, characterised by the elements of legality and traceability, within the Great Lakes region, and specifically in the DRC. One method that has been used to achieve this is the creation of closed pipelines to enable artisanally mined 3TG to enter the market.

Closed-pipe supply chains: From mine to end-user

In July 2011, Motorola Solutions and AVX launched the Solutions for Hope (SfH) project as a pilot initiative to source conflict-free tantalum from the DRC (Katanga province). Other companies such as Nokia, Hewlett Packard and Intel have subsequently joined the project. SfH created a closed-pipe supply line involving a defined set of suppliers and buyers along the whole supply chain, i.e. pre-assessed mine sites that participate in the iTSCi traceability programme, ASM cooperatives, exporters, smelters/processors, component manufacturers and end-users. Most recently, SfH moved beyond northern Katanga and started expanding in North Kivu, thus trying to start sourcing responsibly from Congo's war-torn provinces.

In September 2012, the Dutch government, together with industry partners Philips and Tata Steel, established the Conflict-free Tin Initiative (CFTI) in South Kivu, specifically identifying Kalimbi (Nyabibwe) as a pilot tin mine (map). Most recently, CFTI expanded its mining operations to Maniema, a province bordering South Kivu, which carries the advantage of being far less prone to conflict.

Closed-pipe supply chains have also attracted some criticism from local stakeholders, who argued that the 'top-down' approach does not take into account local stakeholders' perspectives.⁷³

⁷¹ *Ibidem*, pp. 87-88.

⁷² *Ibidem*, pp. 93-94.

⁷³ Matthysen, K. & Zaragoza Montejano, A., 'Conflict Minerals' Initiatives in DR Congo: Perceptions of Local Mining Communities,

One of the tasks of the risk assessment teams is to review all internal documents regarding a company's current and planned operations, including their business development plans. Responsible companies should first develop a thorough understanding of the context in which they seek to operate. Risk assessors should be able to see what new operations are being planned and if they are due to take place in high-risk areas. In this context, upstream companies and their risk assessors could use the IPIS map to monitor all security developments at one specific mine/area that could potentially be 'next in line' for a responsible sourcing programme.

The map also offers detailed figures concerning the number of *creuseurs* currently active at a specific mine, and additional information on when the mine was last visited by an IPIS team and whether the mine has been validated by an ad hoc validation mission. All this information will be regularly updated, and companies can consult the map as a source of information in the run-up to setting up a new sourcing programme involving a site in Eastern Congo.

Also, recognizing that updates only capture a precise moment in a mine's lifetime and do not aid companies in identifying risk-prone features from a mine's past, IPIS recently decided to include a history of important mining sites and trading centres along with the map. The map will soon include at least one site/area history for every

Image 7: The Lubile mine, in Maniema, as an example of the information per mine on the IPIS map (map)



province in Eastern Congo. IPIS plans to expand this in order to offer a more comprehensive picture of the various sites' histories and specific challenges. At the time of writing, IPIS' sites' history covers both sites where responsible sourcing is already up and running (e.g. Kalima (map)) and sites/ territories where no sourcing initiatives are currently being rolled out.

An example of the latter is Djugu (map), in Ituri, a gold-rich area that has been conflict-free for several years and could therefore be not only attractive but also eligible for sourcing.⁷⁴

November 2013, pp. 21, 34, 37-38.

⁷⁴ Of course, this first step in identifying an area as conflict-free needs to be complemented by more in-depth checks on issues that the map currently does not cover, such as human rights risks and other risks that go beyond conflict financing.

Conclusion

An initial interactive map of artisanal mining areas was published in November 2013. A first update of this map is now available online. This update includes additional mining sites, trading centres and other detailed information regarding artisanal mining and the trade in minerals, as well as the involvement of armed groups or the Congolese military therein.

Over the past six months several important security developments have occurred. Military operations in Eastern DRC have seen some success in weakening armed groups and driving them out of their traditional strongholds, including groups such as the ADF, APCLS and FRPI. Most importantly, these operations have also seen the defeat of the M23. Nevertheless, a wide range of security issues persists. For example, the FDLR continues to be operative in the Kivu provinces and the Mai-Mai Bakata Katanga are occasioning considerable displacement in several Katangan territories.

Despite the military gains outlined above, the security situation in mining areas does not appear to have significantly improved. Those armed groups profiting the most from mining and mineral trading, such as the NDC in North Kivu, and the Mai-Mai Yakutumba and Raïa Mutomboki in South Kivu, remain largely unaffected. Furthermore, the Congolese army continues to suffer from a lack of discipline within its own ranks in mining areas.

In the artisanal mining sector, gold mining remains by far the most important subsector in Eastern DRC; over four in five artisanal miners work in the gold sector. A comprehensive strategy to improve governance in the sector is therefore needed. As for 3T mining, the regulated areas in Eastern DRC have already outgrown the more 'problematic' ones, and remaining 3T supply chains in the Kivu provinces are relatively limited in number, which should facilitate their future management.

In the Kivu provinces, a wide range of armed groups continue to be involved in the mining sector. Nevertheless, some areas might be considered for responsible sourcing. Illegal taxation by both state security services and civilian authorities remains, however, an important challenge for the Congolese state.

With the major part of Maniema's mineral production free from military involvement, the extension of responsible sourcing programs should be welcomed. This situation should however be closely monitored as some pockets of insecurity persist. This also seems to be the case in North Katanga. Here, whilst large quantities of tin are produced with good security, our teams have reported some security incidents in the province's mining areas. The relationship between artisanal mining and insecurity in Katanga requires further monitoring, including transparent communication between all stakeholders involved. Such stakeholders would benefit greatly from collaboration and information exchange.

The interactive map is an important platform that contains detailed information on Eastern DRC's artisanal mining sites and mineral trading routes. This paper has outlined how upstream companies could use the map to identify and assess security risks in their supply chains in Eastern DRC. In this way, the map has the potential to be an important tool in corporate due diligence processes, whilst offering companies the chance to explore new responsible sourcing opportunities in the country.