



Publication: November 21, 2013

Effective date: November 22, 2013

Conflict-Free Smelter Program (CFSP) Supply Chain Transparency Smelter Audit Protocol for Tin and Tantalum



Conflict-Free Smelter Program (CFSP)	1
Supply Chain Transparency Smelter	1
Audit Protocol for Tin and Tantalum	1
I. FOREWORD.....	3
II. INTRODUCTION.....	3
III. Purpose	4
IV. Application.....	4
V. Disclaimers	5
VI. TERMS AND DEFINITIONS.....	5
VII. SCOPE	8
VIII. Effective Date	12
IX. Conflict Minerals Policy Compliance Requirements	12
X. Mass Balance Compliance Requirements.....	13
XI. Material Type and Origin Verification.....	14
XII. References	25
XIII. Annexes	25
XIV. Revision History	37
About the Conflict-Free Sourcing Initiative (CFSI)	37



I. FOREWORD

This protocol was developed to meet an emerging need for downstream companies to demonstrate reasonable country of origin inquiry and validate smelter procurement processes with respect to four "conflict minerals": tin, tantalum, tungsten and gold. The audit against this protocol is a key component of the Conflict Free Smelter Program (CFSP). The CFSP, developed by the EICC and GeSI in 2010, is a voluntary initiative in which an independent third party audits smelter procurement and processing activities and determines if the smelter showed sufficient documentation to demonstrate with reasonable confidence that their company processes minerals originating from conflict-free sources.

The first protocol for tantalum was published in 2010, and tin and tungsten protocols followed in 2011. In February 2013 a single, harmonized protocol representing all three metals was put in place (published December 2012). This version is limited to tin and tantalum, with tungsten again covered separately. In addition to EICC and GeSI members, other key stakeholders including smelters, metal industry associations, and non-governmental organizations took part in the development of these protocols.

This protocol will be reviewed annually to ensure that the content continues to reasonably support the conflict-free sourcing requirements set forth by law (i.e. Section 1502 of the United States Dodd-Frank Wall Street Reform and Consumer Protection Act) and international expectations, such as the OECD Due Diligence Guidance for Responsible Supply Chains on Minerals from Conflict-Affected High-Risk Areas (OECD Guidance). External reference documents are listed in Section XII. Interim adjustments will be made if driven by new findings or legislations.

II. INTRODUCTION

International guidance and US Law are setting expectations on supply chain due diligence and disclosure regarding "conflict minerals". This is to address the minerals that are one of the resources within the Democratic Republic of the Congo (DRC) that may be directly or indirectly financing or benefiting illegal armed groups. This protocol was developed as a specific, practical means of validating the supply chains of these minerals at the smelter level, the point at which the mineral is converted into a ubiquitous metallic product. If the materials in scope during the audit period, as well as accompanying procurement processes, can be validated at this level in the supply chain, then products made from materials coming from those validated smelters can also be considered to have validated sourcing. It is not a material certification audit.

The audit protocol aims to validate sourcing through the following methods:

- Demonstration of management commitment via a strong conflict minerals policy.
- Examination of the processes and systems used for sourcing to demonstrate the ability to support conflict free sourcing



- Line Item Summary and Mass Balance analysis to demonstrate the smelter's ability to account for all inputs and outputs during the audit period
- Evaluation of materials within the audit scope to demonstrate the appropriate level of sourcing traceability and origin determination

Following the OECD Guidance, audits will be conducted in accordance with third party auditing requirements of ISO 19011.

III. Purpose

This protocol was developed to support independent, third party audits of tantalum and tin smelters, to aid in sourcing validation requests across the global supply chain. Compliance to this protocol will determine the reasonable country of origin inquiry (RCOI) for each of the materials processed at the smelter. For those smelters sourcing from Level 3 countries, this will also trigger the requirement for an OECD Guidance conformance audit for Step 4 as described below. In addition, the RCOI determination and documentation provided by CFSP will be shared by smelters with the supply chain to satisfy the due diligence expectations set forth by Section 1502 of The Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd-Frank).

If sourcing from Level 3 countries, compliance to this audit is expected to help meet the requirements of Step 4 in the OECD Guidance. This protocol examines processes at the smelter, but also conducts a results-based analysis of materials in scope during the audit period. Other programs, such as the ITRI Tin Supply Chain Initiative (iTSCI) provide critical information to support this audit protocol as well as the OECD Step 4 when materials are sourced from Level 3 countries. A combination of the CFSP audit and that of an in-region program, such as iTSCI, is required to demonstrate that a smelter meets the full expectation of Step 4 of the OECD Guidance.

