



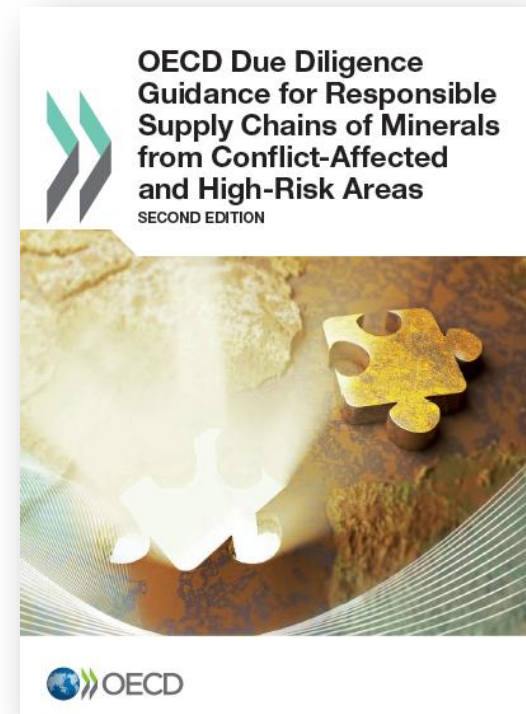
# Certification and Due Diligence in Mineral Supply Chains – Benefit or Burden?

SDIMI Conference, Vancouver, July 15, 2015

**Philip Schütte, Gudrun Franken, Patricie Mwambarangwe**  
Federal Institute for Geosciences and Natural Resources (BGR)

# 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



## ***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?

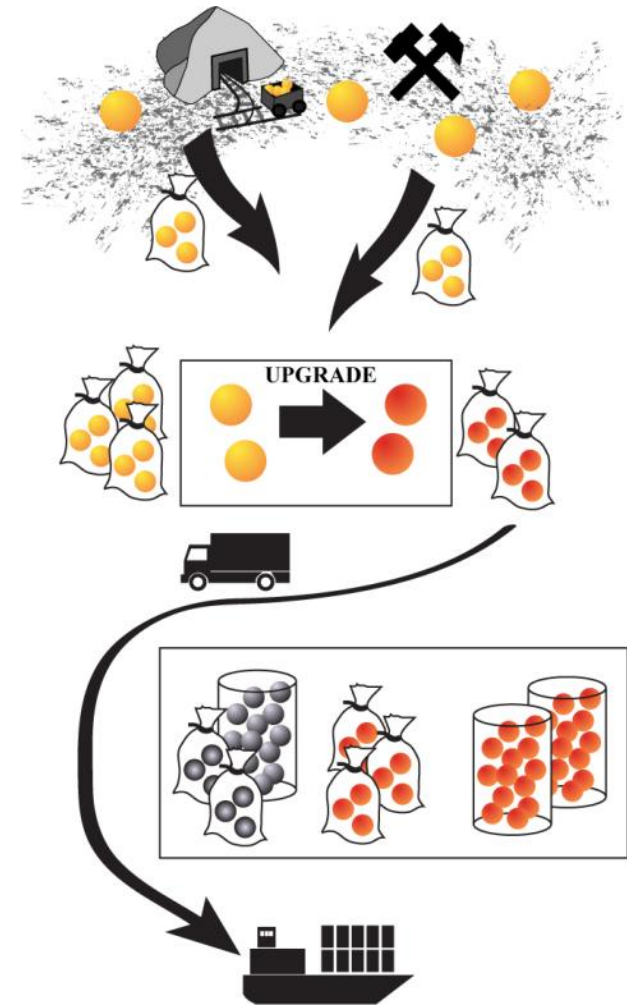
# The Upstream Supply Chain: From Mine to Smelter

