

**OECD DUE DILIGENCE GUIDANCE FOR RESPONSIBLE SUPPLY CHAIN MANAGEMENT OF  
MINERALS FROM CONFLICT-AFFECTED AND HIGH RISK AREAS**

**IMPLICATIONS FOR THE SUPPLY CHAIN OF GOLD AND OTHER PRECIOUS METALS**

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**Summary**

This review is produced for the OECD to assist in and comment on the development of responsible supply chain due diligence guidance as it relates to the gold supply chain and production of gold and other precious metals from large-scale and artisanal sources in conflict-affected and high risk areas. The due diligence guidance has been produced by the OECD based on the supply chain of other minerals from the Eastern Democratic Republic of Congo (DRC).

The review is written based on the author's knowledge of the fine jewellery supply chain and the supply and demand dynamics of the gold market, which in 2009 was 4,287 tonnes, valued at over US\$108 billion at the average cost of gold in the year, and identifies the main protagonists in the gold market across all sectors. The content of the review therefore focuses on the major constituents and participants in the gold industry in general, rather than a detailed knowledge of gold production or gold supply from DRC.

Part 1 of the review summarises statistics on the gold market and the supply chain, explains the complicated non-linear structure of the gold supply chain, the different roles that gold has in various sectors (especially the very liquid and fungible role of gold as money), and identifies the largest participants in the gold supply chains, especially those which provide a focal point along the supply chain, along with a summary of key dynamics in global gold jewellery markets.

Part 2 is in two sections. The first section (a) identifies existing and emerging standards, codes of practice, guidance, certification and emerging chain of custody initiatives in the gold supply chain, and covers both large-scale and artisanal production: this section is primarily for context purposes, and to help OECD ensure it is aware of all relevant issues and industry participants. The second section (b) then evaluates each Step of the OECD guidance paper and its annexes, highlights issues relating to gold and precious metals and recommends how existing industry initiatives relate or would add value to the OECD's draft due diligence guidance paper.

Part 3 of the review recommends how the OECD could adapt its guidance to cover participants in the gold and precious metals supply chains, and how OECD could harmonise its activities with other industry initiatives, some of which already enjoy a large degree of support from major participants in the gold, mining and precious metals and minerals industries. Recommendations that may be included as supplemental guidance for gold and precious metals are highlighted, with reference to the OECD's 5-Step framework.

As general guidance and recommendations for any mineral supply from conflict and high-risk affected areas, the OECD draft guidance does not require a separate document for gold and precious metals, although there are issues relating to size of the gold market, the complicated and fragmented supply chain and the intrinsic value of gold and other precious metals which warrant supplemental comments, recommendations and guidance.

For the OECD to help develop guidance to the gold industry relating to how gold and precious metals may be used in areas of conflict, it will be important to secure the support and alignment of existing industry initiatives which already have very broad and large-scale support from major players in the industry. These include the Responsible Jewellery Council, The International Council on Mining and

Metals, the Association of Responsible Mining and World Gold Council. The OECD should encourage and support these organisations to build into their programmes policies, procedures, guidance, standards and, in some cases, certification that relate to ensuring gold and precious metals supplies do not contribute to fuelling areas of high risk and conflict, and ensure that OECD guidance does not lead to an independent and incremental set of standards, reporting and auditing. These programmes are especially important in mining, refining, jewellery manufacturers and retailers, and the role of bullion banks, as these sectors being the highest focal points in the supply chain.

The OECD should also encourage the banking industry dealing in gold (“bullion banks”), either directly or through membership of the London Bullion Market Association (LBMA), to extend its governance of the international bullion market by establishing responsible sourcing requirements for its membership, participating in appropriate gold industry supply chain initiatives (such as RJC and WGC), and ensuring that the banks themselves establish a common set of principles, standards and certification to ensure the integrity of supply of gold from their suppliers and to the market, encouraging the use of allocated gold accounts where practicable and commercially viable.

## **Part 1: Gold Supply Chain**

### **a: Gold Supply and Demand Summary**

Gold demand and supply was 4,287 metric tonnes in 2009 (value over US\$108 billion): gold is unlike most other metals and minerals, as the major source of demand has consistently been consumer demand, mainly in the form of fine jewellery, although recently investment demand has risen, as a result of the global financial crisis and gold's traditional role as a financial safe haven. The resurgence of jewellery demand since 2002 and the increase in investment demand, both institutional and retail, has driven the price of gold to all-time records (over \$1,250/oz in June 2010). Supply of gold is provided mainly by supply from gold mines (59% of supply in 2009) and also from recycled or "scrap" gold (41% of supply in 2009, mainly from the recycling of personal jewellery). Supply of "scrap" gold surged to record levels in 2009, as a result of higher gold prices, financial insecurity and a decline in jewellery demand.

<b><u>World Gold Supply and demand (tonnes)</u></b>		<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
<b><u>Supply</u></b>						
	Mine Production	2,549	2,483	2,473	2,409	2,572
	Official Sector Sales	663	365	484	232	41
	Scrap Supply	902	1,133	982	1,316	1,674
<b>TOTAL SUPPLY</b>		<b>4,114</b>	<b>3,981</b>	<b>3,939</b>	<b>3,957</b>	<b>4,287</b>
<b><u>Demand</u></b>						
	Fabrication					
	Jewellery	2,718	2,298	2,417	2,193	1,759
	Other	581	650	672	696	658
	Total Fabrication	3,299	2,948	3,089	2,889	2,417
	Bar Hoarding	264	235	236	386	187
	Net Producer De-hedging	92	434	444	352	254
	Implied Net Investment	459	365	169	330	1,429
<b>TOTAL DEMAND</b>		<b>4,114</b>	<b>3,982</b>	<b>3,938</b>	<b>3,957</b>	<b>4,287</b>
Av Gold price (London PM, US\$/oz)		444	604	695	872	972
Source: GFMS						

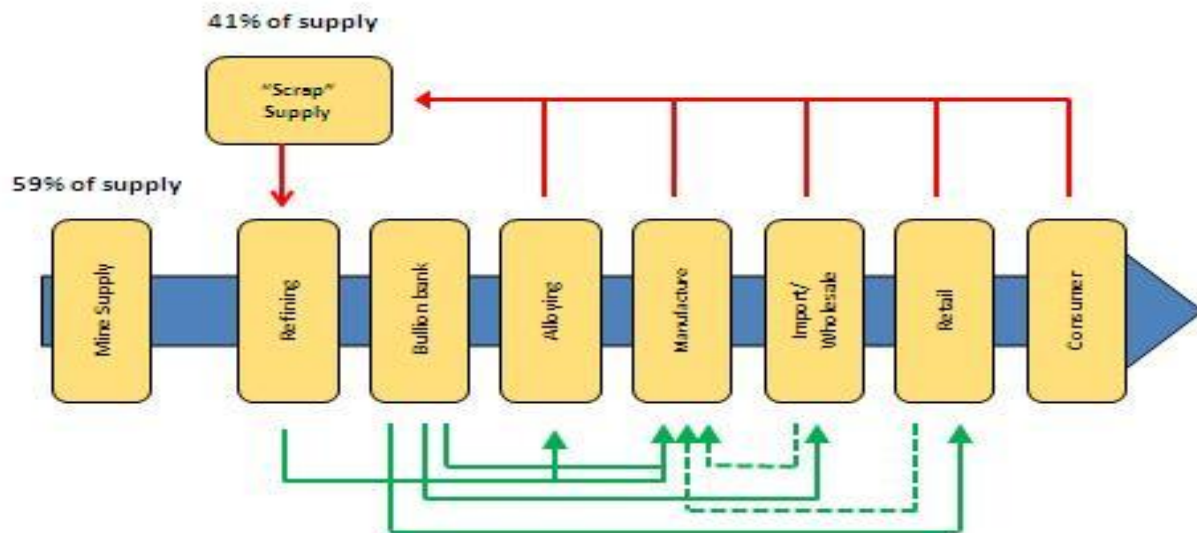
It is estimated that all the gold ever produced is still in existence in reasonably accessible form, totalling 165,600 tonnes by end 2009 (i.e. nearly 40 years' supply at current rates). Half of this inventory is in jewellery (hence relatively inaccessible in large quantities), 30,000 tonnes (or 18%) is in the form of investment products (ingots, bars and coins) and 17% is held by the official sector (central banks, who are the largest holders of accessible gold, and until recently have been a significant source of supply).

The supply chain for gold is complicated and non-linear, summarised in the simplified chart below: a major reason why the gold supply chain is not linear is the role that gold has as money, whereby its intrinsic value can be realised through recycling (through "scrap" supply as shown in red below).

Gold's role as money also means that the supply of gold through the supply chain can be owned and transferred at many levels. For example, like a foreign currency account, participants in the supply chain can open unallocated gold accounts with bullion banks around the world, and the gold can be

transferred electronically, leased, loaned or swapped to other participants (as shown in green below). Gold bullion can be supplied to participants at various levels in the supply chain (e.g. bullion bank to retailer), who can then, in turn, provide, loan, or lease the gold to other participants (especially from retailers and wholesalers to manufacturers).

### Gold Supply Chain: Simplified Summary



#### b: Mine Supply

Mine supply of gold grew from a low of 1,300 tonnes per year in the mid 1970s to a peak of over 2,500 tonnes in the early 21<sup>st</sup> century; however, gold mining is not a dynamic source of supply to the gold market, as new mines take several years to come to fruition, and there have been very few new discoveries of significant ore bodies in recent years.

Global mine supply in 2009 was 2,572 tonnes (or 59% of total supply). China maintained its position as the world's largest producing country (which it has been since 2007), with Australia, South Africa, the USA and Russia all producing over 200 tonnes. A list of the top 20 producing countries is attached as Appendix 1a, which account for 88% of global mine production. China is the largest gold producing country, due to large scale support from the Chinese central government and official institutions to local small and medium sized local mining companies. The largest gold miner in China is Zijin Mining (producing 31 tonnes directly and a further 44 tonnes through smaller third party ores), with the other leading producers being Shandong Mining (c 18 tonnes per year) and Zhaojin Mining (19 tonnes).

The largest gold mining company is Barrick Gold (see [www.barrick.com](http://www.barrick.com)), based in Canada, which produced 231 tonnes of gold in 2009 through 26 mines, either wholly or in joint venture partnerships, in North America, South America (Peru and Chile), Australia, Papua New Guinea and Tanzania. A list of the largest 15 gold producing companies is attached as Appendix 1b. These "major" companies account for 46% of all gold mine production, with the rest coming from "junior" producers, government controlled mining and artisanal mining.

Although there is no standard definition of artisanal mining (ASM), the term is generally used to encompass all small, medium, large, informal, legal and illegal miners who use rudimentary processes to extract gold from secondary and primary ore bodies, often on the fringes of sites

operated by some of the major mining companies. CASM (Communities and Small Scale Mining), supported mainly by the World Bank and the U.K. government's Department for International Development estimate that over 15 million people are employed in artisanal mining (especially of gold, as the price has risen over recent years) providing a livelihood for around 100 million people, mostly in South America and Africa. Due to its nature, there are no reliable statistics on the scale of artisanal gold mining, although CASM estimate global annual production at around 330 tonnes (c. 12% of total gold mine output, and around 8% of global supply).

In many cases, artisanal miners do not have legal rights to mine for gold: sometimes the gold is sourced illegally from "industrial" mine sites, sometimes from the fringes of "industrial" mine sites, and sometimes from ore bodies where no mining rights have been granted. In some cases, legal cooperatives of artisanal mining operations have been established with legal mining rights, so the activity is organised and structured; this approach to organised artisanal mining is gaining increased support from the gold industry at large, media and NGOs. Many large-scale "industrial" mining companies have formal policies to help artisanal miners around their mining operations as part of their community engagement programmes.

It is important to note that artisanal mining generally provides an important source of income for impoverished rural communities and regions where economic alternatives are extremely limited, and that without these practices, poverty in these areas would be even worse.

Gold is produced by artisanal miners in a variety of ways depending on the type of ore body: often the gold ore is crushed and milled with basic equipment to dust like particles and mixed with water to create a pulp. Mercury is often used by artisanal miners to separate and collect the gold from the rock or ore in which it is found, a practice which is highly toxic and is therefore illegal in most countries. Mercury binds to the gold to form an amalgam which helps it to separate from rock, sand or pulp. The amalgam is then heated to vaporize the mercury, leaving the gold behind: this is what is then sold to dealers, jewellers and refiners to convert to pure gold. The easiest source of refining of gold from these artisanal sources by "illicit" or illegal artisanal miners is through the huge numbers of small family-owned gold dealers and jewellers who have the refining resources in workshops to smelt the gold, especially in North Africa, the Middle East, India and East Asia. Most "corporate" refining companies, such as the members of the LBMA, will not accept gold from such sources.

#### c: Other Supply ("Above Ground Stocks")

"Scrap" supply of gold in 2009 from above ground stocks (i.e. existing gold inventory held by private individuals, investment accounts, manufacturers, retailers etc., but not including sales by central banks) was 1,674 tonnes in 2009, or 39% of total supply. Official sector sales to the open market (by central banks) added a further 41 tonnes or 1% of total supply.

"Scrap" supply of gold is sold via multiple channels, such as jewellers, pawnbrokers, scrap dealers and recently dedicated "Cash For Gold" businesses, who then sell the gold on to refiners to turn the scrap into pure gold, which then re-enters the supply chain. The main sources of scrap gold are private individuals who want to realise the cash value of their gold jewellery, and other participants in the supply chain (e.g. manufacturers and retailers) who want to realise the value of obsolete or slow-moving inventory. This source of supply has increased dramatically in recent years due to the record high price of gold, the global financial crisis and a resultant slowdown in jewellery demand. Supplies of gold from unofficial (i.e. non-corporate) mining, or small-scale artisanal mining, often find their way into the supply chain through "scrap" channels via refineries or small traders and dealers. "Scrap" supply can therefore be a potential source of contamination with supplies of gold from "unofficial" or illicit sources, including those from areas of conflict and high risk.

Official Sector sales refer to the sale of gold by central banks and other organisations such as the IMF from their reserves. The largest holders of gold are:

Tonnes		
1	USA	8,134
2	Germany	3,408
3	IMF	3,005
4	Italy	2,452
5	France	2,435
6	China	1,054
7	Switzerland	1,040
8	Japan	675
9	Netherlands	612
10	Russia	608

Source: World Gold Council, Dec 2009

Over the past 15 years, central banks have been net sellers of gold to the open market, in order to balance their reserves over a broader risk of currencies; however, as the gold price has risen, central banks have been less prepared to sell, and may even be net purchasers of gold in 2010. To ensure the gold market is not disrupted by large and unexpected sales of gold by central banks, the major European banks have agreed not to sell more than 400 tonnes per year from 2009 to 2014 (the CBGA agreement).