Downstream companies using the tin and tantalum refined by smelters audited to this protocol, non-governmental organizations, and other key stakeholders will utilize the outcome of a compliant CFSP audit as a means of demonstrating reasonable due diligence and origin determination.

IV. Application

The CFS audit is available to all tin and tantalum smelters that meet the following conditions:

- Meet the definition of a tin or tantalum smelter as defined in Section VII.B
- Agree to make public a conflict minerals policy



- Agree to fund the audit, or retain other accessible funding to pay for the audit.
- Initiate a request with the CFSP program manager via: <http://www.conflictreesmelter.org>
- Sign the appropriate agreements (e.g. non-disclosure and auditee agreement)

V. Disclaimers

- Chain of custody documentation exists in a variety of forms that vary by country, region, and company. While this protocol attempts to call out the types of documents that can be used to successfully demonstrate chain of custody, others may equally meet the intent of the audit and may be utilized. Some countries may not issue certain or even any documents from the government and this will be considered in document evaluations.
- The focus of the audit is validating that systems and processes are capable of delivering conflict-free product. The audit is not expected to determine, with 100% certainty, that material at a smelter is conflict-free. When necessary, the auditor may need to draw conclusions weighing the data available, the systems and processes in place, and the percent of missing documentation relative to the total material processed.
- If a company found in the supply chain is no longer operational and records are no longer available, the best available information will be accepted.

VI. TERMS AND DEFINITIONS

Artisanal and Small-Scale Mining (ASM): "Mining by individuals, groups, families or cooperatives with minimal or no mechanisation, often in the informal (illegal) sector of the market. Despite many attempts, a common definition of ASM has yet to be established. In some countries a distinction is made between 'artisanal mining' that is purely manual and on a very small scale, and 'small-scale mining' that is more mechanised and on a larger scale."¹

ARC: Audit Review Committee. The ARC committee reviews audit reports for consistency in implementing the audit protocol.

Audit period: The period of time covered by the Line Item Summary, typically one year.

¹ Hentschel, T., et. al., Global Report on Artisanal & Small Scale Mining, 2002, Minerals, Mining, and Sustainable Development (MMSD).



Closing Inventory (declared): Closing inventory at the Line Item Summary end date based on normal inventory calculation and reporting processes of the smelter and declared by them. Inventory may be physical or calculated as appropriate for the business circumstances of the auditee.

Closing Inventory (calculated): Closing inventory at the Line Item Summary end date calculated by the auditor based on transactions reported over the audit period by the smelter.

CFSP: Conflict-Free Smelter Program

CoA: Certificate of Analysis which will show production date, or in the case of non-registered metal brands, similar appropriate documentation.

"Conflict Minerals": cassiterite, columbite-tantalite, gold, wolframite, or their derivatives, or any other minerals or their derivatives determined by the United States Secretary of State to be financing conflict in the covered countries (referred to in this protocol as Level 3 countries)

Dodd-Frank Wall Street Reform and Consumer Protection Act (Dodd Frank Act): A federal statute in the United States that was signed into law on July 21, 2010. Section 1502 added Section 13(p) to the Securities Exchange Act of 1934, which requires the Securities and Exchange Commission to promulgate rules requiring issuers with conflict minerals that are necessary to the functionality or production of a product manufactured by such person to disclose annually whether any of those materials originated in the Democratic Republic of the Congo or an adjoining country.

EICC: Electronic Industry Citizenship Coalition

Estimated Losses: Unrecoverable production losses. Such losses in tin can be described as fume and fugitive losses; and in tantalum such losses can be described as residual solid Ta in ore/scrap materials, dissolved Ta in liquid waste streams, and Ta fines in waste streams².

GeSI: Global e-Sustainability Initiative

Immediate supplier: the company which is immediately before the smelter in the supply chain, which may be upstream producers such as a smelter, or downstream user, as well as traders.

Inventory (whether calculated or declared) will include stocks of ore, secondary material, and finished product, work in progress materials not calculated in stocks, and similar material.

² Tin loss estimation on average is approximately 2.5%.

[<http://www.pdmhs.com/PDFs/ScannedBulletinArticles/Bulletin%2013-2%20-%20An%20Analysis%20of%20the%20Processes%20for%20Smelting%20Tin.pdf>]

Tantalum loss estimation is approximately 5% from concentrate to KTaF/KSalt, and another 5% from KSalt to Ta powder, or 10% from concentrate to Ta powder. [Comment from T.I.C., circa 2012]



iTSCi: ITRI Tin Supply Chain Initiative

Level 1 Country: Countries with known active ore production for tin or tantalum that are not identified as conflict regions or plausible countries of smuggling or export of tin or tantalum containing materials.