## 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:

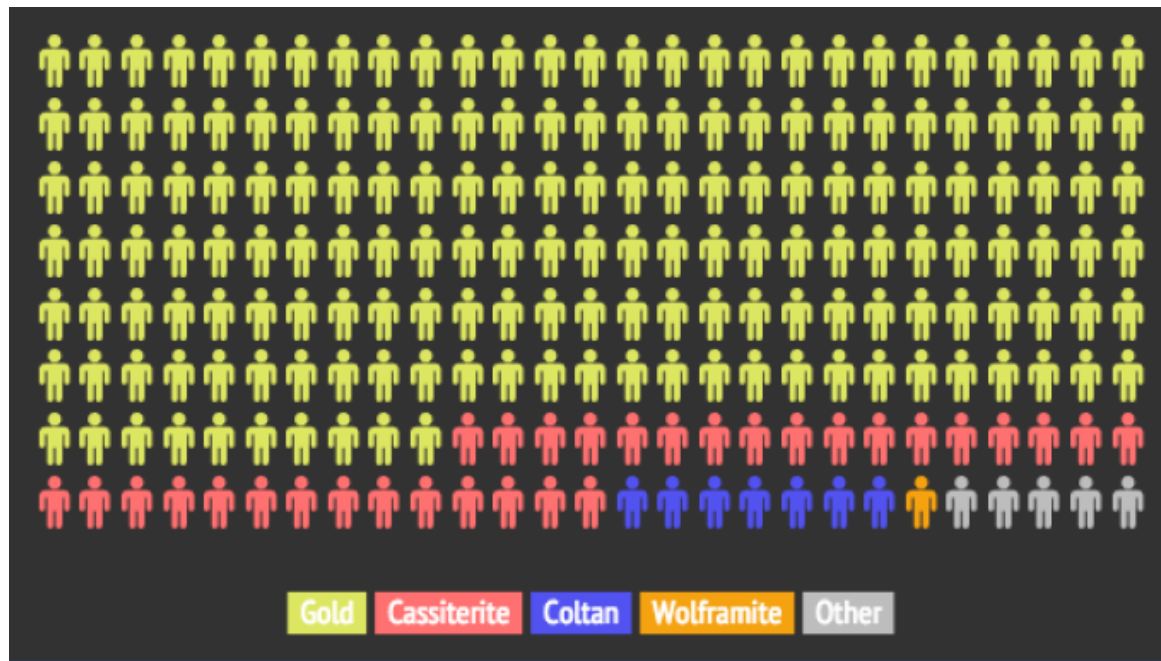
- **3Ts**: official (several dozen exporters) & in-region smuggling; smelters (bottleneck in supply chain) in Asia & EU
- **Gold**: mostly smuggled to UAE/Dubai





# 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

# 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 

## Actual implementation progress on the ground (so far):

3Ts 

ASM gold 

industrial gold 



Bundesanstalt für  
Geowissenschaften  
und Rohstoffe

GEOZENTRUM HANNOVER



# 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
  - 3<sup>rd</sup> party audits
  - System-level governance & conformance assessments



# In-Region Due Diligence Framework for Supply Chains

Process	Industry approach (in cooperation with government): <b>ITRI Tin Supply Chain Initiative</b>	Government approach (supported by donors): <b>Regional Certification Mechanism</b>
Mine site inspections	Baseline studies, industry funds	Inspections / Validation missions (state & donors)

# In-Region Due Diligence Framework for Supply Chains

Process	Industry approach (in cooperation with government): <b>ITRI Tin Supply Chain Initiative</b>	Government approach (supported by donors): <b>Regional Certification Mechanism</b>
Mine site inspections	Baseline studies, industry funds	Inspections / Validation missions (state & donors)
Traceability	Chain of custody tracking, industry & state funds	Relies on iTSCi (open to others, theoretically)

# In-Region Due Diligence Framework for Supply Chains

Process	Industry approach (in cooperation with government): <b>ITRI Tin Supply Chain Initiative</b>	Government approach (supported by donors): <b>Regional Certification Mechanism</b>
Mine site inspections	Baseline studies, industry funds	Inspections / Validation missions (state & donors)
Traceability	Chain of custody tracking, industry & state funds	Relies on iTSCi (open to others, theoretically)
Export certification	Dedicated export doc	<b>ICGLR certificates</b>

# In-Region Due Diligence Framework for Supply Chains

Process	Industry approach (in cooperation with government): <b>ITRI Tin Supply Chain Initiative</b>	Government approach (supported by donors): <b>Regional Certification Mechanism</b>
Mine site inspections	Baseline studies, industry funds	Inspections / Validation missions (state & donors)
Traceability	Chain of custody tracking, industry & state funds	Relies on iTSCi (open to others, theoretically)
Export certification	Dedicated export doc	<b>ICGLR certificates</b>
Regular monitoring (sites, database)	Established (live data performance unclear)	Theoretical