#### d: Refining

Gold supply from industrial mines is sometimes refined on site, but is more normally delivered to refineries in the form of a concentrate called “doré”, which is an unrefined, impure alloy of gold with variable quantities of silver and base metals, which the refinery upgrades to bullion at “London Good Delivery” standard. The constituency of gold doré and its impurities is specific to each ore body, and so is, in theory, geologically traceable (although not necessarily to specific mines, as multiple mines can operate on the same ore body, and such geological analysis is not commonplace). “London Good Delivery” is the international reference for quality of pure gold bullion; doré usually consists of 85% gold on average. The other main source of supply to refineries is “scrap” gold, which is mostly in the form of carat gold jewellery (whereby 24 carat gold is pure gold), which is no longer wanted by consumers, is often traded in for a new item, or it can be excess inventory from retailers and manufacturers. Scrap gold can also take the form of melted gold dust from the artisanal miners (often not legal entities). The dust and nuggets are melted into small slipper bars (50 to 500 g) for supply to a refinery.

Refining is a significant focal point of the gold supply chain: although the volume of gold refined per year is generally around 3,500 tonnes per year (the balance of supply/demand being in the form of pure bullion, so not requiring refining), there is capacity of over 7,500 tonnes per year. The refining sector of the gold supply chain therefore operates far more capacity than is required, especially in Europe and the CIS: generally, refineries are paid on a fixed fee basis by the mining companies, and a combination of overcapacity and fixed fees has led to highly competitive market with very low operating margins.

Gold refineries collate gold from multiple sources, including scrap supply (at over 40% of global supply). If the gold remains in the ownership of the mining company, the refining of gold from different sources is segregated for each customer, usually through a system of batch processing.

However, if the gold is owned by the refinery, the gold is unlikely to be segregated between mine supply and “scrap” sources (especially as the margins in refining are too low to make this cost-effective), and in these cases, it is impossible to trace the source of refined gold. Some gold mines have integrated refining on the same mine sites, such as Rio Tinto’s operation in Kennecott, Utah, U.S.A., making the supply of gold bullion easily traceable. It is possible to segregate the refining of gold from different mines, from recycled gold jewellery and from other sources (which might include artisanally mined supply), but the margins structures in the refining industry, along with the lack in momentum from any other sectors of the supply chain to encourage such segregation have made this unattractive in the past: however, the recent U.S. Conflict Minerals Trade Act is likely to make segregation commonplace in future, especially in refineries in the USA.

The London Bullion Market Association (LBMA) and its “Good Delivery List” (see Appendix 2 for the January 2010 list) is widely recognised as the global standard for the quality of gold bullion bars, due to the stringent criteria for assaying standards and bar quality that an applicant must satisfy in order to be listed (the minimum acceptable fineness is 995 per thousand parts fine gold, expressed as .995). Members of this list constitute the overwhelming majority of gold refining worldwide. There are 5 refiners defined as “referees” by the LBMA, who agree standards (mainly product quality): these are Rand Refinery, Metalor, Pamp, Argor-Heraeus and Tanaka.

The largest industry players providing refining capacity from mine supply are Great Wall Refinery (China), Rand Refinery (South Africa), Johnson Matthey (North America), Perth Mint (Australia) and Valcambi, Argor-Heraeus, Metalor and Pamp (Switzerland). Emirates Refinery in Dubai is a major refiner of “scrap” gold from the Middle East and India. In particular, Rand Refinery in South Africa (53% owned by gold miners AngloGold Ashanti and 33% by Gold Fields) refines 100% of the gold mined in South Africa, and 80% of all gold mined throughout the rest of the African continent. Rand refinery only buys product from registered companies (therefore does not buy artisanally mined gold which is not through a registered company with mining rights). Of further note regarding gold mining companies’ ownership of refining operations is the 60% ownership that Newmont Mining has in Valcambi.

Gold refineries supply gold to the market in multiple forms: the most common form to the investment and official sectors markets is 400oz bars (ingots), and to the jewellery and industrial markets the most common form is 1 kg bars. Most of these large corporate refineries only accept gold doré or recycled gold from carefully monitored corporate sources based on the principles of “Know Your Customer” (for example, using credit reports and company data from international providers such as Dun and Bradstreet, Experian etc to establish the structure of the organisations providing the gold).

Gold supply to refiners normally requires signed certification from an official from the mine (validating the source and quality of the doré), the handling/clearing agent (such as Brinks, Viamat) and, if applicable, a customs agent, and the product is sealed in containers with individual serial numbers. Any discrepancy between the certification from the mine and the receipt by the refinery is independently assessed, normally by LBMA accredited supervising companies. In this way, contamination in supplies of gold from large-scale mining organisations and artisanal organisations is mitigated. Very few of these refining organisations would accept gold from unregistered (and therefore potentially illicit or illegal) artisanal gold producers.

#### e: Bullion Banks

Bullion banks are the primary providers of gold from mines and/or refineries to the jewellery, investment and industrial markets, and provide gold at multiple levels in the supply chain. The London Bullion Market Association (LBMA) has 29 members who are bullion banks, and these are

the leading gold bullion providers (see Appendix 3). Of these, the LBMA has 9 members which are defined as “market-makers” and are the primary references in the gold market, quoting each other in spot, options and forward prices throughout the London business day. These market makers are (for full details and web links, see [www.lbma.org.uk/assocrn/mktmembms](http://www.lbma.org.uk/assocrn/mktmembms)):

- The Bank of Nova Scotia – Scotia Mocatta
- Barclays Bank PLC
- Deutsche Bank AG
- Goldman Sachs International
- HSBC Bank
- JP Morgan Chase Bank
- Mitsui & Co Precious Metals Inc
- Société Générale
- UBS AG

Bullion banks hold gold in either unallocated or allocated accounts: the distinction of these is as follows:

i: Unallocated Accounts, whereby specific bars are not set aside and the customer has a general entitlement to the gold, which is very similar to a standard currency bank account. The bank has the responsibility to store and insure the gold. It is the most convenient, cheapest and most commonly used method of holding gold, but the client cannot normally take delivery of physical gold. Credit balances on the account do not entitle the creditor to specific bars of gold, but are backed by the general stock of the bullion bank with whom the account is held. The bank can deal in the gold, and the client is an unsecured creditor. This type of account is effectively gold as money, and the provenance of this gold is normally not traceable through the supply chain. This type of account represents an estimated 90% of gold supply.

ii: Allocated Accounts, whereby a customer requires metal to be physically segregated and needs a detailed list of the gold (normally by registering serial numbers of specific bars and their weights and assays). The client has full title to the metal in the account, with the bullion bank holding it on the client’s behalf as a custodian, charging the client a fee for storage and insurance depending on the size of the deposit. The bank cannot deal in the gold. Credits or debits to the holding will be made by physical movements of bars to or from the client’s physical holding, and in some cases the client can take physical delivery of the gold. This type of account is used where ownership and integrity of the gold is important (as, for example, in some gold exchange traded funds), the gold is a product (as opposed to money) and the gold is traceable. The customer may either provide the gold for storage directly to the bank, or buy the gold from the bank, which the bank would provide from unallocated sources.

To establish a chain of custody in the gold supply chain, or to ascertain the provenance of gold, allocated accounts are more practical. However, allocated accounts are more expensive to own and the risk lies with the owner of the gold (therefore has impact on working capital, storage and insurance costs), whereas unallocated accounts are cheaper and less risky.

#### f: Fabrication:

Fabrication of gold into finished products or industrial components in 2009 was 2,417 tonnes; 1,759 tonnes (73%) in jewellery (normally as carated gold), 373 tonnes for industrial use (246 tonnes in electronics components, especially bonding wire, 53 tonnes in dentistry) and the remaining 285 tonnes in investment products (gold medals, bars and coins, normally as pure 24 carat gold). Gold bullion (large 400oz ingots and other smaller bars as supplied by refineries), as used in the



investment market, is not considered as fabricated product for the purposes of industry supply chain analysis.

Most gold fabricated into investment products are small bars/medals and gold coins (commemorative, numismatic or currency, produced by mints), and normally as high quality 22ct or “pure” 24 carat gold. A comprehensive website reference for gold bars and coins of all sizes, including coverage of gold bar and coin brands and accredited refineries is produced by Grendon International Research, at [www.goldbarsworldwide.com](http://www.goldbarsworldwide.com) .

Similarly, the majority of gold used in industrial applications is also 24ct gold, manufactured by specialist manufacturers (e.g. as dental implants, gold bonding wires for electronic applications).

The vast majority of gold fabrication is used in the manufacturing of gold jewellery, and is mainly produced as carated gold (i.e. mixed with other metals such as copper, nickel, palladium, platinum): this fabrication data differs significantly from demand data, especially geographically, as sources of jewellery manufacturing are often large exporters (such as China, Turkey, Italy) and large demand markets such as the U.S.A. often have very little local manufacturing industry.

A breakdown of gold fabrication is as follows:

		<u>2005</u>	<u>2006</u>	<u>2007</u>	<u>2008</u>	<u>2009</u>
<b>Gold Fabrication (tonnes)</b>						
<b>Europe</b>		<b>524</b>	<b>457</b>	<b>444</b>	<b>405</b>	<b>322</b>
of which	Italy	290	236	229	187	135
<b>N America</b>		<b>246</b>	<b>233</b>	<b>201</b>	<b>216</b>	<b>223</b>
of which	USA	219	211	179	176	173
<b>Latin America</b>		<b>90</b>	<b>75</b>	<b>71</b>	<b>66</b>	<b>58</b>
<b>Middle East</b>		<b>678</b>	<b>534</b>	<b>594</b>	<b>538</b>	<b>332</b>
of which	Turkey	303	242	277	237	111
	Saudi Arabia	125	90	100	85	54
<b>Indian sub-continent</b>		<b>780</b>	<b>705</b>	<b>754</b>	<b>669</b>	<b>582</b>
<b>East Asia</b>		<b>851</b>	<b>809</b>	<b>868</b>	<b>841</b>	<b>766</b>
of which	China	258	270	327	342	369
<b>Africa</b>		<b>39</b>	<b>35</b>	<b>39</b>	<b>37</b>	<b>42</b>
of which	South Africa	10	10	14	14	23
<b>Australasia</b>		<b>10</b>	<b>10</b>	<b>11</b>	<b>14</b>	<b>15</b>
<b>Russia and CIS</b>		<b>82</b>	<b>89</b>	<b>108</b>	<b>103</b>	<b>78</b>
<b>TOTAL GOLD FABRICATION</b>		<b>3,300</b>	<b>2,947</b>	<b>3,090</b>	<b>2,889</b>	<b>2,417</b>
Source: GFMS						

The largest manufacturing centres for gold jewellery are India (mainly for the domestic market), China (for both domestic and exports), Turkey (for both domestic and exports) and Italy (mainly for exports). Outside of South Africa, there is very little jewellery manufacturing of any scale in Africa.

Gold manufacturers obtain their gold in many different ways, making the supply chain very complicated: these include:

- Supply from a local bullion bank (at various pricing structures, such as spot rates, contracted forward rates, leasing rates etc). The gold is sold by the bank to the manufacturer.
- Supply from the manufacturer’s unallocated account of gold at a local bullion bank. The gold is owned by the manufacturer.

- Supply from the customer's unallocated account of gold at an international bullion bank. For example, a U.S. retailer with an unallocated gold account with an international bullion bank will debit a U.S. account and credit an account in the manufacturing country. This gold is then provided by the local bullion bank to the manufacturer, and remains the ownership of the customer. The manufacturer charges the customer the manufacturing cost (or "making charge") only.

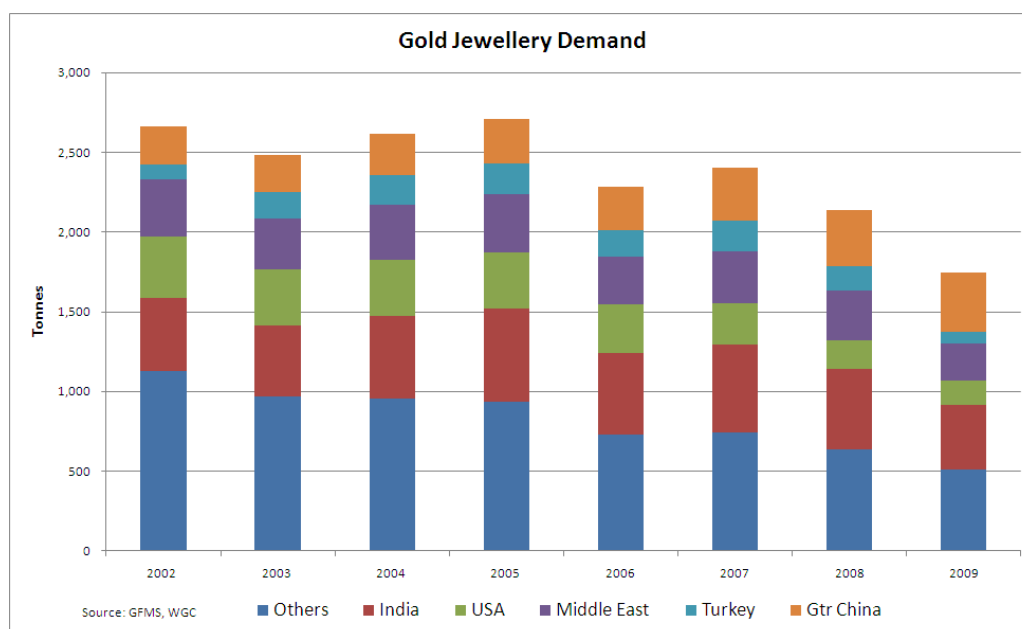
Jewellery manufacturers generally sell the finished product at a combination of (a) the weight and caratage of gold in the product at an agreed gold price plus (b) any additional high value materials such as diamonds, and (c) a manufacturing charge or "making charge", which can be either a per gramme of gold basis (e.g. US\$20/gramme) or a fixed cost per piece. The making charge will vary depending on the complexity of the finished piece, and covers the cost of workmanship, manufacturing, packaging, brand premium etc. In the case of very complex and luxurious products, the products are sometimes sold at a total fixed price basis, although even in these cases, the weight and value of gold is disclosed to the trade buyer.

In many cases, the retail or wholesale buyer may have stronger credit and financing than the manufacturer, and in these cases, the buyer will finance or physically supply the gold - therefore for a plain gold piece of jewellery, the buyer will pay only (c).

g: Gold Jewellery Retail Distribution and Consumer Demand:

The global fine jewellery market is highly fragmented, especially at the retail level, which is characterized by small family-owned businesses, sometimes with their own cottage industry manufacturing capability.

Appendix 4 shows the 10-year global demand (as opposed to fabrication, referenced above) for gold jewellery, which in 2009 was 1,750 tonnes or US\$55 billion (over US\$100 billion at retail value), as shown in the chart below.



An important aspect of the gold jewellery market is that it is much larger and far more geographically diversified than other premium consumer products, or precious metals and stones (such as platinum or diamond jewellery).