Level 2 Country: Known or plausible countries for smuggling, export out of level 3 countries, or transit of materials containing tin or tantalum. This currently includes Kenya, Mozambique, and South Africa.

Level 3 Country: The Democratic Republic of the Congo (DRC) and its nine adjoining countries as outlined in Section 1502 of the Dodd Frank Act. These include Angola, Burundi, Central African Republic, DRC, Republic of the Congo, Rwanda, South Sudan, Tanzania, Uganda, and Zambia. These are also commonly referred to as "covered countries" in the Dodd Frank Act Section 1502.

Large Scale Mining (LSM): For the purposes of this document this definition includes all formal operations characterized by substantial capital, heavy equipment, high technology and a significant workforce (large and medium in size) not considered to be within the ASM definition.

Line Item Summary (LIS): A listing of all inventory, receipts and related documents in the audit period.

Mass balance: Method by which auditors will ensure the quantity of material received and in inventory during the audit period matches that expected from the transaction records, taking into account the possible error margin of inventory, stock, and loss estimation.

Opening Inventory (declared): Opening inventory at the start date of the LIS based on the inventory calculation and reporting processes of the smelter and declared by them. Inventory may be physical or calculated as appropriate for the business circumstances of the auditee.

OECD Guidance: General term for the Organization for Economic Co-operation and Development Due Diligence Guidance for Responsible Supply Chains on Minerals from Conflict-Affected and High Risk Areas.

Origin: The location where the ore was mined, to the best detail possible. At a minimum the description must include the country, but province/state, city, mine site and mine name are further details that are helpful to locate the origin.

Outside the supply chain: Per the Dodd-Frank Act, this refers to conflict minerals that have been smelted or fully refined, or if they have not been smelted or fully refined, and are outside the Level 3 Countries, or "covered countries", prior to January 31, 2013.

Product shipments: Include any finished good, secondary, intermediate, semi-processed, or other materials that are sold and then shipped out of the facility during the audit period.



Receipts: all material received during the audit period. To be used as part of the Mass Balance Calculation.

RCOI: Reasonable Country of Origin Inquiry, a requirement of the Dodd Frank Act Section 1502.

Secondary Materials: Recycled metals as defined by the OECD Guidance, and referenced by the U.S. Securities and Exchange Commission are 'reclaimed end-user or post-consumer products, or scrap processed metals created during product manufacturing including: excess, obsolete, defective, and scrap metal materials which contain refined or processed metals that are appropriate to recycle in the production of tin/tantalum. As defined by the OECD Guidance, minerals partially processed, unprocessed, or a byproduct from another ore (i.e. slags) are not recycled materials. See Annex B for additional examples.

Supplying smelter: When an auditee receives material from another entity, the supplying smelter is the last point in the supply chain in which the material was processed. Trading companies and other pass-through segments of the supply chain would not be considered supplying smelters.

Tantalum intermediate products: powder, ingot, sintered bars, tantalum hydroxides, in process scrap (processor level), K2TaF7 (also known as K-salt or "KTaF"), Ta unrefined powders and other Ta containing products for further processing.

Tolling: A transaction where materials are processed by a smelter on behalf of a client who retains ownership of the agreed to elements and/or volume of those materials.

Total material processed: With respect to the mass balance calculation, this term refers to total metal content of the material processed by the smelter during the audit period. This will include as relevant ore, secondary material and internal recycle/reclaim, whether the smelter's own material or material received for toll processing.

VII. SCOPE

A. Timing

- 1) The initial audit period for tantalum and tin smelters will cover the period from one year prior to the date of the Line Item Summary (LIS).
- 2) The smelter may determine the end date it wishes to utilize for the LIS as long as it is not more than four weeks before the file is provided to the CFSP Audit Program Manager. The audit must be scheduled within 30 calendar days of when the LIS was provided or an updated version will be required, unless an extension is granted by the CFSP.