# In-Region Due Diligence Framework for Supply Chains

Process	Industry approach (in cooperation with government): <b>ITRI Tin Supply Chain Initiative</b>	Government approach (supported by donors): <b>Regional Certification Mechanism</b>
Mine site inspections	Baseline studies, industry funds	Inspections / Validation missions (state & donors)
Traceability	Chain of custody tracking, industry & state funds	Relies on iTSCi (open to others, theoretically)
Export certification	Dedicated export doc	<b>ICGLR certificates</b>
Regular monitoring (sites, database)	Established (live data performance unclear)	Theoretical
Incident reporting	Established, industry funds	Whistle blowing (pilot stage), donor funds

# In-Region Due Diligence Framework for Supply Chains

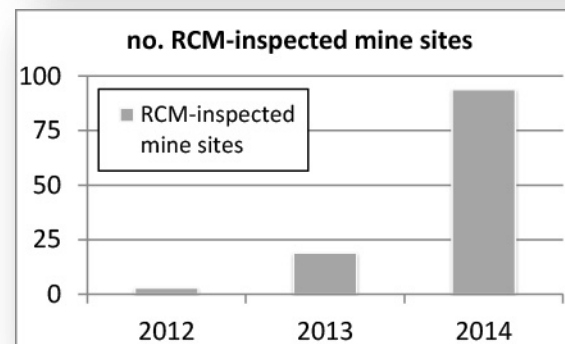
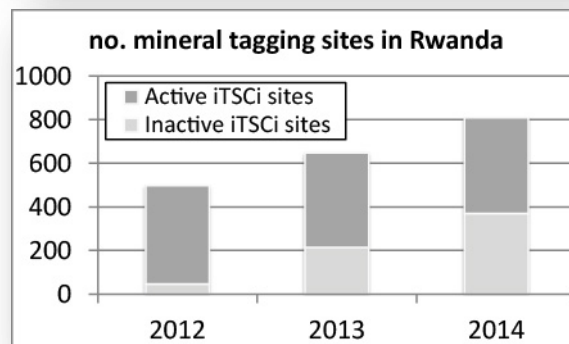
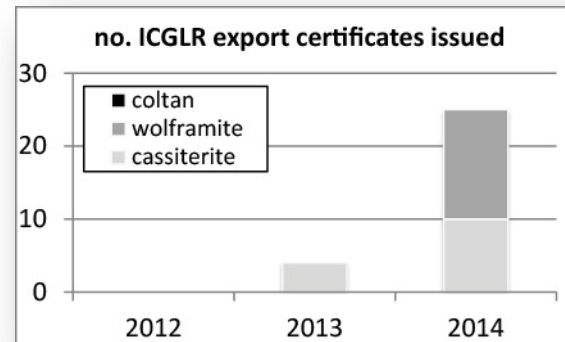
Process	Industry approach (in cooperation with government): <b>ITRI Tin Supply Chain Initiative</b>	Government approach (supported by donors): <b>Regional Certification Mechanism</b>
Mine site inspections	Baseline studies, industry funds	Inspections / Validation missions (state & donors)
Traceability	Chain of custody tracking, industry & state funds	Relies on iTSCi (open to others, theoretically)
Export certification	Dedicated export doc	<b>ICGLR certificates</b>
Regular monitoring (sites, database)	Established (live data performance unclear)	Theoretical
Incident reporting	Established, industry funds	Whistle blowing (pilot stage), donor funds
3 <sup>rd</sup> party audits	Established, industry funds	Theoretical, pilot stage with donor funds

# In-Region Due Diligence Framework for Supply Chains

Process	Industry approach (in cooperation with government): <b>ITRI Tin Supply Chain Initiative</b>	Government approach (supported by donors): <b>Regional Certification Mechanism</b>
Mine site inspections	Baseline studies, industry funds	Inspections / Validation missions (state & donors)
Traceability	Chain of custody tracking, industry & state funds	Relies on iTSCi (open to others, theoretically)
Export certification	Dedicated export doc	<b>ICGLR certificates</b>
Regular monitoring (sites, database)	Established (live data performance unclear)	Theoretical
Incident reporting	Established, industry funds	Whistle blowing (pilot stage), donor funds
3 <sup>rd</sup> party audits	Established, industry funds	Theoretical, pilot stage with donor funds
System-level assessments	Established, industry funds	Theoretical, donor funds on selected procedures