David Yurman), regional jewellery chains (Ben Bridge, Lux Bond & Green), department stores (Bloomingdale's, Saks, JCPenney) and "big box"/discount retailers (WalMart, Sam's Club, Target, Costco). The largest importer and distributor of gold in the USA is Richline, a Berkshire Hathaway company, and the latest importer/distributor of gold jewellery in the U.S. market, with their own manufacturing facilities in the U.S. and internationally. Jewelers of America is the national trade association, with over 20,000 retail members, and are very strong advocates of a responsible jewellery supply chain.

b: India: the largest consumption market for gold jewellery and the largest producing market for diamond jewellery. As a consumption market, it is highly fragmented with over 300,000 retail stores: the largest multiple retailers in India have fewer than 200 stores. Media, consumer and trade interest in responsible sourcing is currently weaker in India than in USA or Europe: nevertheless, we should expect that CSR will become a more important issue in India in the future, especially for Indian companies with international presence, and particularly those involved in diamond jewellery manufacturing. Bollywood stars, who are used extensively as "brand ambassadors" in the branded jewellery sector, are also increasingly supporting "green" causes. The Indian government has also been a strong advocate of improved integrity in the jewellery industry, especially in gold hallmarking (which remains voluntary) and improving manufacturing practices (especially child labour). Leading retailers include Gitanjali Group (the largest multiple jewellery retailer in India and the owner of Samuels and Rogers stores in the USA), Tanishq (the highest quality free-standing jewellery retailer and part of Tata Group) and Alukkas (Dubai-based retailer with a strong presence in UAE and India). There are also strong regional jewellery retailers – TBZ in Mumbai, GRT in Chennai, PN Gadgil in Pune, Khanna in Delhi, etc. In recent years, some large scale multiple retailers have emerged – for example, Reliance Retail, which has more than 900 stores in 80 cities across 14 states in India, operating supermarkets and shopping malls with a dedicated jewellery retail division. National and regional trade associations are strong in India, especially Gem and Jewellery Export Promotion Council (GJEPC) and The Federation of Indian Chambers of Commerce and Industry (FICCI), both of whom are promoting the jewellery sector domestically as well as for exports.

Gold is considered an intrinsic part of the household wealth in India, and is especially so in marriage, where the bride is gifted with gold that remains her property (and is therefore her insurance if times are tough): the Hindu calendar has many days and festivals which are considered auspicious for buying gold and jewellery, bringing good fortune and prosperity, and these occasions are major purchase drivers, second only to weddings.

c: China: the second largest market for gold jewellery (just behind India) and the only significant market to grow in 2009. It is now also the largest gold producing country, and most gold in China is mined locally and sold via the Shanghai Gold Exchange. Demand growth is driven by increasingly affluent young urban consumers, using fine jewellery as an expression of social status. In China, gold jewellery has historically been sold as pure 24K gold (known as "chuk kam"), a quasi investment product sold at the daily spot price plus a 10%-20% retail margin. However, over the past five years, more fashionable 18K gold jewellery has grown significantly, adding around 30% to the gold market, without cannibalising 24K sales. This 18K (or "K-gold") jewellery is often sold at fixed retail prices, has diamond or precious stone accents, higher margins and is often branded. Hong Kong based retailers have been at the forefront of growth in this new sector and these companies have also driven growth in the diamond jewellery market. Chow Tai Fook now operates over 150 stores in China, and Chow Sang Sang has over 100 stores across Greater China. China is now the primary focus for growth for many international luxury goods and jewellery brands: for example, Tiffany now

has 25 stores in Greater China (10 in China, 8 in Hong Kong, 5 in Taiwan and 2 in Macau). There are large scale domestic/local retailers: for example, CaiBai is a huge jewellery department store in Beijing which sells around 50% of all gold jewellery sold in the city. Trade development organisations are important, such as the Hong Kong Trade Development Council (HKTDC), the international marketing arm for Hong Kong-based traders, manufacturers and service providers. HKDTC has 11 offices in the Chinese mainland, and promotes Hong Kong as a platform for doing business with China, through marketing projects and trade shows.

d: Europe: the consumer markets in Europe for fine jewellery have been stagnant or in decline for several years: apart from luxury brands such as Cartier, Bvlgari, there are no regional retailers across Europe, and product design varies considerably across the continent. However, Europe is second only to the U.S. in terms of the profile of responsibly sourced jewellery in media and by NGOs (especially CAFOD). The recently announced Fairtrade/Fairmined gold project is intended to launch in the U.K. market by end 2010. Leading national retailers include Signet in the U.K. (550 U.K. stores in addition to the Sterling stores in the U.S.), Wempe in Germany, and Atasay, Altinbas and Goldas in Turkey. All European markets have strong national jewellery trade associations, and CIBJO (the World Jewellery Federation) is registered in Bern, Switzerland.

e: Middle East; the jewellery market in the Middle East bears some superficial similarities to India: it is primarily a high karat gold market (21K and 22K) with an increased influence of branded 18K gold and diamond jewellery marketed at the large youth market (over half of the Gulf's population is under 30 years old). There are several large scale retailers and manufacturers in the region: Dubai-based retailers such as Damas, Sky have retail stores across the Gulf and North Africa. L'Azurde and Taiba are major manufacturing and retail companies in Saudi Arabia, the world's fourth largest gold jewellery market. The Dubai Multi Commodities Centre (DMCC) is a major regional centre for the gold trade.

## **Part 2: Review of Standards and Risks in the Gold and Precious Metals Supply Chain**

### **a: Context and Overview of Industry Standards:**

#### **i: Summary of Corporate Standards, Industrial Gold Mining**

As explained in Part 1, the gold market in 2009 was worth US\$108 billion at the primary cost of gold (i.e. before any added value or margins): around  $\frac{2}{3}$  of gold supply originates from corporate industrial mining activity, and nearly  $\frac{1}{2}$  from just 15 companies (see Appendix 1b). Gold is therefore a very large scale activity dominated by multinational corporations, mostly originating from North America, South Africa and Australia. All major gold mining companies have extensive reports to society, corporate responsibility and sustainable development reports on their websites: links to reports and policies from the largest producers are listed below:

Barrick Gold	<a href="http://www.barrick.com/CorporateResponsibility/default.aspx">www.barrick.com/CorporateResponsibility/default.aspx</a>
Newmont Mining	<a href="http://www.newmont.com/sustainability">www.newmont.com/sustainability</a>
AngloGold Ashanti	<a href="http://www.anglogoldashanti.co.za/Sustainability/Reports/Sustainability+review">www.anglogoldashanti.co.za/Sustainability/Reports/Sustainability+review</a>
Gold Fields	<a href="http://www.goldfields.co.za/sus_reports">www.goldfields.co.za/sus_reports</a>
Freeport McMoran	<a href="http://www.fcx.com/envir/index.htm">www.fcx.com/envir/index.htm</a>
Goldcorp	<a href="http://www.goldcorp.com/corporate_responsibility/">www.goldcorp.com/corporate_responsibility/</a>
Kinross Gold	<a href="http://www.kinross.com/corporate-responsibility.aspx">www.kinross.com/corporate-responsibility.aspx</a>
Newcrest Mining	<a href="http://www.newcrest.com.au//sustainability.asp">www.newcrest.com.au//sustainability.asp</a>
Harmony Gold	<a href="http://www.harmony.co.za/sd/s_i.asp">www.harmony.co.za/sd/s_i.asp</a>
Buenaventura	<a href="http://www.buenaventura.com/">www.buenaventura.com/</a>
Polyus Gold	<a href="http://www.polyusgold.com/eng/community/sustainable_development/">www.polyusgold.com/eng/community/sustainable_development/</a>
Rio Tinto	<a href="http://www.riotinto.com/index_ourapproach.asp">www.riotinto.com/index_ourapproach.asp</a>
Lihir Gold	<a href="http://www.lglgold.com/asp/index.asp?pgid=10648">www.lglgold.com/asp/index.asp?pgid=10648</a>
Yamana Gold	<a href="http://www.yamana.com/CorporateResponsibility">www.yamana.com/CorporateResponsibility</a>

In addition to national and regional legislation that apply to mining operations, many of the above corporations claim that their own corporate responsibility policies and mining practices go beyond any standards set by national, regional or international governance and guidelines.

The leading proponent of sustainable development in the mining sector is the International Council on Mining and Metals (ICMM, see [www.icmm.com](http://www.icmm.com)), which has established a Sustainable Development Framework comprising three elements – a set of 10 Principles, public reporting and independent assurance. The 10 ICMM Sustainable Development Principles are as follows, which also include supporting guidelines and position statements for a number of principles:

1. Implement and maintain ethical business practices and sound systems of corporate governance.
2. Integrate sustainable development considerations within the corporate decision-making process.
3. Uphold fundamental human rights and respect cultures, customs and values in dealings with employees and others who are affected by activities.
4. Implement risk management strategies based on valid data and sound science.
5. Seek continual improvement of health and safety performance
6. Seek continual improvement of environmental performance
7. Contribute to conservation of biodiversity and integrated approaches to land use planning
8. Facilitate and encourage responsible product design, use, re-use, recycling and disposal of products

9. Contribute to the social, economic and institutional development of the communities in which members operate
10. Implement effective and transparent engagement, communication and independently verified reporting arrangements with stakeholders

The ICMM Sustainable Development Framework has been developed systematically since the formation of ICMM in 2001, with its foundations in the Mining, Minerals, and Sustainable Development (MMSD) project. In 2010, for the first time, ICMM conducted an assessment of the progress that each member company is making against these performance commitments, and reported the results of all 19 corporate members (see [www.icmm.com/document/818](http://www.icmm.com/document/818)). This publication was recognised by the Global Reporting Initiative (GRI) as an example of best practice.

ICMM corporate member companies report on their sustainable development performance on an annual basis, in line with the GRI's Sustainability Reporting Framework. This is in line with ICMM Principle 10, whereby members have committed to "implement effective and transparent engagement, communication and independently verified reporting arrangements with our stakeholders".

The ICMM Sustainable Development Principles, along with the reporting and assurance process that support the principles, are widely regarded as the foundation of best practice corporate governance in the mining sector, and principles 1-5 are especially relevant to the OECD draft guidance paper (see [www.icmm.com/our-work/sustainable-development-framework/10-principles](http://www.icmm.com/our-work/sustainable-development-framework/10-principles) ). These principles have been adopted by World Gold Council (WGC) on behalf of its membership of around 20 mining and royalty companies, and 5 WGC members are also members of ICMM. These principles have also guided the Responsible Jewellery Council's (RJC) development of guidance on mining standards. The ICMM reporting and assurance processes refer to many of the international standards listed in Appendix 1 of the OECD guidelines, and ICMM have themselves issued several position papers on the same issues, and do so with specific reference to the industrial metals mining sector (which are also applicable to gold, as well as platinum and diamonds).

As most aspects of gold mining and processing are the same as for other metals, there are no specific mining standards for gold. The membership of World Gold Council, over 20 companies which represent around 60% of all gold mined by the corporate sector, have adopted the ICMM's sustainability principles, and five of the largest members of WGC are also members of ICMM. The ICMM's principles, reporting and assurance requirements represent the strongest alignment of mining operations, including gold and other precious metals.

Although the issues of conflict are implicit in the principles of the ICMM, especially principles 1 to 5, none of the above organisations have specific standards or common guidance on how to identify and then mitigate against supply of gold and precious metals from areas of conflict or high risk (although the World Gold Council is developing a chain of custody from mine to refinery based on being "conflict-free"). There is therefore an opportunity for the draft OECD guidance to be taken into consideration by the ICMM, RJC, WGC, and by the gold and precious metals mining companies, and incorporated into the principles and practices related to best practice in corporate governance, sustainable development and supply chain integrity.

The strongest likelihood of corporation in the gold and precious metals mining sectors adopting OECD guidance is if leading organisations such as ICMM, RJC and WGC align principles, guidelines and standards to the OECD guidance, especially as these organisations have been included as participants in the OECD working group to help develop the OECD guidelines.



Although the OECD guidance paper is based on smaller-scale and mostly artisanal mined sectors in DRC such as tantalum, it is generally applicable to gold and other precious metals, especially platinum group metals (notably platinum, palladium and rhodium) and silver. However, the size, global diversity, and the complicated non-linear structure of the gold supply chain, as well as the role of large international corporations that operate in the gold sector, mean that OECD should provide a gold supplement to the general framework of the draft guidance. The purpose of this supplement should be to provide an overarching framework to help guide existing initiatives such as those by the WGC, RJC and EICC.

## ii: Summary of Standards and Guidelines, Artisanal Gold Mining

There is no common definition of artisanal and/or small-scale mining (ASM), but it is usually described as local, formal or informal mining by individuals or small groups using rudimentary technology, often on the verges of industrial mining sites, or on old mine dumps and tailings storage facilities, mine pits and old underground workings. This activity is sometimes legal, extra-legal or illegal. ASM is common in commodities which are high value, low bulk (easy to transport), and easily traded (fungible), such as diamonds, coloured stones, gold and silver.

ASM is especially relevant to the OECD draft guidance paper, as it can be assumed that artisanal mining will be prevalent in areas of conflict and high risk, such as DRC, especially where there is a lack of large scale industrial mining operations.

As there is no common definition of ASM, which by its nature is often small and unstructured, there are fewer established guidelines or standards for this activity, with the exception of those from the Fairtrade/Fairmined/ARM/FLO initiative (see below). However, as part of their community engagement policies, many large scale industrial gold mining companies have policies and procedures that relate to ASM activity around their mine sites. The ICMM and CASM have published guidance for industrial mining relationships with ASM operators, and the RJC's Code of Practices includes a standard relating to ASM.

The ICMM and CASM guidance encourages large-scale mining companies to undertake formal policies and engagement programmes with artisanal mining around their mine sites. Many companies report publicly on specific projects. Best practice examples of these include:

1: Barrick Gold: Barrick has a defined "Artisanal and Small-Scale Mining Initiative" which it launched in Tanzania in 2008 in partnership with the Tanzanian government. This initiative aims to assist the artisanal and small scale miners near Barrick's North Mara mine, and transform artisanal mining activities in Tanzania into regulated, productive and sustainable small-scale mining operations. Under Barrick's project, artisanal and small scale miners will have access to financing in order to legally acquire land for mining. Training, efficient tools and clean technology will help to make this labour-intensive work easier and safer, and leave the land healthier for future generations. Barrick's stated goal is to eliminate confrontation and work in harmony with local communities by supporting viable, sustainable livelihoods.

2: AngloGold Ashanti: specifically relating to ASM activity in DRC, and in response to a 2005 Human Rights Watch report "The Curse of Gold", AngloGold Ashanti, the largest industrial producer in Africa, which is in exploration stages in the DRC, has stated that "it has established processes and programmes, in collaboration with the relevant institutions of civil society in the region, which will promote sustained economic and community development with appropriate transparency. In particular, the company is working on programmes which will contribute to improved health care, education and community infrastructure and which seek to better manage the relationship between large scale mining operations and artisanal and small-scale miners."