- 3) Smelters typically carry out a full physical inventory on an infrequent basis, approximately annually, supported by regular recalculation of inventory in the intervening period, approximately every month. The date of the line item summary chosen by the smelter can align with the date of either physical or calculated inventory according to the normal processes of the smelter.
- 4) Subsequent annual audits are required to maintain a compliant status. The annual audit date should be requested within one month after the prior compliance expiration date, which under normal circumstances should be dictated by the Line Item Summary date of the last facility audited for the smelter. The audit should be conducted within two months of the prior compliance expiration date. Should this annual audit not be performed for any reason, and no extensions are granted by the CFS program, the company will no longer be considered as compliant. An extension may be granted in particular if there was any undue delay in the response or prior decision making process of the CFS program, as will be defined in the future CFS audit program manual.³ In such case the annual audit should occur within fourteen months of the date of issue of the letter of compliance, and will cover an audit period of one year.
- 5) The next audit conducted on a smelter who has failed to maintain their compliance status will include the entire period of non-compliance up to a maximum of two years.
- 6) A smelter who has previously been found to be non-compliant due to unresolved audit findings will not be able to re-enter the CFS audit process for a period of six months. At the time they re-enter the program, the smelter will need to include the entire period from the end of the last LIS submitted, up to a maximum of two years.

B. Companies Within Scope of the CFS Audit

- 1) **Tantalum (Ta) smelter:** A tantalum smelter (also known as a processor) is defined as a company which converts Ta-containing ores, concentrates, slags or secondary materials into tantalum intermediate products or other tantalum containing products for direct sales or further processing into Ta-containing products, such as Ta powders, Ta components, Ta oxides, alloys, wires, sintered bars*, etc.
- 2) *Please note that sintered bars of <10% Ta-contained made exclusively from slags of <2% tin content will also be out of scope of this audit protocol. A facility producing such bar does not qualify as a Ta smelter on the basis of this type of product alone. A purchaser of this type of bar would only need documentation similar to secondary materials.

³ A CFS Audit Program manual is expected to be released publicly before the end of 2013.



- 3) **Tin (Sn) Smelter:** Primary smelters are companies with one or more facilities treating tin containing ore concentrates in order to produce tin metal. Secondary smelters⁴ are companies with one or more facilities which treat secondary materials by reduction⁵ for the production of crude or higher grade tin or tin product such as solder. A smelter as referred to within this audit protocol may operate as either one or both types of business operation.
- a) *Companies within the scope of the tin audit:* All companies meeting the definition of smelter are included within the scope of this audit protocol. Downstream from the smelting process, companies may perform a range of metal treatment or processing such as refining or alloying, and may have the capability to utilize a range of primary or secondary tin containing materials creating the opportunity for non-CFS validated materials to enter the supply chain. In consideration of this complex situation (See Figure 1 below), independent audit or another form of evaluation of non-smelter companies may be necessary. Notes regarding possible evaluation on refining companies, tin product manufacturers, and traders are provided below.
 - b) *Evaluation of Tin Refining companies:* Smelters typically operate refining facilities at the smelting facility in order to remove impurities or other unwanted material from the tin metal output from the smelting plant and produce fully refined tin of various grades. The refining stage, if occurring at a smelter, would be included in the mass balance and line item summary evaluation of the smelter company audit, therefore providing verification that input into smelter refineries is from a conflict-free source. Independent refiners also perform the same tasks of removing impurities or other unwanted materials, although they were not directly associated with any smelter. The source of inputs into the independent refining companies required verification and such companies are within the scope of this audit.
 - c) *Evaluation of Tin Product Manufacturing Companies:* While product manufacturers such as solder and other alloy manufacturers are not traditionally considered smelters or refiners, some may have the capability to utilize a range of input materials aside from standard grade(s) of tin, in particular low grade/impure or unbranded tin. Smelters operating refineries, as well as independent refineries, may also continue processing to manufacture tin product such as solder. The differentiation between a refiner and alloy manufacturer, especially when secondary input materials may be used, is not clear and the need for auditing of the input sources of such companies will be evaluated on a case by case basis depending on the company capabilities and operations. Factors to be considered when evaluating if a company should be considered in scope include company capabilities for processing low grade materials and purity requirements of company products. The