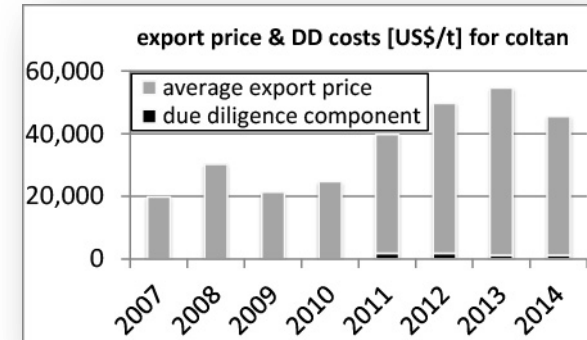
# Due Diligence Implementation Progress Rwanda

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



# Due Diligence Implementation Progress Rwanda

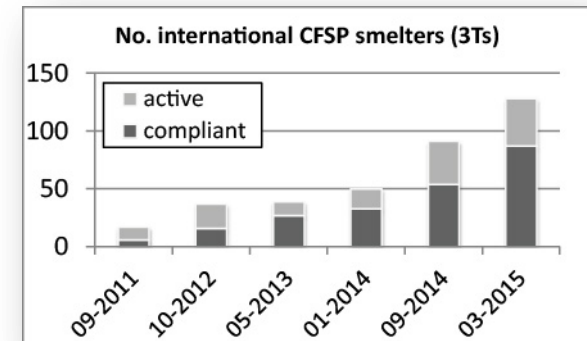
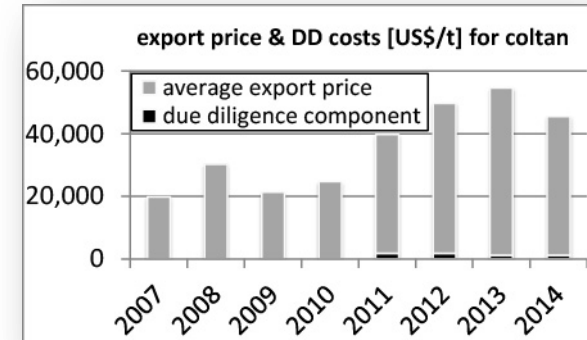
- Due diligence implementation levies for iTSCi (industry scheme): ca. 3% of 2013 3T export value (total ca. US\$ 6 million)
  - Scalability – relative costs significantly higher in other countries (no level playing field)
  - Commodity price fluctuation risks: implementation so far has taken place during high-price cycle