AngloGold Ashanti (AGA) is a good example of an industrial gold mining company that has a formal approach to ASM (see attached report “AGA artisanal-mining review”), and it can be expected that if AGA start production in DRC, along with Randgold (South Africa) and Banro (Canada), standards should be improved.

The primary international reference for the establishment of common policies and standards in ASM is the Alliance for Responsible Mining (ARM), an independent, multi-stakeholder, advocacy initiative established in 2004 with the stated aim “to enhance equity and wellbeing in artisanal and small-scale mining (ASM) communities through improved social, environmental and labour practices, good governance and the implementation of ecosystem restoration practices.” ARM estimates that up to 12% of the world’s annual production of newly mined gold is produced by ASM.

ARM has launched standards and a certification system for artisanal mining in collaboration with Fairtrade Labelling Organisation (FLO), in the understanding that fair trade marketing can become a major incentive to improved practices and bring improved safety and environmental and living standards to local communities and miners. The “Fairtrade and Fairmined Standard for Gold from Artisanal and Small-scale Mining, including associated precious metals” were launched in March 2010 (see [http://communitymining.org/attachments/034\\_Gold%20Standard%20Mar%202010%20EN.pdf](http://communitymining.org/attachments/034_Gold%20Standard%20Mar%202010%20EN.pdf) ).

These gold standards enable organised “Artisanal and Small-scale Miners’ Organisations” (“ASMOs”, member-based organisations) to use the Fairtrade and Fairmined marks on certified gold products. These ASMOs must have the rights to mine in the affected areas. The Fairtrade/Fairmined initiative is currently focused on ecological and social, health and safety practices in South America, and is still in the development phase, so issues around conflict are not dealt with in detail in the ARM standards: the OECD guidance could be taken into account by Fairtrade if the initiative extends in future to cover conflict in more detail or if it extends in its geographic scope.

Certified miners, as ASMOs, must employ safe and responsible practices to manage dangerous chemicals involved in gold recovery, such as mercury and cyanide. Chemicals have to be reduced to a minimum and, where possible, eliminated. Miners can earn an additional “ecological” premium when they recover gold without the use of “chemicals” (which presumably means mercury and cyanide).

This mining standard was developed by ARM with nine legally established mining organisations in Bolivia, Colombia, Ecuador and Peru, and is being extended to other ARM producers in South America in 2010, so ARM expect more producers to join the system from 2011. ARM plan to extend the system to a series of pilot projects in Africa and Asia. In territories where the programme operates, local FLO-CERT (the independent international certification company offering Fairtrade certification services in over 70 countries) representatives certify and audit the ASMO, and all other participants in the supply chain who are supplied with gold originating from the ASMO (and who therefore wish to attribute “Fairtrade” to the gold) must register with Fairtrade and can be audited by FLO-CERT against relevant standards. The final seller of the gold, normally the retailer, must pay a license fee to Fairtrade for use of the mark (normally 1.7% of the wholesale value of the finished item). This system therefore establishes a specific and relatively linear supply chain for gold, in what is a non-linear market.

ARM plan to launch Fairtrade and Fairmined gold in the U.K. jewellery market, and then extend the initiative in an international roll-out, and have stated a target of establishing a 5% market share of the gold jewellery market within the next 15 years (which they quote as 15 tonnes, although 5% of the global gold jewellery market based on 2009 data would be 88 tonnes).

A key dynamic of the ARM/Fairtrade/Fairmined system is the intent to enable the gold certified as “Fairtrade/Fairmined” to be charged at a premium to the standard international price (in a similar way to other successful Fairtrade products): the Fairtrade minimum price for the pure gold content will be

95% of the LBMA daily fix price, and miners will receive a Fairtrade social premium of 10% of the LBMA fixing. For gold designated as “ecological” (gold that has been extracted without “chemicals” – mercury and cyanide), an additional 5% ecological premium will be paid, again based on the LBMA fix. This premium is paid by the Fairtrade registered buyer (normally a refiner) and can be passed on through the supply chain through other registered participants.

Such a system of encouraging artisanal miners to establish proper companies with legitimate mining rights (ASMOs) will encourage better processes, especially in Africa. As explained in Part 1, Rand Refinery processes around 80% of all gold mined in Africa, and all the gold mined in South Africa. However, Rand Refinery only deals with registered companies with proven legitimate mining rights, so will not buy from independent artisanal mining operations. It is estimated that such gold supplies from small-scale artisanal sources (and therefore those from high risk areas such as those in DRC) will sell their semi-refined gold to independent merchants or jewellers, or transport it as scrap to Dubai, where there are hundreds of traders in and around the gold souk who will pay a discounted rate (of around 10%) of the spot price for such product, and then have it refined to pure gold at the Emirates Refinery or elsewhere.

A further organisation focused on the ASM mining sector is The Communities and Small-scale Mining initiative (CASM, see [www.artisanalmining.org](http://www.artisanalmining.org)), launched in 2001. Its principal tasks are:

- Provide a forum that will facilitate better coordination and networking between stakeholders;
- Facilitate the availability of information on projects, contacts, publications and other activities on small scale and artisanal mining;
- Distil, extract and disseminate good practice and lessons learned on a hands on basis from selected projects and develop tools and principles that can be replicated in other projects;
- Act as a mechanism to facilitate matching projects and proposals with funding sources

CASM is a global networking and coordination facility with a stated mission to “to reduce poverty by improving the environmental, social and economic performance of artisanal and small-scale mining in developing countries.” CASM is currently chaired by the UK's Department for International Development and is housed at the World Bank headquarters in Washington, D.C. The Strategic Management and Advisory group of CASM includes representatives of The World Bank, The International Labour organisation, and United Nations Economic Commission on Africa.

It is resourced by a multi-donor trust fund, and receives its core funding from the UK and the World Bank, supplemented by support from Japan, Canada, France and the US. Several companies, trade associations and charitable funds, such as Tiffany & Co Foundation, also contribute finances to CASM's work programme. In contrast to ASM, which currently focuses on South America, CASM has a regional focus on Africa and Asia.

Although CASM has not been prominent in recent years, possibly due to difficulties in financing, it remains an important reference for the ASM sector, especially in Africa, where it facilitates small grants (up to US\$7,500) to support projects addressing improvements in community wellbeing, health, education etc.

In terms of gold and precious metals industry standards relating to artisanal activity, the Responsible Jewellery Council (RJC) have a set of standards guidelines relating to money laundering and the finance of terrorism (see Code of Practice 1.2 in the attached Standards Guidance – p.p. 9-11). The ICMM refers to the GRI's Mining and Metals Supplement's guidance on corruption and bribery, which in turn refers to the OECD Convention on Combating Bribery of Foreign Public Officials in International Business Transactions, OECD Guidelines for Multinational Enterprises, the Inter-American Convention Against Corruption, the United Nations Convention Against Corruption and Business Principles for Countering Bribery.

There is a risk that increased attention to due diligence and mitigation of supplies of gold and precious metals from conflict and high-risk areas may result in a negative impact to ASM producers who are attempting to escape poverty, simply because the downstream supply chain may avoid supplies of gold or precious metals from such regions. It is therefore important that the OECD guidance is not misinterpreted as a means to avoid gold and precious metals provided from ASM sources. In order that ASM producers are not penalised, I would recommend that OECD:

a: Include recommendations to large-scale producers to have clear and public policies relating to artisanal mining (both legal and illegal, organised and informal), as is the case with many large gold mining companies, and members of the ICMM and RJC.

b: Encourage national, regional and local governments, NGOs, industrial gold mining producers and refineries to support formal and organised ASM activity, similar to the ASMOs attributed to the Fairtrade initiative, such that artisanal mining is seen to be more productive and profitable is run within legal and organised frameworks, with registered companies with clearly defined, controlled legal mining rights.

c: Support the development of ASM/Fairtrade/Fairmined gold standards (attached) as the leading initiative in the ASM sector.

d: Encourage closer alignment between the ASM/Fairtrade/Fairmined gold initiative, CASM and other interested parties (ICMM, RJC, WGC etc).

### iii: Summary of Standards and Guidelines in the Gold Supply Chain beyond Mining and Refining

After refining, gold enters the supply chain in 3 basic supply chains: jewellery, industrial use (mainly electronics and dentistry) and investment (institutional and retail). Of these, the jewellery and electronics supply chains have been most active in developing supply chain standards, through the Responsible Jewellery Council (RJC) and the Electronic Industry Citizenship Coalition (EICC). Both are voluntary membership organisations: RJC welcomes membership from any participant in the jewellery supply chain (from mine to retail) as well as trade associations, and the EICC membership is available to electronic goods manufacturers, software firms, manufacturing service providers, contractors, designers etc. Both organisations have a broad membership base, with some very large and high profile members: in the RJC; Rio Tinto, BHP Billiton, AngloGold Ashanti, Signet Group, De Beers, amongst around 250 members and in the EICC; Microsoft, IBM, Sony, Philips and Dell amongst their 42 members.

The Responsible Jewellery Council has taken standards in the fine jewellery industry, across the entire supply chain from mine to retail, further than any other organisation, through the RJC System, a certification system which applies to all members' businesses that contribute to the fine jewellery supply chain (specifically, gold, diamonds, and in future, platinum). Under the RJC system, all "commercial" Members of the RJC are required to be audited by accredited, third party auditors to verify their conformance with the RJC's Code of Practices, and become certified under the RJC System. "Commercial" members relating to gold are defined as gold producers (mining), gold trader, hedger or refiners, jewellery manufacturers, wholesalers, retailers or service industries such as assayers (hallmarkers).

The RJC's Standards were launched in December 2009 (attached), which cover standards and guidance relating to Business Ethics, Human Rights and Social Performance, Environmental Performance and Management Systems, with the first accredited auditors announced in June 2010. The RJC's membership has started to be certified against these standards from 2010.

The RJC standards were produced through a long multi-stakeholder consultation review process, and although the standards focus on mining practices, they are also applicable throughout the supply

chain. The standards refer throughout to accepted and established international standards, using sources such as the Extractive Industries Transparency Initiative (EITI), Financial Action Task Force (FATF), Global Reporting Initiative (GRI), United Nations Universal Declaration of Human Rights, International Labour Organisation (ILO), Voluntary Principles on Security and Human Rights, the International Finance Corporation (IFC), the International Organisation for Standardisation (ISO SA8000), as well as more mining and sector specific guidance such as the ICMM's Sustainable Development Framework, the International Cyanide Management Code, the Kimberley Process etc.

The RJC has grown its membership considerably since announcing its standards guidance, particularly in retailers in the USA and Europe, and now has over 240 members. It is especially important that the membership is strong in the USA and Europe, as the media and NGO profile of “dirty gold” and “conflict diamonds” is strongest in these regions. The membership of RJC represents the strongest endorsement by any premium consumer goods sector in sustainable development and the application of standards across the entire supply chain, especially when compared to competitive premium consumer goods to fine jewellery, such as fashion items (apparel and footwear), luxury accessories, electronic goods or travel.

Although the RJC's membership was originally driven by a need to address consumer confidence in the diamond supply chain, its scope now covers a strong representation from the gold supply chain from mine to retailer, and from 2010 will also include platinum. With diamonds, gold and platinum, the coverage of the fine jewellery chain sectors will be over 95% of the market. Key players in the gold supply chain who are RJC members include:

- Mining: AngloGold Ashanti, Rio Tinto, (also formerly Newmont)
- Refining: Argor-Hereaus, Metalor, Pamp, Precinox, Valcambi
- Retailers: Cartier, Signet Group, Zale Corporation, Tiffany, LVMH
- Trade Associations: World Gold Council (currently around 20 gold mining or royalty companies as members), Jewelers of America (the U.S. jewellery association) , and, as a “friend”, World Jewellery Federation (CIBJO)

Although the RJC standards and certification system is a leading force in sustainable and responsible supply chain in precious metals and stones, it does not include specific guidance on supplies from areas of conflict. The OECD should ensure that its guidance paper is taken into consideration as a potential additional element in the RJC's standards and certification process, and in the development of a chain of custody by RJC for the fine jewellery industry, from mine through to retail.

In the use of minerals in the electronics sector, the Electronic Industry Citizenship Coalition (EICC) has followed the RJC in establishing a set of standards, procedures and an independent certification process to ensure adherence to those systems. The EICC encourages broad adoption of CSR best practices by all ICT companies and suppliers through a Code of Conduct, which provides guidelines for performance and compliance with critical CSR policies. EICC provides tools to audit compliance with the code, and helps companies report progress against the Code of Conduct. It provides guidance in five areas of CSR performance; labour, health and safety, environment, management systems and ethics. In terms of breadth and content, it draws from many international standards, such as the International Labour Organization core conventions, SA 8000, Fair Labour Association Code, United Nations Global Compact, and the Ethical Trading Initiative Base Code.

The EICC is a group of companies working together to create a comprehensive set of tools and methods that support credible implementation of the EICC Code of Conduct throughout the Electronics and Information and Communications Technology (ICT) supply chain. The EICC encourages members to use a “Validated Audit Process” (VAP), which provides a standardised audit process and resources; audits are conducted by auditors that have completed an Auditor Certification Program, qualifying them for conducting an evaluation of a facility. Validated audits can be conducted

on behalf of a single company or on behalf of multiple companies. As with RJC's standards and certification process, there could be an opportunity for the EICC's VAP procedure to be used to help implement the OECD's guidance on supplies of minerals from areas of conflict and high risk.

In the gold supply chain, use in electronics represents around 8% of total gold demand (an average of just under 300 tonnes per year for the last 5 years). This source of demand is relatively constant and is driven by high quality components (especially bonding wire) in mobile phones, MP3 players, computers and televisions. Its closest competitor is lower quality but lower priced equivalent components fabricated from copper. Although a small proportion of the total components, due to the high relative price of gold, EICC estimate that gold is currently the most valuable element in electronics, despite its relatively low weight, and composes 67% of the metals value in a cell phone and 65% of the value in a personal computer.

In April 2010, in partnership with Resolve, the EICC published a report on the electronics supply chain ("Tracing the Path Forward: A Study of the Supply Chain for Target Metals Used in Electronics", copy attached), with emphasis on tin, tantalum, and cobalt and the link between mineral extraction, trading, and conflict and human rights abuses, particularly in areas such as the Democratic Republic of Congo (DRC) and the broader Great Lakes region of Central Africa. This report is especially relevant to the OECD due diligence guidance.

Key findings and recommendations from this report were (all as quoted below, abridged):

1. Start with Supply Chain Transparency and Accountability, and Willing Partners

Without transparency and accountability in the supply chain, it is difficult to move to a proactive position and make claims that are credible and can be verified. The actors best positioned to move quickly in a supply chain transparency initiative for tin, tantalum, cobalt, and other metals such as gold and copper are likely to be medium- and large- scale operators from the formalised mining sector.