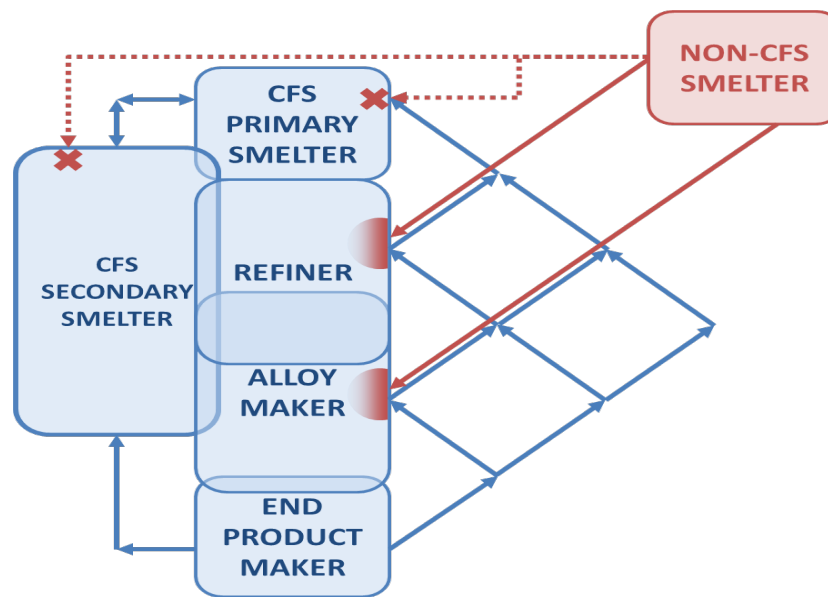
⁴ A company classified as a secondary smelter may not in the normal course of business treat cassiterite but does have the capability to do so.

⁵ Recyclers of solder dross and similar oxide based materials with the capability to perform reduction to metallic tin would be classified as a secondary smelter.

CFS program management team may find the engagement of an industry expert helpful in informing these case by case decisions.

It is understood that all tin product manufacturers within the supply chain of partners participating in the CFS program are likely to be contractually obliged to ensure sourcing from companies validated by CFS. In order to monitor this obligation, spot checks may be performed by customers or by industry representative bodies on product manufacturers. Should there be any indication of the infiltration of non-CFS validated material into product manufacturing lines, non-compliant sources would need to be validated to the full scope of this audit protocol as part of an evaluation of the product manufacturing company.

Figure 1: Complexity of the Tin Supply Chain



C. Materials in Scope During the Audit Period

All materials delivered, held, and/or processed during the audit period, regardless of origin and type, are expected to be in the line item summary and mass balance and included in the audit.

D. Out of Scope Companies

Materials Treatment Specialist: Companies processing materials sent for external treatment are not within the scope of this audit or spot check requirements. For example, a specialist company might take materials originating from, and returning to, the auditee smelter to provide an external service to remove hazardous waste contaminants (e.g. arsenic, or



radioactivity). Such materials continually owned by the auditee will also not require additional source or other information on their return from such a company.

Trading companies: Companies trading in materials where there is no mechanical or heat treatment or other process performed, and the material traded is on the same chemical and physical state as received, are not within the scope of this audit or spot check requirements.

VIII. Effective Date

The revision of the audit protocol is in effect starting 01 February, 2014. This revision replaces Rev. 21 December 2012, which was put into effect February 28, 2013.

For those audits which were already scheduled prior to 01 February, 2014, the auditee will have the option of conducting their audit with either revision of the audit protocol. This is conditional on all other supplemental audit program documents being ready and the auditors being trained to the changes. Those audits scheduled on or after 01 February, 2014 will utilize this revision of the protocol.

The date of the record of export (or similar document) will be used to determine effective date for any individual shipment should there be any uncertainty over the use of prior or new protocols for individual transactions.

IX. Conflict Minerals Policy Compliance Requirements

The Auditor will confirm that the smelter will have a documented, effective, and communicated conflict mineral policy for procurement of tin/tantalum containing materials. The policy will explicitly state that the smelter avoids minerals that directly or indirectly finance or benefit illegal armed groups from conflict-affected regions. Key components of an acceptable policy are:

- a) Covers tin/tantalum materials as relevant to that smelter
- b) Covers the DRC and adjoining countries
- c) Is publicly communicated
- d) Is imbedded into the smelter's standard operating procedures and relevant individuals will be trained
- e) Has an effective date established



- f) Is shared with suppliers.

If sourcing from Level 3 countries, the policy will need to comply with Annex II of the OECD guidance for tin and tantalum.

Tantalum Specific Note: Due to naturally occurring radioactivity from thorium and uranium in tantalum ores and their concentrates, policies relating to tantalum ore concentrates must additionally cover adherence to international transportation regulations (United Nations Dangerous Goods Class 7), although this is not a conflict minerals issue.

X. Mass Balance Compliance Requirements

A. Mass Balance Calculation and Objective

The auditor will record the metal content of the smelter receipts, shipments, losses and any other relevant information on transactions and processing within the audit period and perform a mass balance calculation as follows (see Definitions for descriptions of below terms):

$$\text{Closing inventory (calculated)} = \text{Opening inventory (declared)} + \text{receipts} - \text{product shipments} - \text{estimated losses}$$

The auditor will then evaluate whether the closing inventory (declared) matches the closing inventory (calculated) within the allowed margin error of 10%.

