Certification and Due Diligence in Mineral Supply Chains – Benefit or Burden?

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Definitions

- **Due diligence** is an on-going, proactive and reactive process through which companies can ensure that they respect human rights and do not contribute to conflict.
  - Five steps framework defined in the OECD Due Diligence Guidance (2011).

- **Certification** refers to assessment and assurance procedures that a business, product, process, service, supply chain or management system conforms to specific requirements.
  - The Regional Certification Mechanism (2011) aims to institutionalize due diligence sourcing provisions for designated minerals in the Great Lakes Region.
Background: Artisanal Mining & Conflict Minerals

Why supply chain due diligence?

- 3Ts (tin, tungsten, tantalum) and gold earnings contribute to conflict in the eastern DRC
- ASM-dominated production in Great Lakes Region lacking transparent formal supply chains
  - “Conflict mineral” smuggling
- US Dodd-Frank Act, 1502 (2010): companies sourcing from the region to report on mineral origin & due diligence
- Response: due diligence mineral sourcing initiatives & certification
Research Questions

Certification and Due Diligence in Mineral Supply Chains – Benefit or Burden?

- Does the scope of DD implementation reflect conflict risk relevance?
- What is the efficiency of implementation (coordination of efforts)?
- Is economically sustainable auto-financing of DD possible?
- What are tangible results of DD implementation?
The Upstream Supply Chain: From Mine to Smelter

ASM mining in the Great Lakes region: heterogeneous country features

- 250-500 active 3T mine sites in Rwanda; relatively well formalized (recently)
- 200 3T sites (declining) & 900 gold sites in the DR Congo; mostly informal / illegal; extensive mineral trading networks
- Hundreds of gold sites in Tanzania; variable level of formalization
- <100 mine sites in Burundi, Uganda

Exports:

- 3Ts: official (several dozen exporters) & in-region smuggling; smelters (bottleneck in supply chain) in Asia & EU
- Gold: mostly smuggled to UAE/Dubai
The Evolving DRC Conflict: Changing Sources of Financing

Number of ASM miners (conflict minerals) in the DR Congo (IPIS 2015):

Relative percentage of militarized mine sites: gold (57%) vs. 3Ts (26%)

2014/15: ASM Gold = ca. 10 times the conflict relevance of 3T minerals
Due Diligence Schemes in the Great Lakes Region

- **Industry-driven** certification of smelters as “conflict free”
  - Conflict-free Sourcing Initiative / Conflict-free Smelter Program (CFSP)
  - Linked with industry-driven institutionalized upstream mechanism for due diligence: ITRI Tin Supply Chain Initiative (iTSCi)

- **Government-driven** mandatory mineral certification scheme
  - International Conference on the Great Lakes Region (ICGLR): Regional Certification Mechanism (RCM)

- Pilot (voluntary) mine/supply chain certification
  - Certified Trading Chains (CTC)
  - Fairtrade Gold; PAC Just Gold

- Other private sector due diligence service providers & standards
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**Actual implementation progress on the ground (so far):**

- 3Ts
- ASM gold
- Industrial gold
In-Region Due Diligence Framework for 3T Supply Chains

Key certification system components:

- Mine site inspections: local conditions with regards to conflict risks, production capacity (smuggling), child labor
  - Red – Yellow – Green classification
  - Responsible mining (OHS, environment) not enforced
- Mineral traceability: establish chain of custody tracking
  - Mineral traders/ exporters: verifiable aggregation of ore concentrates (several dozen sources per 24 ton container)
- Export certification
- (Semi-) Independent assurance procedures
  - Regular monitoring (on-site & database)
  - Incident reporting
  - 3rd party audits
  - System-level governance & conformance assessments
# In-Region Due Diligence Framework for Supply Chains

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**Note:** Theoretical performance; live data performance unclear.
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Due Diligence Implementation Progress Rwanda

Both industry (iTSCi) and government-led (RCM) schemes advancing:

- **no. iTSCi members in Rwanda**
  - Total active members
  - (Temporary) suspended/inactive

- **no. ICGLR export certificates issued**
  - Coltan
  - Wolframite
  - Cassiterite

- **no. mineral tagging sites in Rwanda**
  - Active iTSCi sites
  - Inactive iTSCi sites

- **no. RCM-inspected mine sites**
  - RCM-inspected mine sites
Due Diligence Implementation Progress Rwanda

- Due diligence implementation levies for iTSCi (industry scheme): ca. 3% of 2013 3T export value (total ca. US$ 6 million)
  - Scalability – relative costs significantly higher in other countries (no level playing field)
  - Commodity price fluctuation risks: implementation so far has taken place during high-price cycle
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  - Scalability – relative costs significantly higher in other countries (no level playing field)
  - Commodity price fluctuation risks: implementation so far has taken place during high-price period
- International: steady increase in number of smelters seeking conflict-free certification
  - Smelters = bottleneck in supply chain
  - Requiring iTSCi participation for in-region suppliers (quasi-mandatory)
  - Few alternatives, heavy price penalties
In-Region Due Diligence: Complementary Challenges

Industry (& government) focus: iTSCi

- Established across all levels, integrating lessons learnt since 2011
- Fully accepted by smelters & downstream (electronic) industry
- Industry-driven and –funded: conflict of interest risks? credibility?
  - secretariat = industry associations abroad, not in-region (ownership)
- 3T-selective, not considering ASM gold

Government & donor focus: ICGLR Regional Certification Mechanism

- Initial implementation progress in selected member states (RWA, DRC)
  - gap between standard theory and practice (incl. procedures; ASM gold)
- Wide-spread donor support & member state ownership: credibility (+)
- Management capacity challenges: credibility (-)
  - political processes impact on performance orientation
Due Diligence Impacts on Mineral Exports

- **Cassiterite exports [tons]**
  - **DRC**
  - **RWANDA**

- **Tin price crisis**
  - **Bisie mine** (75%)

- **Independence (foreign/national), mostly ASM**
- **State mining companies subcontracting ASM**
- **Genocide & Congo wars**
- **Liberalization & re-privatization**

- **Congo conflict**
- **Dodd-Frank Act**

- **Bundesanstalt für Geowissenschaften und Rohstoffe**

- **GEOZENTRUM HANNOVER**
Due Diligence Impacts on Mineral Exports

![Graph showing cassiterite exports in tons from 2007 to 2014 for Rwanda and DRC.]

**Post-2010 (Dodd-Frank) impact:**
- Rwanda: exports increased
- DR Congo: exports declined
  (Bisie geology, ASM gold shift)

- **Dodd-Frank Act signed**
- **Traceability starts in RWA**
- **SEC reporting starts** (transition period)
- **Conflict Mineral Rule adopted**
- **Presidential ban of ASM**
- **Ban lifted**
- **UN reports smuggling**
- **Bisie mining boom**
Four Years of Due Diligence Implementation…

Conclusions

- DRC conflict continues to be partly funded by natural resources (gold, charcoal)
  - shifting of problems in eastern DRC from 3T sector into ASM gold
  - no correlation between due diligence efforts/spending and specific conflict risks
- Very general coordination of efforts at political level, but not on the ground
  - process duplication (industry vs. government schemes)
- Auto-financing in-region due diligence is economically feasible (3Ts) if
  - supported by attractive international mineral price level
  - sustained by sufficiently large mining sector (economies of scale) – but… ASM gold?
- Due diligence expectations management: contribution to ASM supply chain formalization & market access
  - no certification of responsible mining practice (OHS, environment, communities)
  - performance unclear when it comes to mitigating smuggling risks
  - but: no large-scale embargo because of Dodd-Frank Act (selected temporary disengagement)
  - further review after Dodd-Frank transitional 2-4 year period (“conflict undeterminable”)?
Acknowledgement

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http://www.bgr.bund.de/mineral-certification