2. Forge Agreements with Key Stakeholders on Transparency and Accountability Measures

Stakeholders have valuable information that can help inform systems development. Each supply chain presents unique challenges. It is useful to discuss potential responses with stakeholders so that they are aware of both the challenges and potential solutions, can offer input and guidance and even participate in systems design, and can provide feedback when new approaches are tested. It is recommended that a robust stakeholder engagement strategy and protocol be established with a focus on the desired results, design, and accountability mechanisms for a) the supply chain transparency systems, and b) the pilots or trials focused on DRC.

3. Coordinate and Collaborate

Conflict and human rights challenges are likely to occur around minerals with significant economic value in the marketplace. While some regions will be in pressing need of political intervention and solutions designed with the relevant political, cultural, historical, social and economic factors in mind. A system that seeks to create voluntary industry and civil society response to these issues is more likely to work if it is designed with a global view in mind. It is hard to imagine unique systems designed region-by-region, mineral-by-mineral.

4. Explore a Multi-Sector Approach

The electronics industry is not the only sector challenged by conflict minerals or issues pertaining to supply chain accountability for minerals, nor is it the only sector that will have to address social and environmental issues related to the source of the material in its products. In identifying suppliers willing to participate in next steps, GeSI and EICC companies should also consider how to involve other end-use sectors, particularly automobile, airline and aerospace, energy and other green technology, medical equipment, and other industrial sectors.

5. While Designing Long Term Approaches, Create Opportunities to Test Solutions

Establishing standards and programs can be quite time-intensive. This is especially true of initiatives incorporating multi-stakeholder consultation, which is highly recommended for any chosen conflict minerals approach. "

These recommendations are relevant to the OECD guidance, especially related to the importance of medium and large-scale operators to facilitate a transparent supply chain, that guidance should not be determined specifically to individual metals/minerals, and that it is important to ensure the inclusion and collaboration of all end-user sectors (for example, jewellery, electronics and the automotive sectors in precious metals).

Although gold remains a small component by volume in consumer electronics, but relatively high by metals value, the EICC initiatives in establishing a responsible supply chain in the electronics sector complement those of the RJC in the jewellery sector, often using the same references for standards, and the EICC represents a very important development, supported by some of the world's largest electronics companies.

In terms of the third market sector for gold, retail and institutional investment, which together represent an average of 24% of global gold demand since 2005, I am not aware of any initiatives to establish responsible sourcing, supply chain integrity, nor chain of custody beyond general international financial services regulations and organisations such as the Financial Action Task Force (FATF, see [www.fatf-gafi.org](http://www.fatf-gafi.org) ), an inter-governmental body, established through the OECD, whose purpose is the development and promotion of policies, both at national and international levels, to combat money laundering and terrorist financing. The Task Force is a "policy-making body" which works to generate the necessary political will to bring about national legislative and regulatory reforms in these areas.

Since its creation the FATF has spearheaded the effort to adopt and implement measures designed to counter the use of the financial system by criminals. It established a series of Recommendations in 1990, revised in 1996 and in 2003 to ensure that they remain up to date and relevant to the evolving threat of money laundering, setting out the basic framework for anti-money laundering efforts and are intended to be of universal application.

As seen in Part 1, bullion banks constitute a major element of the gold supply chain, supplying all market sectors as well as the primary source of the investment market. The London Bullion Market Association (LBMA, see [www.lbma.org.uk](http://www.lbma.org.uk) ) is the London-based trade association that represents the wholesale gold bullion market in London. London is the focus of the international over-the-counter (OTC) market for gold and silver, with a client base that includes the majority of the central banks that hold gold, plus producers, refiners, fabricators and other traders throughout the world. The LBMA "Good Delivery List" is now widely recognised as representing the global standard for the quality of gold bars, but there does not appear to be any reference to supply chain vigilance in LBMA's documentation.

Most gold used in financial services (e.g. that held by central banks, or gold held in the large exchange traded funds (ETFs) is held in 400oz bullion form. Retail investment is mostly in the form of small bars (usually provided by banks and refineries) or coins (produced by mints). As such, the product is in the same form as it left the refinery, and in the case of bars, will have the year of manufacture, the refinery mark, a purity standard and an individual serial number; in some cases the bar will have a weight mark. Participants in this sector include retailers (coin and bullion dealers), but more importantly, large international banks such as HSBC, Barclays, ABN-AMRO and UBS.

The absence of bullion banks, and the associations representing the gold industry in the financial markets (such as the LBMA) in supply chain initiatives such as RJC or EICC is a deficiency in establishing a stronger chain of custody and best practices in the gold supply chain. Outside of AML (anti-money laundering) and "Know Your Customer" practices, the banking sector does not participate in the major supply chain initiatives in gold and precious metals.

The LBMA, its members, and in particular, the LBMA's market makers and referee refineries could be encouraged to endorse the principles and standards of the RJC and the EICC, and ensure that all its members do not source gold from independent (i.e. non-corporate) or artisanal sources and adopt

the OECD due diligence guidance. Ideally, the LBMA and its members should establish its own set of common principles and code of practice specifically relating to their trade in gold bullion, adopting (and add input where applicable to) the standards and certification policies of organisations such as the RJC, EICC, WGC etc., joining the Consultative Panels of these organisations to ensure harmonisation across sectors. Such an initiative by LBMA could provide a global reference for the investment market and act as a template for other governing bodies in the bullion market to adopt, such as the Dubai Multi Commodities Centre and the Shanghai Gold Exchange.

Beyond standards in mining (covered above), my recommendation to OECD regarding standards through the precious metals supply chain in the jewellery and electronic/industrial sectors are as follows:

a: Support the RJC's system of standards and independent third party certification, which has been adopted by their 250 members, and, especially importantly, through the OECD's participation on the RJC's Consultative Panel, engage in the RJC's development of a chain of custody in the fine jewellery supply chain, currently work in progress.

b: Likewise, engage in the development of the WGC's chain of custody initiative, which specifically addresses gold from conflict areas.

c: Support the EICC's initiatives in the electronics sector, adopted by the leading electronics manufacturers and suppliers, and use these as guidance for other areas of industrial supply in the gold market (e.g. dentistry, auto catalysts etc).

d: Monitor the RJC, EICC and WGC's initiatives, and support harmonisation of standards in these organisations on common issues, especially in chain of custody and product traceability relating to areas of conflict and high risk.

e: Encourage greater involvement by bullion banks, possibly through the LBMA, to engage in responsible supply chain issues, and encourage the leading bullion trading banks to adopt a common code of practice relating to a formal evaluation and certification of sources of gold supply to and from banks.

iv: Gold Supply Chain and Standards Issues Relating to the United Nations Final Report of the Group of Experts on the Democratic Republic of the Congo, November 2009

The Final Report of the U.N. Group of Experts on the DRC (see [www.un.org/sc/committees/1533/egroup.shtml](http://www.un.org/sc/committees/1533/egroup.shtml) , especially pp. 39-40), assessed the international gold trade between the Democratic Republic of the Congo, Uganda and Burundi, and the United Arab Emirates, and gathered evidence of inconsistent and incomplete customs declarations and procedures, as well as a lack of adequate control procedures by Government customs and mining authorities in gold exporting and importing countries. The report explains how gold was smuggled in very small quantities by individuals and then processed in Dubai, possibly by traders in the gold souk, or by the Emirates Refinery. In May 2010, it was reported that Russian investors have installed a \$1.5m gold refinery in Uganda, the first of its kind in the Great Lakes region, supported by the Ugandan government. It was stated that the refinery, Victoria Gold Star, based in Fifth Industrial area in Kampala, can refine 60 kilogrammes of gold daily.

Outside of governmental regulations requiring declarations of exports and imports, there are no standards in the industry which would directly address the issues in the report. Imports into Dubai can only be undertaken by those importers who have the appropriate trade licence. Import duties have been largely standardised at 4%, but there are many exemptions, including un-worked silver and gold, iron and steel for use in construction, and raw or partially worked materials for use by local manufacturers. The importation of semi-refined gold would therefore not attract duty.

There are hundreds of retailers and traders in the gold souk in Dubai who will buy “scrap” or semi-refined gold, at a small discount to the daily spot rate (a buy/sell spread, in the same way as currency traders). Most of these traders will then have the gold refined to pure gold by the Emirates Refinery, which refines around 450 tonnes of gold a year (around US\$ 15 billion at 2009 average prices).

According to the U.N. Report, a letter from the Dubai Multi Commodities Centre (DMCC) to all of its members dated April 2007 advised them to stop purchasing gold from the Democratic Republic of the Congo, Rwanda and Uganda. However, it has been virtually impossible for these traders to enforce this guidance, as they cannot validate the origin of the gold, and there is no industry-wide chain of custody to enable them to do so (yet). As gold is a globally traded commodity which acts as a currency (i.e. most gold dealers, traders and banks around the world will exchange gold with local currency), such guidance is, in effect, similar to asking traders not to accept US dollars originating from these countries.

The hundreds of gold retailers and traders in Dubai will accept gold, as scrap carat jewellery, or as semi-refined gold as a part-payment for new jewellery, or will exchange for cash. If DMCC were successful in cutting out supply of gold from DRC, Uganda or Rwanda, then it is highly probable that the trade would move to other countries; for example, there are over 300,000 gold retailers in India who trade in “scrap” gold, where fabrication of gold jewellery exceeded 450 tonnes in 2009. Other easily accessible potential sources of recycling would be Turkey (where gold jewellery fabrication was 111 tonnes in 2009), Egypt (45 tonnes) Iran (38 tonnes), or India (the largest market for gold demand). Even if access to these sources of finance and refining were closed, even in “Western” economies, the trade in “scrap” gold has increased dramatically in recent years (for example, through pawnbrokers, bullion dealers or direct mail ventures such as “Cash4Gold” in the USA and the UK), with no procedures to validate the source of the gold. This constitutes a risk to the implementation of OECD’s guidance.

In the UN Report, it states that a Democratic Republic of the Congo senate report published in September 2009 estimated that 40 tonnes, or \$1.24 billion of gold, is smuggled out of the Democratic Republic of the Congo each year, and the UN Report uses these figures to estimate that armed groups may derive several million dollars of revenues each year from gold trade. However, the source of these figures is not clear: GFMS, the leading global authority on gold supply and demand statistics, quote total mine supply of gold from the DRC in 2009 at 8 tonnes. This constitutes around 0.3% of global gold mine production, and 0.2% of global demand including supply of “scrap” gold, so in gold industry terms, it is very insignificant.

Even this figure of 8 tonnes may be high, especially if the analysis in the Pact report of June 2007 to DFID, USAID and ARM, “Researching Natural Resources and Trade Flows in the Great Lakes Region” are correct, and there are no reasons to expect this situation to have changed in the last three years. In terms of “industrial” gold production in DRC, AngloGold Ashanti is still in exploration stages, Rand Gold is building the Kibali project, Banro Corporation is planning to start production in 2011, and Mwana Africa is also still in exploration stages: if these industrial mining companies start production, then the incidence of illicit production in DRC and subsequent smuggling to other countries for refining may reduce as a result of improved corporate governance in the country.

Even at the very low figures stated by GFMS of 8 tonnes of gold production in the DRC in 2009, which is very low in global gold production terms, it is important to recognise the value that gold production in DRC creates to the local economy: the above-mentioned Pact report from 2007 states “while the informal gold trade in the northern province of Orientale is illegal, dangerous and exploitative, it is still the economic heart of the region providing essential incomes for miners and traders. Without this industry, poverty would be far worse. Accurate figures are difficult to obtain but it is estimated that there are ca 60,000 artisanal miners making their livelihoods across the main gold areas. The trade flows from the gold fields generate millions of dollars per month into the local economy.”

The report concludes that “it is clear that renovation of the enabling environment within the natural resource sector and improved regulation by, and revenue return to, the state has the potential to play a significant role in poverty alleviation in the region. It is, however, important to view any poverty



alleviating programs and interventions within this sector in a holistic manner. Given that many of the problems are multi-faceted and dependent on a variety of other factors within such a weakly governed environment, it is critical that an integrated development approach be adopted that will maximize positive impact. Failure to do so will inevitably limit the effectiveness of any one program.”

So whilst industry initiatives in gold and other extractive industries are making committed and very constructive progress in addressing the issues that underpin the illicit production of gold in DRC, such as those of ARM, CASM, RJC, ICMM, EICC, EITI etc., it is vital that local and national government and international organisations play supportive roles in these initiatives to provide structure to artisanal mining of gold and other metals and minerals in the DRC.

Likewise, it is important to recognise the role that precious metals production can play in the strengthening of emerging economies such as the DRC. For example, a World Gold Council report of September 2009, produced in collaboration with the ICMM, “The Golden Building Block: gold mining and the transformation of developing economies” (see [http://www.gold.org/assets/file/pub\\_archive/pdf/WGC\\_Golden\\_Building\\_Block.pdf](http://www.gold.org/assets/file/pub_archive/pdf/WGC_Golden_Building_Block.pdf)) considers the macroeconomic benefits of gold production for developing countries, taking into account the resource curse theories proposed over the past several decades and examining evidence of actual contributions, reporting on activities in Tanzania, with additional material from the ICMM’s “Resource Endowment Initiative” in Ghana, Peru and Chile. It considers large-scale, formal gold production only, as opposed to small-scale, artisanal or informal mining which plays an entirely different role in the economies of many developing nations, with very different social and environmental impacts, often negative.

One general conclusion of the review was that government reform of mining law has been one of the identifiable common denominators in mining’s contribution to positive economic development. The report states that evidence suggests that gold mining, in particular, can be one of the first sectors to sustain growth in a previously failing economy, once minimum reforms are in place. This would be especially applicable in the DRC.

Specifically relating to the impact of mining activities in the Great Lakes region of Central Africa, the Pact report mentioned above states that “while the informal gold trade in the northern province of Orientale is illegal, dangerous and exploitative, it is still the economic heart of the region providing essential incomes for miners and traders. Without this industry, poverty would be far worse. The trade flows from the gold fields generate millions of dollars per month into the local economy”.

#### **b: Industry Standards and the OECD Draft Due Diligence Guidance**

The OECD due diligence guidance, as a general document relating to supplies of minerals from areas of conflict and high risk, is applicable to all minerals, and as such, separate guidance specific to gold and other precious metals is not required.

However, it is important to recognise that the gold industry is large (over US\$100b), globally and industrially diverse, highly fragmented (especially “downstream” in the jewellery sector) and is complicated by several factors, including the role of recycling (which makes the gold supply chain more similar to timber or palm oil than to other metals or diamonds). The recent enactment in the U.S.A. of the “Dodd Frank Wall Street Reform and Consumer Protection Act” will require U.S. publicly-traded companies using gold in their products to file annually with the SEC, disclosing whether this gold originated from areas of conflict. If so, the reporting company must provide information on the due diligence it exercised to ensure that the gold did not benefit armed groups, and the OECD guidance will be especially relevant in establishing such due diligence for the US market.