# 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 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



CFSP data

# In-Region Due Diligence: Complementary Challenges

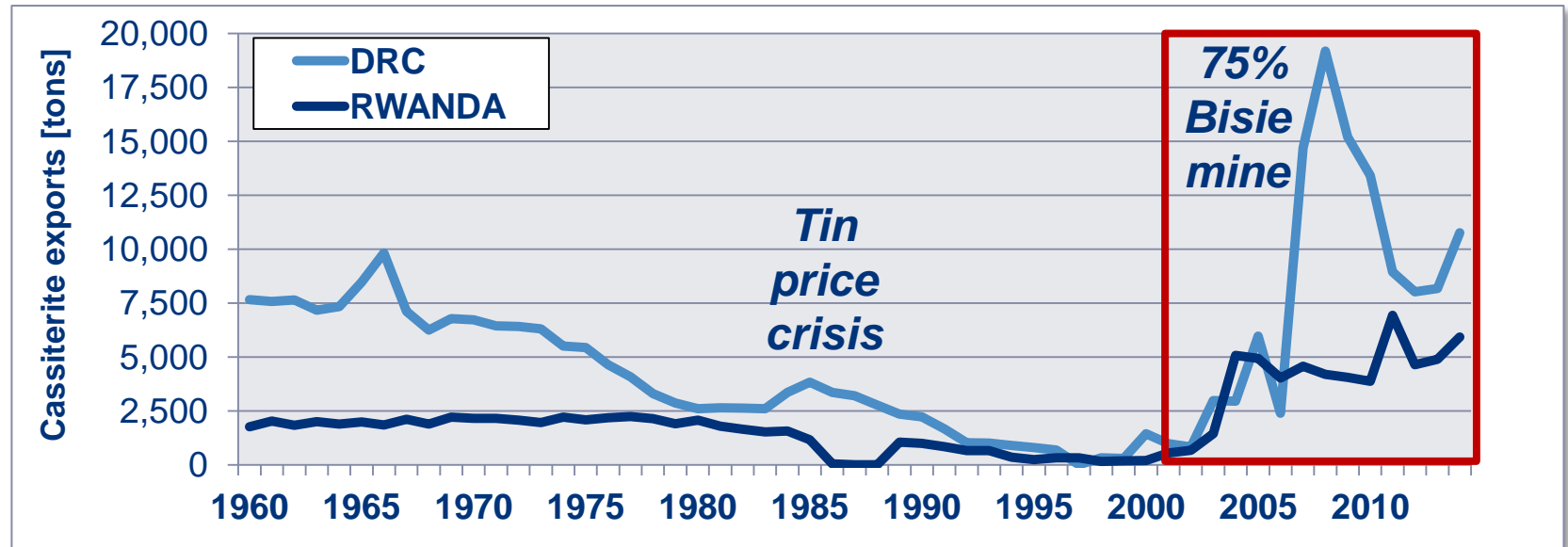
## Industry (& government) focus: iTSCi

- 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



Independence  
(foreign/national),  
mostly ASM

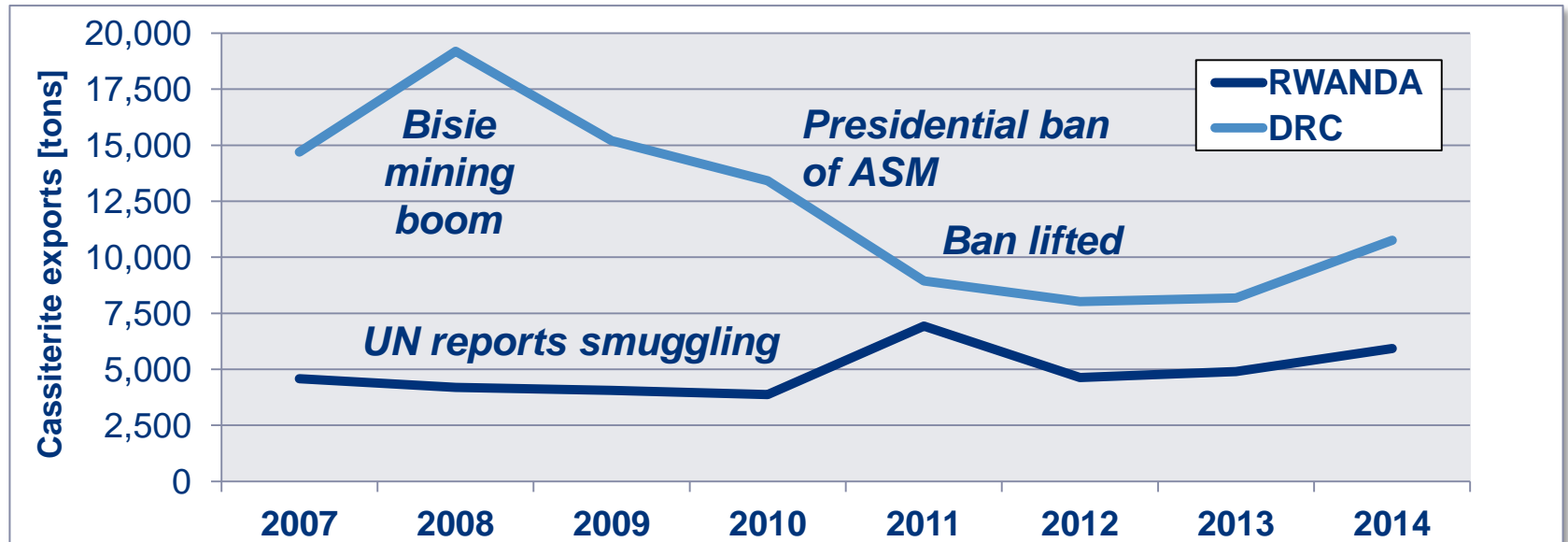
State mining  
companies  
subcontracting  
ASM

Genocide & Congo wars  
Liberalization & re-privatization

Congo conflict

Dodd-Frank Act

# Due Diligence Impacts on Mineral Exports



## Post-2010 (Dodd-Frank) impact:

- Rwanda: exports increased
- DR Congo: exports declined (Bisie geology, ASM gold shift)



# 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

This work is based on our activities in Rwanda from 2011-2015, funded by the Federal Ministry for Economic Cooperation and Development as part of a regional cooperation program with the ICGLR.

On-going BGR cooperation with Rwanda Natural Resources Authority / Geology and Mines Department is appreciated.

Thanks to Rupert Cook, Steffen Schmidt and SDIMI for helpful reviews of the manuscript.



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