The margin of error % will be calculated by the auditor as follows, and documented in the audit report:

$$\frac{\text{closing inventory(calculated)} - \text{closing inventory(declared)}}{\text{total material processed}} \times 100 < 10\%$$

B. Mass Balance Documentation Requirements

To enable the mass balance and margin of error calculations, the smelter will provide information and/or documentation on:

- 1) The process for allocating lot numbers to incoming materials (receipts/deliveries).
- 2) The Line Item Summary completed with lot number, metal content, and weight information recorded for all incoming materials, and including un-smelted inventory.
- 3) The process for recording weights and lot numbers for outgoing product shipments.
- 4) Access to the records of lots shipped by the smelter during the audit period.



- 5) The process for recording weights and lot numbers for current smelted inventory.
- 6) A description of the process used to calculate inventory, including work in progress, metal stocks, and other material types.
- 7) A material balance statement on the opening and closing dates of the audit period.

Note: The terms "smelted" and "un-smelted" are used to indicate treated or untreated material in general terms and should not be considered literally.

XI. Material Type and Origin Verification

This section describes the documentation required for each type of material in the Line Item Summary.

A. Plausibility Expectations

The auditee is responsible for considering any unusual patterns of supply from that country or region of origin, and make reasonable efforts to understand why increasing production could be occurring and whether it is plausible and should document such findings. If a smelter has a direct relationship with a mine, whether through ownership, joint venture or similar levels of influence, the smelter will be expected to provide plausibility reports even if the site is worked by ASM.

B. Confidentiality and Third Party Origin Documentation

The auditee should make sufficient effort to obtain the necessary documents from traders or other suppliers but may have difficulty in doing so due to business confidentiality concerns. In such cases, the auditee may request the trader or other supplier provide the necessary documents directly to the CFS auditor for review. This process should be an interactive process between the auditee, the auditor, and the auditee's supplier. The auditor will confirm gap closure on such items as soon as reasonably possible to assist the smelter and supplier in providing further documentation as necessary. It is optimal that these interactions occur either before or during the on-site audit, after the Line Item Summary has been provided. This should be considered an exception process as delays in receiving the required documentation may incur higher audit costs for the smelter.

In the case where origin and chain of custody information is held within a joint industry program (i.e. iTSCi), as access is available, the auditor may also obtain the necessary documents from the program in order to both address confidentiality issues and increase efficiency. Similarly, this information needs to be available before or during the on-site audit.



C. Determination of Applicability

Not all materials listed on the Line Item Summary require origin determination. For example, materials categorized as legacy or secondary require reduced documentation, primarily to demonstrate the material is as described. Additionally, materials received from a smelter already validated via the CFS program, or equivalent require greatly reduced documentation.

To determine if a given line item requires origin determination, the auditor shall follow the process flow illustrated in Figure 2.

D. Origin Determination

Once the auditor knows the material requires origin determination based on the flow chart in Figure 2, the auditor will collect the necessary documentation to conduct the origin determination. In this flow, materials processed by another company "in scope" as defined by section VII.B may include:

- Material received as part of a tolling provision (for example, materials received for conversion)
- Tantalum intermediates
- Partially processed or byproduct materials (e.g. tin slags)
- Materials received from supplying smelters, as described in Annex D

There are three levels of documentation required to determine origin or RCOI for materials considered in scope for the audit period. Each level requires increasing documentation as the origin of tin/tantalum approaches conflict regions or is undetermined.

To determine which level of documentation is required, the auditor does the following:

- 1) Categorize the materials requiring origin determination by country Level 1, 2, 3.
- 2) Discuss with the auditee the plausibility of ore coming from the declared origin using available information on site, such as government studies, geological studies, etc. If the auditor can demonstrate, using sufficient expertise, that the declared origin is not plausible in the original Level, the auditor can shift the country Level to a higher Level as appropriate.
- 3) Check that each line item shows whether material is sourced from ASM or LSM. For ASM, the overall approach for reduced expectations is described in Annex E.