The comments and recommendations below refer to the OECD guidance requirements for companies to undertake a risk assessment, rather than a “YES/NO” process against established external reference points, which is used by other chain-of-custody processes, including those currently in development in the gold and precious metals sectors by World Gold Council and the Responsible Jewellery Council. If OECD guidance is incorporated into these emerging chain-of-custody systems, it should be recognised that the guidance may need to be flexible to suit a “YES/NO” system, so companies can use an independent reference of whether the provenance of products or materials are from areas of conflict or high risk, hence avoiding subjective assessments.

For example, companies could use the Heidelberg Conflict Barometer, an annual independent review, categorisation and qualitative definition of global conflict and war zones produced by the Heidelberg Institute on International Conflict Research (HIIC, see [www.hiik.de](http://www.hiik.de) and the 2009 barometer at [http://hiik.de/en/konfliktbarometer/pdf/ConflictBarometer\\_2009.pdf](http://hiik.de/en/konfliktbarometer/pdf/ConflictBarometer_2009.pdf)), to help determine whether an area is defined as one of conflict. Another external reference could be the Stockholm International Peace Research Institute (SIPRI, see [www.sipri.org](http://www.sipri.org)), an independent international institute dedicated to research into conflict, armaments, arms control and disarmament, which published a policy brief on controlling conflict resources in the Democratic Republic of the Congo in July 2010 (see [http://books.sipri.org/product\\_info?c\\_product\\_id=407](http://books.sipri.org/product_info?c_product_id=407)).

### Step 1: Establish Strong Company Management Systems:

In general terms, the OECD guidance would not require specific adaptation or change to be relevant to the gold and precious metals supply chains. As explained in Part 2 of this paper, the majority of large scale producers, refiners and other participants in the gold and precious metals supply chains have robust management systems and are aligned to multi-stakeholder industry initiatives such as ICMM, RJC and EICC.

#### A: Supply Chain Policy:

All companies in the supply chain are encouraged to “create and commit to a supply chain policy for minerals from conflict-affected and high risk areas”, and “refer to a common set of standards on mineral extraction, trading and handling”. As yet, there is no established chain of custody supply system in the gold and precious metals industry, although systems are currently being developed by WGC and RJC. Apart from a very limited number of individual projects, as explained in Part 1, there is no “credible chain of custody and traceability system”.

#### B: Internal Management Systems

There are no specific issues to the gold and precious metals industries in this section: as a general comment, OECD may consider endorsing a “YES/NO” approach to this section, whereby management systems use external reference points for due diligence purposes rather than create and possibly proliferate individual or bespoke assessment criteria. The integration of additional requirements into existing management systems such as ISO9001 and ISO14001 should be encouraged to ensure implementation is both cost effective and timely.

#### C: Controls and Transparency in the Supply Chain

Money laundering regulations and import/export requirements mean that the “Know your customer” processes of the refiners has resulted in a relatively well-defined supply chain between “upstream” participants in the supply chain (from mine to bullion bank/dealer). The key issue in this section is the lack of established supply chain systems in gold and precious metals beyond the “upstream”, which is extremely problematic given the structure of the supply chain and the role of recycling, the fragmentation and lack of sophistication of the supply chain (especially at the retail level), at the

global fungibility of gold. In terms of key reference points in the supply chain to identify and mitigate against supplies from areas of conflict, due diligence should be driven by an ability to identify suppliers, especially “upstream”, rather than necessarily identify the country of origin of the materials.

It is important that OECD guidance ensures the support of organisations such as ICMM, ARM, RJC EICC and WGC, who have been through very rigorous stakeholder reviews and who now enjoy the support of a significant proportion of industry participants through the supply chain, many of which are very large and influential multinational corporations with exemplary performance records.

Turning to the detailed recommendations in the Supplement on Tin, Tantalum and Tungsten (hereafter “3T Supplement”), the OECD guidance separates guidance for exporters, companies handling mineral concentrate and those using refined metals (smelters); producers (i.e mining companies and ASM organisations) should be included under section C1, although there is a risk under sections C1 and C2 that ASM producers could see these recommendations as too onerous, and they may therefore look to avoid supplies to established refineries and supply their gold doré through less structured sources, such as independent jewellers with smelting capability or refineries in the Middle East and India. This may have the unintended consequence of marginalising ASM producers and increasing supplies of gold and precious metals through unofficial channels.

In a Gold and Other Precious Metals Supplement, it may be more relevant for gold and precious metals to define upstream participants as:

- 1: Producers (mining companies and ASM organisations)
- 2: Local exporters
- 3: Concentrate traders
- 4: Refiners/smelters
- 5: Bullion traders (including banks)

As in 1A above, in the absence of an existing “credible chain of custody and traceability system”, reference could be made in gold and precious metals to the WGC, ICMM and ARM for producers, and to the WGC, RJC, EICC for other upstream participants.

In section C.5.1 of the 3T Supplement, there is a similar issue for downstream companies as there is no established supply chain system for gold and precious metals (yet, although the WGC and RJC systems are in development), and due to the high fragmentation of the supply chain and the role of recycled product in the supply chain, it is virtually impossible for downstream companies to establish their own. However, the RJC and EICC are good references for participants in the jewellery and electronics supply chains.

Section C5 of the 3T Supplement has smelters/refiners as its focal point for downstream participants in the supply chain. It is very difficult, if not impossible, for downstream participants in the gold and precious metals supply chains (e.g. small independent jewellery retailers) to identify their supply to the smelter/refinery level. It is more likely that these participants (especially manufacturers) would be able to identify the provider of the gold bullion (for example, the bullion bank or dealer).

As explained in Part 1(e) above, bullion banks and dealers will provide gold to manufacturers or the investment market, mostly in the form of bars (e.g. 400oz for investment, 1kg for jewellery), and these bars will carry the refiner’s mark, an individual serial number, purity, weight and often date. Much of the gold supplied by banks is through unallocated bullion accounts, and this could be sold, loaned, leased or swapped with the manufacturer, so the supply chain is complicated. Although the gold would be marked with the refiner mark, and would mostly be of LBMA “good delivery” status, there is a risk of contamination if the bullion bank or dealer cannot ensure that all gold provided to

and from the bank is “conflict free”. Similarly, as banks will provide gold from various refineries and in various forms, it is much easier for participants further down the “downstream” supply chain to identify the bank supply rather than identify the refinery from individual gold bars. The ability of bullion banks and dealers to certify that all gold supplied to and from the bank is “conflict-free” would have a significant impact throughout the supply chain.

#### D: Strengthen Company Engagement with Suppliers

The recommendation that companies “should establish, where practicable, long-term relationships with suppliers” could be interpreted as constraining competitiveness, commercial best practice and may be counter to company or auditing policies and procedures. Many companies have internal policies on supplier contracts which determine that supplier contracts should be no longer than three years, supported by guidance from internal auditors, in order that supplier relationships remain competitive and commercial, and that there are no inappropriate “comfortable” relationships.

#### E: Establish Company Grievance Mechanism

There is nothing in this section which would relate specifically to gold and precious metals.

#### Step 2: Identify Facts and Assess Risk in the Supply Chain

As described in Part 1 of this paper, there is no easy way for companies to evaluate and identify all participants in the supply chain (especially as 40% of supply comes from re-cycled “scrap” sources). As there are no internationally accepted chain-of-custody or traceability standards in the supply chain, it is also difficult to evaluate risks in the supply chain against common standards, and there are very few expert sources to call upon in the gold and precious metals industries.

Step 2 of the OECD guidance does not contain issues that would be specific to gold and other precious metals, but does raise some more general points.

Considering the whole gold and precious metals supply chain, the areas where risk of contamination is greatest are mainly in the “upstream” supply chain, namely:

- a: before the mine smelthouse (for example, illegal alluvial miners on a legal mining lease)
- b: in supplies of ore to the mine smelthouse which are mixed from different mine sources in order to achieve the optimum mix for supply to the refinery
- c: at the refinery, especially where the refinery mixes sources of gold and precious metals from different sources, including recycled material
- d: at bullion banks and dealers, where gold and precious metals is stored based on purity rather than provenance, from different refinery sources, in unallocated accounts
- e: at alloy and product manufacturers, where gold carat alloys are produced for final products by adding other metals (especially base metals such as copper, nickel etc) to the gold supplied from a refiner or bank.

Part I of the 3T Supplement, relating to upstream companies, places a large onus on smelters and refiners to undertake a risk assessment: it may be more appropriate to recommend that all upstream companies, from producers to bullion banks/dealers, undertake the risk assessment.

In Part 1.B of the 3T Supplement, the guidance recommends that upstream companies form an on-the-ground assessment team, jointly or individually, to establish and maintain information on mineral extraction from conflict areas. In gold and precious metals supply from mine to bullion, due to the high intrinsic value of the product, through the “Know Your Customer” process, there are many

existing checkpoints such as certification by the mine, certification by the handling/clearing agent, customs certification, which upstream companies can refer to, and which can be independently assessed (by LBMA accredited supervisors) in case of discrepancies. These checkpoints and certifications can already be a basis for establishing whether the source of product is from an area of conflict or high risk.

Part II of Step 2 of the 3T Supplement, relating to downstream companies, requires companies, especially manufacturers to assess due diligence at the refiner/smelter level: as in Step 1, most downstream participants in gold and precious metals would not be able to identify the refinery source: it may be more appropriate to determine the bullion provider (i.e. the bank or bullion trader) as the focal point for due diligence practices. Many manufacturers would use the facilities of an unallocated bullion account with an international bullion bank, and in this case, the supply of gold is not linear: however, the bullion bank should be able to determine the source of bullion held in its vaults, which would all be audited and have individual serial numbers. If the downstream company is able to determine to refinery source, or even the producer mine or company, this would be an additional benefit. This would apply throughout Part II of Step 2 in references to “smelter”.

If, in the proposed Gold and Other Precious Metals Supplement, the “upstream” supply chain includes the bullion banks and dealers, then the “Know Your Customer” guidance, its regulation and assurance processes, and its application to anti-money laundering, may be a useful reference for OECD in assessment of the gold and precious metals supply chains.

As outlined in Part 1 of this paper, some 40% of gold is produced through recycled sources. This will present significant challenges for risk assessment and management. Further, it may be appropriate for OECD to take this into account when elaborating the red flags that trigger the due diligence process for the Gold Supplement, as production of gold as bullion from a country may not relate to the mineral reserves or mine production. It would be more relevant for the gold and precious metals supplement if the red flags distinguished between minerals from mining production, and minerals from recycled sources. Step 3: Design and Implement to Respond to Risks

The guidance in Step 3 does not raise issues specific to gold and precious metals.

The recommendation for downstream companies to encourage industry membership organisations to develop modules relating to the OECD guidance is important, as these organisations tend to have the greatest leverage through the supply chain. These organisations also have the strongest relationships with external stakeholders and other industry experts.

In the gold and precious metals sectors, the key industry organisations are:

Mine production: ICMM, ARM, WGC, International Platinum Group Metals Association (IPA)

Refining: LBMA, WGC, RJC

Bullion dealing: LBMA

Manufacturing: RJC (jewellery), EICC (electronics)

Retailing: RJC, WGC, Platinum Guild (PGI), CIBJO, local national jewellery associations.

#### Step 4: Ensure Independent Audit of Due Diligence

Step 4 of the 3T Supplement requires smelters/refiners to undertake independent third party auditing of due diligence practices. As in comments relating to Steps 1 and 2, it would be more appropriate if this were applicable to “upstream” companies in the supply chain, and for gold and precious metals, that those “upstream” companies should include bullion traders (including banks) as the focal point in the supply chain for all “downstream” participants. If OECD includes bullion banks in the “upstream”

supply chain, then the “organisations of bullion banks” (such as LBMA) could take a more direct role in the auditing process (as they do in acting as referees presently). Possibly the most sensitive issue with mining companies, not only in the gold and precious metals sectors relates to Step 4, requiring third party auditing, as most “upstream” participants already have extremely onerous auditing procedures, either as part of their own company policies or as part of their commitment to industry associations such as ICMM, RJC and LBMA, as well as governments in some cases. It is unlikely that these “upstream” companies would accept further auditing obligations beyond their own corporate policies and procedures, along with those of established membership organisations that they belong to and governmental obligations. It is therefore important that the guidance recognises, as it does in the introduction, that the OECD requirement to audit is not a stand-alone audit, and that the audit can be incorporated into existing and ongoing auditing practices to avoid “audit fatigue”.

An additional issue that faces auditing, not only in gold and precious metals, is the lack of independent, credible and experienced third party auditing facilities, especially as they relate to the “competence” criteria in Step 4 A.3.b. of the 3T Supplement. The risk of a lack of appropriate audit providers who have relevant experience enhances the need for integration into existing, ongoing audit policies and programmes. It may be very difficult to find auditors who have knowledge and skills in (i) the company (ii) the supply chain, (iii) conflict affected areas and (iv) standards of care in the industry. Therefore in Step 4.B.d, it may be more appropriate to re-word this guidance so downstream companies ensure their industry organisations incorporate this guidance into existing auditing principles, guidelines and certification procedures.

OECD should clarify that the audit would be at the “upstream” supply chain, and make supporting references to existing and emerging chain of custody initiatives.

#### Step 5: Publish Annual Report on Supply Chain Due Diligence

Although Step 5 of the guidance does not highlight any issues specific to gold or precious metals, the fragmented nature of the supply chain, especially in jewellery, means it is very unlikely that all companies in the supply chain would have the capability to publish such a report (for example, a small family owned jewellery store).

Fragmentation in the jewellery supply chain is an issue in this Step of the guidance (a) due to the high numbers of SMEs in the industry and (b) because the final product sold in the jewellery supply chain is normally a composite of several minerals (e.g. an alloy/combination of gold and other metals, or gold set with precious or semi-precious stones). In the Gold Supplement, the OECD should elaborate further upon the provision given to SMEs to address these issues. As in Step 4, a solution to this issue may be rather than recommend that all supply chain participants publish supply chain due diligence (separately), OECD could require that where companies produce annual reports or reports to society, they include supply chain due diligence in those reports. Likewise, industry organisations such as RJC, EICC, ICMM and national trade associations could include supply chain due diligence in their own annual publications, alongside guidelines for their membership organisations.

#### Annex II, Model Supply Chain Policy for Responsible Global Supply Chains of Minerals from Conflict and High-Risk Areas, and Appendix, Guiding Note on Upstream Company Risk Assessment

The OECD guidance and the Appendix to the 3T Supplement do not raise issues or risks specific to gold and precious metals, although some points are especially relevant due to the high intrinsic value of these minerals and their fragmented supply chains. It will be important to ensure that the principles and standards in Annex II are harmonised as much as possible with industry organisations such as ICMM, RJC, EICC, WGC etc., through the OECD working group and through the OECD’s

incorporation of its guidance in these organisations' standards development. This applies especially to those principles and standards where there is not an obvious direct correlation between the policy and the supply of minerals from conflict areas (for example, mining conditions, corruption).