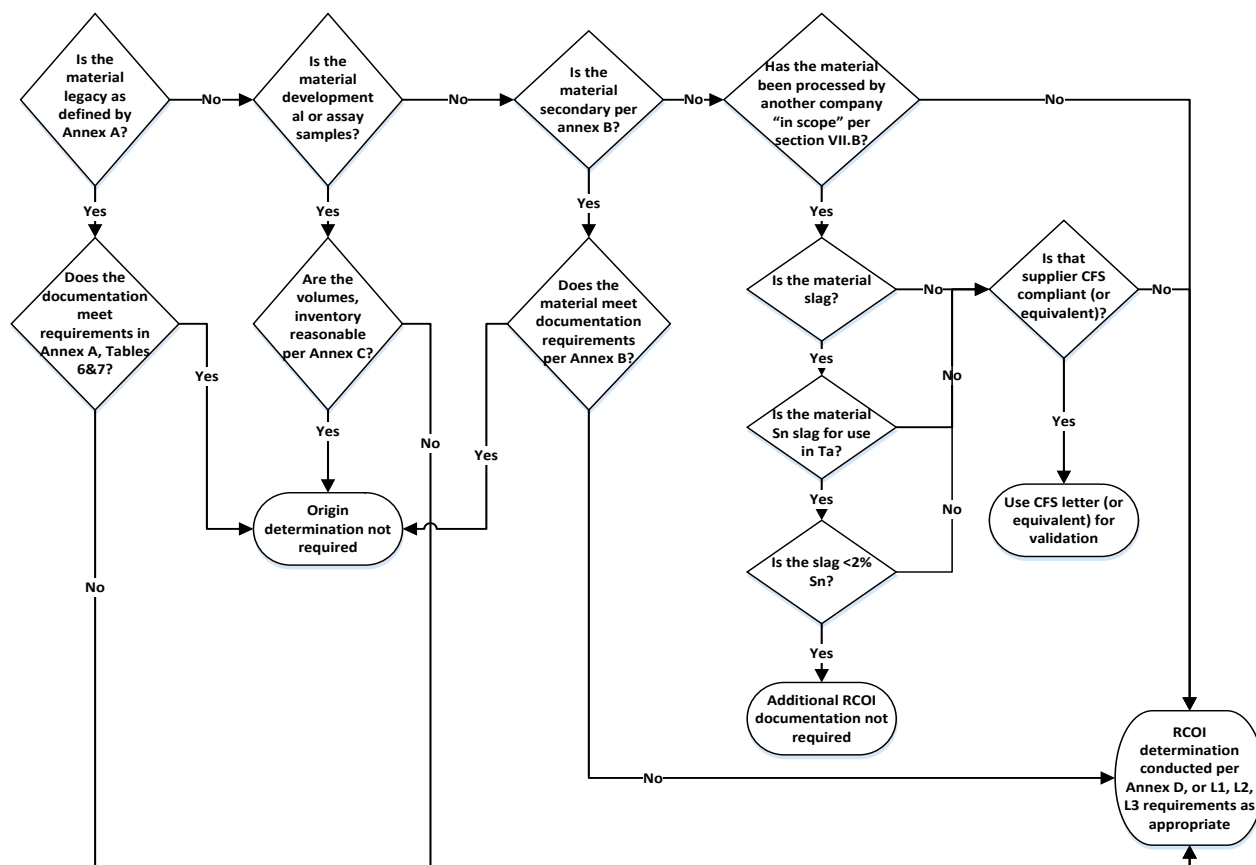
- 4) Collect the necessary documentation per the tables below for appropriate country and mining operation size (LSM or ASM). These tables summarize the goal of each validation element relative to each risk level. Copies of documents are acceptable.
- 5) Utilizing the documentation collected, the auditor will validate links between key documents and lot number, weight, smelter and/or supplier assays and smelter receipts for a sample of transactions. This will result in the origin determination for each line item investigated and demonstration of chain of custody.

Auditors will substantiate materials requiring origin determination by reviewing document(s) in accordance with the audit goals specified for Level 1, Level 2 and Level 3 material. It is the auditor's discretion to validate receipts until reasonable assurance regarding source and chain-of-custody has been achieved using the following sampling plan as a guideline.

Originating from L1 countries: a random sampling of transactions according to the following sampling plan.

- 10% of all L1 transactions up to a maximum of 25 transactions.
- If after the initial sampling, reasonable doubt remains, validate an additional 10% up to a maximum of 40 of the remaining transactions.
- If after the additional sampling, reasonable doubt remains, validate an additional 10% up to a maximum of 60 of the remaining transactions.
- If after the third round of sampling, reasonable doubt remains, validate all L1 transactions.

Sampling will not be used for receipts originating from L2 or L3 countries. NOTE: Not every document is necessary for the auditor to draw a conflict-free sourcing conclusion.