In the Appendix to the 3T Supplement, in terms of "Know your supplier and business partners", as indicated in comments on Step 2, in gold and precious metals, it is virtually impossible to "identify all key actors in the supply chain", due to its fragmentation and cyclical nature. However, it should be possible to moderate this by stating "where possible, identify key actors in the supply chain to and from the company" or alternatively "identify all key actors in the upstream supply chain".

## **General Comments and Recommendations**

The analysis above and recommendations in this section relate primarily to the “industrial” supply of gold and the supply chain of “industrially” mined gold and “recycled/scrap” gold (primarily jewellery) to the jewellery, industrial and financial investment markets, as this is where most corporate participants operate to which the OECD guidance would apply, and these companies constitute over 95% of the gold and precious metals markets. The recommendations reflect the need for due diligence to be driven by an ability to identify “upstream” suppliers, rather than country of origin.

The intention of the comments and recommendations in this document would mean that over 95% of all gold supplied in jewellery, industrial and investment markets would be supported by operating standards and nascent chain of custody initiatives, and therefore supplies of illicit and illegal gold, which may fund conflict, as is alleged in gold supplies from DRC, would find integration in the organised supply chain more difficult. This review therefore assumes that concerted action by over 95% of the industry to create a transparent and responsible supply chain would inevitably increase the likelihood of improvements in the unofficial, illicit and illegal aspects of the use of gold and precious metals.

However, given the highly fragmented nature of the gold market, and the relative ease of supplying relatively small quantities of gold in various forms to independent traders and retailers around the world, this report does not attempt to identify measures to eliminate such illicit trading through these sources.

Although the OECD paper rightly does not require specific separate guidance for companies dealing in gold and precious metals, it should take account of the gold supply chain, the huge scale of the gold industry (at over US\$100 billion at the first cost of gold) and recognise the important influence that the large-scale mining companies, refining companies and wholesalers and retailers that operate in the industry can have in improving standards and procedures through the supply chain. These large scale corporations have been the main drivers in establishing standards and in founding initiatives such as the ICMM, RJC, WGC and Kimberley Process systems of principles, standards, auditing and certification. This is primarily because these corporations (a) have the ability to fund such initiatives and (b) have strong CSR policies and reports to society which mean they can implement such initiatives.

It is also important to recognise the complicated and non-linear chain of custody in the gold supply, the fact that 40% of gold supply comes from recycled sources, the non-linear structure of the supply chain, the multiple sectors that gold supplies, and the role that gold has as money, which makes the establishment of standards in the industry more complicated than in many other sectors.

I recommend that OECD ensure its guidance provides the overall framework for corporate guidance and is that it is harmonised with established or nascent standards which are already being developed and implemented by some of the most important sectors and industry organisations throughout the supply chain. These standards and principles have been developed with the input and subsequent support of the major players in the industry; they are consistent, focused and implementable. However, these organisations do not specifically target conflict-related mining and trade, so OECD’s guidance could potentially be incorporated into these standards and processes.

In terms of “upstream” companies, mining principles and best practice are well established through the ICMM and supported by the world’s major mining companies, in gold and other metals and minerals. The WGC, through its members and accredited refineries, is currently investigating options for a chain-of-custody approach for gold supply from mines to refineries. For “downstream” companies, the three major sectors of end-user demand are gold jewellery (average of 64% of gold demand over the past 5 years), gold as electronic components (8% of demand) and gold as a financial investment (24% of demand). The jewellery and electronics supply chains have very strong initiatives through the RJC and EICC, although the global investment market for precious metals does not have any specific initiatives that relate to the responsible use of these commodities in the



financial services industry. OECD should consider this in its guidance, and recommend that the financial services industry consider the OECD guidance as part of broader initiatives related to responsible sourcing of precious metals through the supply chain.

Although supply of gold and precious metals ex-refinery is in a form which allows traceability of individual bars, given the nature of the fluid nature of bullion accounts, it is important that OECD's guidance cover the bullion element of the "upstream" supply chain, as the most practical focal point of the supply chain for all sectors, and enlist the support and engagement of industry bodies such as the LBMA in establishing responsible principles and standards for bullion suppliers and banks.

Likewise, industry bodies such as the Dubai Multi Commodities Centre (DMCC) and the Shanghai Gold Exchange should be encouraged to engage with the OECD's guidance. This would be especially relevant to the supply of "scrap/recycled" gold to Dubai, if the DMCC would require its membership to follow OECD guidelines in the supply and transfer of gold, especially in the supply of gold for local refining.

This section does not attempt to recommend local or national governmental policies relating to the organisation, control and policing of unofficial, illicit or illegal mining, specifically relating to the DRC, nor the practical difficulties of implementing a system of controls or a chain of custody in DRC, as these are beyond the scope of the report and the author's direct experience.

The commentary and recommendations below for a supplement for gold and precious metals are general guidance, in line with the OECD draft guidance paper. Individual companies through the supply chain have policies and procedures to identify and mitigate risk, which can provide OECD with greater detail, especially in the "upstream" supply chain.

Recommendations and comments made for each Step of the draft guidance which OECD could consider as direct textual references for a supplement for gold and precious metals supply chains are highlighted in *italics* in the text below.

### **Recommendations, Step 1 ("Strengthen Management Systems"):**

*Recognising that a full traceability system is not yet possible in the gold and precious metals supply chain, which makes the establishment of policies and procedures difficult and potentially inconsistent through the supply chain, participants should ensure they follow the guidance of appropriate industry organisations such as ICMC, WGC, RJC, EICC, as they relate to responsible sourcing. Participants should support these organisations' development of principles, standards and certification relating to supplies from conflict-affected and high-risk areas, especially the development of chain-of-custody initiatives, taking OECD guidance into account wherever possible and appropriate.*

#### **A: Create and commit to a supply chain policy for minerals originating from conflict-affected and high-risk areas:**

*i: "Upstream" companies should establish policies which ensure gold and precious metals are certified and segregated through the supply chain from mine to through to the bullion bank/dealer, namely;*

- *Mining companies: establish policies which ensure the mine does not operate within nor contribute to an area of conflict or high risk and that the integrity and security of supply from mine to refinery is maintained.*
- *Refiners/smelters: develop segregated refining for certified "conflict-free" material and material from all other sources, and mark the refined product accordingly. Ensure supply chain policies adhere to "Know Your Customer" principles and guidance.*
- *Bullion banks/dealers: establish sourcing policies from refiners which certify bullion/bars as "conflict free" or otherwise. Ensure supply chain policies adhere to "Know Your Customer" principles and guidance.*

ii: “Downstream” companies should create sourcing policies which can trace the supply of gold and precious metals to the “upstream” providers of bullion (the bank, or, if possible, the refinery).

**B: Structure internal management systems to support supply chain due diligence:**

i: “Upstream” companies must be able to trace certified material and product through the supply chain from mine to bullion bank/dealer.

- Mining companies should certify the origin (i.e. the company source and preferably the specific mine location) and technical specification (e.g. weight, purity) of the gold doré supplied to refineries, which must be supplied through secure and tamper-free transit arrangements. (Note: I would expect that all large-scale mining companies all already do this, and that confirmation of mine rights by these companies is well established).
- Gold supplied to refineries from artisanal organisations (ASMOs) or cooperatives should certify the origin and purity of the gold (as for “mining companies” above), along with proof of mining rights.
- Refiners should ensure security from mine to refinery, that supplies are certified by the mining company, the clearing/transport agents and (where applicable) customs officials, and where any discrepancies arise, that LBMA accredited supervising agents undertake an independent assessment.
- Gold refineries should adopt corporate due diligence checks on all supplies of gold (via agencies such as Dun & Bradstreet, Experian) to ensure all supplies are from established corporate entities, that these entities have mining rights from the regions where the gold is sourced, and that the sources of the gold are certified from the mining company or specific mine. Any purchases from artisanal mining sources should be done through registered companies and organisations, and should be corporate financial transactions (i.e. not cash transactions). (Note: most large-scale refineries, e.g. members of LBMA, already have such procedures in place).
- In the first instance, refiners should segregate product from certified “conflict-free” sources (certified mines, ASMOs and recycled gold from certified companies) and all other sources. The refineries should then identify the pure gold ingots and bars accordingly from these sources (with additional marks on the ingots and bars), and separate handling of these products from products from all other non-certified sources.

This would mean establishing separate lines of refining according to the source of supply (especially those designated and certified as not from an area of conflict), which is sometimes not financially viable nor practical at present, especially in cases where the refiner takes ownership of the product. If gold is separated at the refinery according to the type of source (i.e. determined as “conflict-free” or otherwise), then the costs to the refiners should be relatively manageable. However, if the refinery has to separate the supply from each mine or company, then the costs escalate hugely. For cases where the refiner does not take ownership, but refines the gold as a service to the mine or the bank, such separation of refining is established practice

- Supplies to refineries from “recycled” or “scrap” sources should certify the source of supply (e.g. jewellery), and where possible, such supplies should come from corporate entities where due diligence can be undertaken, and wherever possible, the product should be in their manufactured state when delivered to the refinery.
- If all gold received by the refinery, from mine or recycled sources, is certified and due diligence is undertaken on all supplier companies, there may be no need to segregate refining.

*ii: “Downstream” companies must be able to trace the supply of gold/precious metal to the furthest point in the “upstream” supply chain, at least to the bullion provider.*

Financial Action Task Force and “Know Your Customer” procedures relating to anti-money laundering are probably the most relevant processes to help identify and restrict, where appropriate, the flow of gold and precious metals from conflict areas. OECD may wish to acknowledge this in the guidance, along with a recommendation that the guidance be built into existing management systems where appropriate (e.g. ISO9001, ISO14001).

### **C: Establish a system of controls and transparency over the mineral supply chain:**

*Along with refineries’ requirements to mark and certify products, bullion banks and dealers should be a focal point (and the final focal point) in the “upstream” supply chain, as most participants in the supply chain will be able to identify the provider of gold or precious metal bullion for manufacturing purposes or for financial investment.*

*Where possible, through the supply chain, the gold industry should be encouraged to use “allocated” gold accounts, especially by the larger participants in the supply chain; examples include major jewellery producers and retailers, large-scale financial investors such as ETFs (already often the case). Although the costs of allocated accounts are higher, and the ownership resides with the companies rather than the banks, increased allocated accounts will improve the integrity of supply and traceability of gold and reduce the risk of “contamination” of gold from illicit sources.*

*i: “Upstream” companies should ensure gold and precious metals are traceable and certified through the supply chain from mine to bullion bank/dealer, namely;*

- *Mining companies: provide certification to handing agent, customs officials and refiner as to company/mine origin, weight and purity, and where ore from different mine sources is mixed prior to supply to the refinery, that the provenance of the mixed ore is also certified. Company/mine origin should confirm that the company/mine does not operate within or contribute to an area of conflict or high risk. Ensure product is transported in sealed and tamperproof containers with traceable tracking numbers through established secure handling agents.*
- *Refiners/smelters: ensure all incoming material is certified as above and is segregated in the refinery from any other material. Ensure any discrepancies between the certification from the mine and the receipt by the refinery are independently assessed by LBMA accredited supervising companies. Develop a process whereby refined material from segregated “conflict-free” sources is separately handled from other sources and is marked accordingly.*
- *Bullion banks/dealers: establish a system whereby “conflict-free” certified bullion is identifiable and traceable from other newly-produced bullion. Consider establishing a “conflict free” policy for all new supplies of bullion to the bank as well as a policy for all supplies to the “downstream” market from the bank.*

*ii: “Downstream” participants in the jewellery, industrial and investment sectors which source gold from banks and gold bullion dealers (such participants could be manufacturers, wholesalers or retailers) should ensure they know the “upstream” source of the bullion, and that the supplier company/bank has followed due diligence procedures to ensure the gold or precious metal has not been supplied from areas of conflict or high risk (as above).*

### **D: Strengthen company engagement with suppliers:**

- *Include conditions in supplier contracts which ensure suppliers have a system of controls as above, and ensure that responsibility for maintaining the provenance of gold and precious metals through the supply chain is made clear to all suppliers.*

## **Recommendations, Step 2 (“Identify and Assess Supply Chain Risks”):**

Under the current 3T Supplement, risk assessment differs from “upstream” and “downstream” participants in the supply chain. “Upstream” participants refer to exporters through to smelters/refiners, and these participants must clarify circumstances of extraction, trade and handling and assess risk based on these findings. “Downstream” participants assess risk by referring to the due diligence of smelters/refiners sourcing minerals from areas of conflict and high risk.

In a Gold and Precious Metals Supplement, I recommend that OECD revise its definition of “upstream” to include “producers” (mining companies and artisanal mining organisations): this will ensure that all mine production is included, including production that is exported (under “local exporters” in the existing OECD terminology).

I also recommend that “upstream” participants should include bullion traders and banks, for reasons explained in Part 2 of this paper. Most “downstream” participants in the gold and precious metals supply chain should be able to identify the source of bullion, but many may not know the source of smelting/refining. Bullion banks and dealers should be able to assess risk based on extraction, trade and handling of gold and precious metals until it becomes bullion (as the bars are always marked with individual serial numbers and subsequently audited, and are also marked with the smelter/refinery mark and the purity of the metal). Over time, once bullion banks and dealers follow OECD guidance and record individual bars on the basis of being “conflict-free”, all bullion sourced by and provided to “downstream” participants should comply. It is therefore important that bullion banks and dealers are seen as focal points in the “upstream” supply chain.

“Downstream” participants should assess risk by referring to the bullion provider, or, if possible, the refinery. Although the bullion may be provided by bullion dealers and banks to participants at many levels of the supply chain, “downstream” participants should be able to ask the provider of the product about the source of the bullion. Indeed, large jewellery retailers may use this as a source of reassurance to consumers, as they often provide the gold and precious metals to the jewellery product manufacturers.

As explained under Step 1A (create a supply chain policy), there are no established standards in the gold and precious metals supply chains which are specific to conflict-affected and high-risk areas, although some are in development (by RJC and WGC), and guidance on responsible sourcing is available from industry organisations.

Specific textual recommendations for the OECD guidance under Step 2 are therefore:

### **A. Map the factual circumstances of their supply chain back to focal points identified in the guidance.**

- *For gold and precious metals, these are the “upstream” participants in the supply chain, to at least bullion providers, and wherever possible, to refiners.*

### **B. Assess risk by evaluating those facts against applicable standards, particularly the model supply chain policy commitment to standards on minerals from conflict-affected and high-risk areas listed in Annex I.**

- *Key references in gold and precious metals are the Responsible Jewellery Council (RJC), Electronic Industry Citizenship Coalition (EICC), International Council on Mining and Metals*

*(ICMM) and World Gold Council (WGC). Gold and precious metals chain-of-custody standards by RJC and WGC are in development stages, and will be areas for future work and development in the implementation phase of the OECD guidance.*

- *Participants in the gold jewellery supply chain should support and engage in the RJC's new initiative to develop a chain of custody system, to help establish the traceability of gold and other fine jewellery products from mine through to the retail store. This system should harmonise with WGC's chain of custody project from mine to refinery, through its membership and designated refineries.*

### **Recommendations, Step 3 ("Respond to Identified Risks"):**

I agree with the assumption in Step 3 that "upstream" companies in the gold and precious metals supply chain (as defined in Step 1 to include producers and bullion dealers/banks) have the greatest leverage over actors in the supply chain who can most effectively identify and respond to risks in the supply chain relating to areas of conflict and high risk.

As outlined in Part 2 of this paper, the main references for "downstream" companies, especially in the highly fragmented and relatively unsophisticated jewellery industry, will be industry membership organisations such as RJC, EICC, and local retailer associations.

In both "upstream" and "downstream" supply chains in gold and precious metals, the guidance for trade organisations to develop modules relating to the OECD guidance is important, as these organisations tend to have the greatest leverage through the supply chain as well as the strongest relationships with external stakeholders and other industry experts.

Specific textual recommendations for the OECD guidance under Step 3 are:

*Companies should look to industry organisations to assist in responses to identified risks: the key references to industry membership organisations are:*

*1: "Upstream" participants:*

*a: Producers: ICMM, ARM, CASM, WGC and IPA*

*b: Smelters and Refiners: RJC, WGC and LBMA*

*c: Bullion Dealers and Banks: LBMA*

*2: "Downstream" participants*

*a: Jewellery Sector: RJC and national/local jewellery and retail associations*

*b: Industrial Sector: EICC*

*c: Financial Sector: FATF and LBMA*

*As these organisations currently do not have established policies, practices or guidance related to conflict and high-risk areas, this will be an area for future work and development in the implementation phase of the OECD guidance.*

Further development work will be required for the gold and precious metals industry to secure the support of the bullion trading sector and the financial services supply chain in this regard.

### **Recommendations, Step 4 ("Independent Audit of Due Diligence"):**

As discussed in Part 2b of this paper, it is important that OECD clarify in the guidance that the auditing requirements refer to the "upstream" participants in the supply chain, namely;

*For gold and precious metals, the focal points that will require greatest scrutiny for auditing are likely to be “upstream” participants: producers, smelters/refiners and bullion dealers/banks.*

The sensitivity of the “upstream” participants to audit fatigue would be reduced if OECD make it clear in the document that *the guidance to audit can be addressed by incorporating the audit requirements into existing audit procedures, such as those of LBMA, ICMM, RJC and governments, and adherence to established “Know Your Customer” procedures.*

Integration of OECD guidance into existing audit procedures would reduce the cost burden as well as the internal resource burden to participants in the “upstream” supply chain. Such cooperation may also address the issue of the scarcity of accredited independent auditors.

### **Recommendations, Step 5 (“Report on Supply Chain Due Diligence”):**

OECD cannot expect all companies in the gold and precious metals supply chain to publish a report on supply chain due diligence, especially due to the fragmentation, complicated supply chain and the lack of large-scale corporations in gold and precious metals after the bullion stage, especially in the jewellery sector.

As discussed in part 2b, I recommend that OECD state its expectation in this Step as follows:

- *For gold and precious metals, mining companies should incorporate such reporting into annual “reports to society”. For other participants in the supply chain, such reporting should be included in annual reports by publicly listed companies.*
- *Likewise, industry organisations such as RJC, EICC, ICMM, WGC and national trade associations could include supply chain due diligence in their own annual publications, alongside guidelines for their membership organisations.*

### **Recommendations, Annex and Appendix (“Supply Chain Policy” and “Terms of Reference”):**

Wherever possible, it is the supply chain’s interest not to proliferate principles, standards and policies across different industry organisations; for example, the RJC used the ICMM as the reference for its mining standards. I would therefore recommend that OECD specify in the guidance that Annex II is a draft document for consultation with industry participants, and encourage existing principles and/or standards in the industry (such as those of ICMM and RJC) and emerging chain-of-custody initiatives (such as those of RJC and WGC below) to participate in the finalisation of these principles and standards through the OECD working group, with the objective of harmonisation across all industry participants.

Terms of reference of the most important examples of other gold and precious metals industry initiatives, where harmonisation with OECD guidance on areas of conflict and high risk would be desirable, are:

1: Responsible Jewellery Council (RJC) Standards Guidance (see [www.responsiblejewellery.com/certification.html](http://www.responsiblejewellery.com/certification.html)): the RJC has a Code of Conduct and Standards Guidance relating to Money Laundering and the Finance of Terrorism (COP 1.2), but the Standards Guidance does not include specific references to areas of conflict or high risk. OECD’s guidance could be considered by the RJC as an additional section in the Standards Guidance, when the next revision is due. This would then be incorporated into the requirements for RJC member certification. The RJC is also in the process of developing a chain-of-custody program to ensure responsible business practices through the entire jewellery supply chain, for diamonds, gold and platinum from mine to retail (see [www.responsiblejewellery.com/chain-of-custody.html](http://www.responsiblejewellery.com/chain-of-custody.html)), and it will be important that OECD’s guidance is taken into account in the development of this program.

2: The Electronic Industry Citizenship Coalition (EICC) Code of Conduct (see [www.eicc.info/EICC%20CODE.htm](http://www.eicc.info/EICC%20CODE.htm)): the EICC Code issues guidance to its memberships in 5 sections (labour, health/safety, environment, management systems, business ethics), but does not include specific references to terrorism, conflict or areas of high risk. Again, OECD's guidance could be considered by the EICC for inclusion in the Code.

3: International Council on Mining and Metals (ICMM) Sustainable Development Framework (see [www.icmm.com/our-work/sustainable-development-framework](http://www.icmm.com/our-work/sustainable-development-framework)): the ICMM has developed additional position statements by ICMM on key issues such as revenues transparency, mining in protected areas, indigenous peoples etc., which provide further detail on the Sustainable Development Framework's 10 principles. Incorporation of OECD's guidance into the 10 principles, or as an additional position statement, would provide significant impetus on the issue of areas of conflict and high risk, as reported against by large-scale mining companies.

4: World Gold Council (WGC): the WGC's "Responsible Gold" program (see [www.gold.org/trustinggold](http://www.gold.org/trustinggold)) represents the largest contingent of large-scale gold mining companies, and is engaged with the other major industry initiatives. WGC is developing its own chain-of-custody project based on establishing "conflict-free" gold supply from WGC member mines and attributed refineries. It will be important to ensure WGC's project is harmonised with OECD guidance and can be taken into consideration by other industry groups and participants throughout gold supply chains.

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#### References/Acknowledgments

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## **Appendix 2: LBMA gold refinery list January 2010 (source: [www.lbma.org.uk](http://www.lbma.org.uk))**

For further contact details and links to websites, see [www.lbma.org.uk/delivery/goldlist](http://www.lbma.org.uk/delivery/goldlist)

### ***Australia***

Western Australian Mint trading as The Perth Mint

### ***Belgium***

Umicore SA, Business Unit Precious Metals

### ***Brazil***

AngloGold Ashanti Mineração Ltda — Nova Lima

Umicore Brasil Ltda — Guarulhos

### ***Canada***

Johnson Matthey Limited — Brampton

Royal Canadian Mint — Ottawa,

Xstrata Canada Corporation — Montréal

### ***China***

The Great Wall Gold and Silver Refinery of China — Chengdu

Inner Mongolia Qiankun Gold and Silver Refinery Share Company Limited — Huhhot

Jiangxi Copper Company Limited — Guixi City

The Refinery of Shandong Gold Mining Co., Ltd — Laizhou City

Shandong Zhaojin Gold & Silver Refinery Co Ltd — Zhaoyuan City

Zhongyuan Gold Smelter of Zhongjin Gold Corporation — Sanmexia City

Zijin Mining Group Co. Ltd — Shanghai

### ***Germany***

Allgemeine Gold- und Silberscheideanstalt A.G.Pfrozheim

Aurubis AG (formerly Norddeutsche Affinerie AG) — Hamburg

W.C. Heraeus GmbH — Hanau

### ***Hong Kong***

Heraeus Ltd Hong Kong — Fanling

Metalor Technologies (Hong Kong) Ltd — Kwai Chung

### ***Indonesia***

PT Aneka Tambang (Persero) Tbk

### ***Italy***

Chimet SpA — Arezzo

### ***Japan***

Asahi Pretec Corp — Kobe

Ishifuku Metal Industry Co., Ltd

Japan Mint — Osaka

Matsuda Sangyo Co., Ltd.

Mitsubishi Materials Corporation

Mitsui Mining and Smelting Co., Ltd.

Nippon Mining & Metals Co Ltd

Sumitomo Metal Mining Co., Ltd.

Tanaka Kikinzoku Kogyo K.K.

Tokuriki Honten Co., Ltd.

### ***Kazakhstan***

Kazzinc Ltd — Ust-Kamenogorsk

### ***Korea, DPR***

Central Bank of the DPR of Korea — Pyongyang

### ***Korea, Republic of***

LS-Nikko Copper Inc — Onsan

### ***Kyrgyz Republic***

Kyrgyzaltyn JSC — Karabalta,

### ***Mexico***

Met-Mex Peñoles, S.A. — Torreon

### ***Netherlands***

Schöne Edelmetaal — Amsterdam

### ***Philippines***

Bangko Sentral ng Pilipinas (Central Bank of the Philippines) — Quezon City

### ***Russia***

FSE Novosibirsk Refinery — Novosibirsk

JSC Ekaterinburg Non-Ferrous Metal Processing Plant — Ekaterinburg

OJSC "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" — Krasnoyarsk

OJSC Kolyma Refinery — Khasyn

Moscow Special Alloys Processing Plant — Moscow  
Prioksky Plant of Non-Ferrous Metals — Kasimov  
SOE Shyolkovsky Factory of Secondary Precious Metals — Shyolkovo  
JSC Uraelectromed — Verkhnyaya Pyshma

**Saudi Arabia**

L'Azurde Company For Jewelry — Riyadh

**South Africa**

Rand Refinery Limited — Germiston

**Spain**

SEMPSA Joyeria Plateria SA — Madrid

**Sweden**

Boliden Mineral AB — Skelleftehamn

**Switzerland**

Argor-Heraeus SA — Mendrisio

Cendres & Métaux SA — Biel-Bienne

Metalor Technologies SA — Marin

PAMP SA — Castel San Pietro

Valcambi SA — Balerna

**Taiwan**

Solar Applied Materials Technology Corp. — Kuang Tien

**Turkey**

Atasay Kuyumculuk Sanayi Ve Ticaret A.S. — Istanbul

**USA**

Johnson Matthey Inc — Salt Lake City

Metalor USA Refining Corporation — North Attleboro

**Uzbekistan**

Almalyk Mining and Metallurgical Complex (AMMC) — Almalyk

Navoi Mining and Metallurgical Combinat — Navoi

### **Appendix 3: LBMA banking members (source: [www.lbma.org.uk](http://www.lbma.org.uk))**

For contact details and links to websites, see [www.lbma.org.uk/assocrn/ordmembs](http://www.lbma.org.uk/assocrn/ordmembs)

ABN-AMRO Bank NV  
Australia & New Zealand Banking Group Ltd  
Bank of China  
Bank Julius Baer  
Bayerische Landesbank  
BNP Paribas  
Canadian Imperial Bank of Commerce  
Citibank N A  
Commerzbank International SA Luxembourg  
Credit Agricole  
Commonwealth Bank of Australia  
Credit Suisse  
Fortis Bank S.A./N.V.  
GFI Brokers Limited  
HSBC Bank plc  
ICAP Energy Limited  
Landesbank Baden-Wurttemberg  
Macquarie Bank Limited  
Merrill Lynch International Bank Limited  
Mitsubishi Corporation International (Europe) Plc  
Morgan Stanley & Co International Ltd  
Rand Merchant Bank  
Royal Bank of Canada Limited  
Royal Bank of Scotland Plc  
Standard Bank Plc  
Standard Chartered Bank  
UBS Ltd  
WestLB AG  
Westpac Banking Corporation

### **Appendix 4: Annual gold jewellery demand, tonnes**

tonnes	2002	2003	2004	2005	2006	2007	2008	2009	yoy ch.
India	459.3	441.7	517.2	584.8	514.2	551.7	501.6	405.8	-19.1%
<b>Greater China</b>	<b>235.4</b>	<b>231.0</b>	<b>258.7</b>	<b>277.7</b>	<b>275.0</b>	<b>331.3</b>	<b>353.5</b>	<b>372.8</b>	5.5%
China	199.6	201.0	224.1	241.4	244.7	302.2	326.7	347.1	6.2%
Hong Kong	16.9	12.0	13.8	14.0	13.1	14.4	14.7	16.1	9.7%
Taiwan	18.9	18.0	20.7	22.4	17.2	14.7	12.1	9.6	-20.8%
Japan	34.2	31.6	34.6	33.5	32.8	30.6	28.2	23.9	-15.2%
Indonesia	92.9	82.0	83.9	78.0	57.7	55.2	55.9	42.0	-24.8%
Vietnam	24.7	22.8	26.1	26.9	22.1	21.4	19.6	15.1	-23.1%
<b>Middle East</b>	<b>355.9</b>	<b>321.6</b>	<b>343.5</b>	<b>365.2</b>	<b>296.1</b>	<b>325.5</b>	<b>311.4</b>	<b>231.7</b>	-25.6%
Saudi Arabia	139.3	128.2	136.2	146.2	104.3	117.9	108.9	82.3	-24.4%
Egypt	82.0	66.1	73.0	75.3	60.0	67.8	74.3	56.7	-23.7%
UAE	87.9	81.7	89.3	96.4	92.4	99.8	93.4	67.6	-27.6%
Other Gulf	46.75	45.70	45.05	47.25	39.50	39.98	34.8	25.1	-27.9%
Turkey	96.7	163.6	185.7	194.9	165.3	188.1	153.2	75.2	-50.9%
Russia	42.7	49.6	55.6	64.3	70.1	85.7	96.1	58.7	-38.9%
USA	385.6	354.5	350.5	349.0	306.1	257.9	179.1	150.3	-16.1%
Italy	86.4	82.0	77.2	71.0	64.8	59.2	50.8	39.5	-22.2%
UK	79.0	73.1	70.2	59.4	52.5	50.1	36.2	31.8	-12.0%
Total above	1,996.7	1,935.3	2,079.7	2,183.1	1,912.7	2,007.2	1,785.5	1,446.8	-19.0%
Smaller markets	383.8	427.7	422.9	429.9	357.7	360.6	274.0	198.2	-27.7%
Other & Stock Change	382.8	200.9	186.9	173.3	69.8	96.8	78.1	75.0	-4.0%
<b>World Total</b>	<b>2,659.6</b>	<b>2,481.9</b>	<b>2,613.0</b>	<b>2,707.8</b>	<b>2,284.0</b>	<b>2,400.2</b>	<b>2,137.5</b>	<b>1,747.3</b>	<b>-18.3%</b>
Source: GFMS, WGC									