Figure 2: Applicability and Origin Determination Process Flow

Table 1: Level 1 Country Documentation for Large Scale Mining (LSM)

Expectation/Audit Goal	Key Document Types	Alternate Document Types
Validate country of origin	<ul style="list-style-type: none"> Customs export record 	<ul style="list-style-type: none"> Government issued country of origin certificate Government issued mine license⁶ Purchase or other contract showing mine name

⁶ Replaces export record for domestic source



Validate internal source country transportation from mine	<ul style="list-style-type: none"> Trucking documentation or transportation logs 	<ul style="list-style-type: none"> Contract showing transporter name Invoices from appointed transport agent License from appointed transport agent
Validate international transportation to the smelter as applicable	<ul style="list-style-type: none"> Inland forwarding note Bill of lading (by sea) Customs import record (smelter country import) <i>Ta specific note: international transportation regulations documentation (Class 7) required, when applicable</i> 	<ul style="list-style-type: none"> Through bill of lading

Table 2: Level 1 Country Documentation for Artisanal and Small Scale Mining (ASM)

Expectation/Audit Goal	Key Document Types	Alternate Document Types
Validate country of origin	<ul style="list-style-type: none"> Customs export record 	<ul style="list-style-type: none"> Government issued country of origin certificate Declaration of region of origin of mine within Level 1 country⁶



Validate international transportation to the smelter as applicable	<ul style="list-style-type: none"> Inland forwarding note Bill of lading (by sea) Customs import record (smelter country import) <i>Ta specific note: international transportation regulations documentation (Class 7) required, when applicable</i> 	<ul style="list-style-type: none"> Through bill of lading
--	--	--

Table 3: Level 2 Country Documentation for LSM (additional requirements in *bold italic*)

Expectation/Audit Goal	Key Document Types	Alternate Document Types
Validate country of origin	<ul style="list-style-type: none"> Customs export record <i>Government issued mine license⁷</i> <i>Mine visit report from smelter, supplier or other representative.⁸</i> 	<ul style="list-style-type: none"> Government issued country of origin certificate Purchase or other contract showing mine name <i>Reports or data from supplier, company or external source to validate as known production areas⁹</i>

⁷ Replaces export record for domestic source

⁸ Mine site reports may help to verify mine location, production plausibility and probable transport routes.

⁹ Examples include trading entity data, 3rd party representative data, industry association data, research entity data, geographical studies, sales statistics



Validate internal source country transportation from mine	<ul style="list-style-type: none"> Trucking documentation or transportation logs 	<ul style="list-style-type: none"> Contract showing transporter name Invoices from appointed transport agent License from appointed transport agent
Validate international transportation to the smelter if applicable	<ul style="list-style-type: none"> Inland forwarding note Bill of lading (by sea) Customs import record (smelter country import) <i>Ta specific note: international transportation regulations documentation (Class 7) required</i> 	<ul style="list-style-type: none"> Through bill of lading

Table 4: Level 2 Country Documentation for ASM (additional requirements in *bold italic*)

Expectation/Audit Goal	Key Document Types	Alternate Document Types
Validate country of origin	<ul style="list-style-type: none"> Customs export record <i>Exporters declaration of region of origin of mine within Level 2 country</i> 	<ul style="list-style-type: none"> Government issued country of origin certificate <i>Reports or data from supplier, company or external source to validate as known production areas⁹</i>



Validate international transportation to the smelter as applicable	<ul style="list-style-type: none"> Inland forwarding note Bill of lading (by sea) Customs import record (smelter country import) <i>Ta specific note: international transportation regulations documentation (Class 7) required, when applicable</i> 	<ul style="list-style-type: none"> Through bill of lading
--	--	--

Table 5: Level 3 Country Documentation for LSM and ASM (additions in *bold italic*)

Expectation/Audit Goal	Key Document Types	Alternate Document Types
Validate country of origin	<ul style="list-style-type: none"> Customs export record¹⁰ <i>Government issued country of origin certificate¹¹</i> 	<ul style="list-style-type: none"> Purchase or other contract showing mine name Declaration of region of origin of mine within Level 3 country (ASM Only)
Validate internal source country transportation from mine	<ul style="list-style-type: none"> Trucking documentation or transportation logs (LSM only) Or, other traceability options shown below 	<ul style="list-style-type: none"> Contract showing transporter name Invoices from appointed transport agent License from appointed transport agent

¹⁰ Level 3 country export records must be confirmed to only be issued once all applicable taxes and royalties for export have been paid (OECD Guidance Annex II) if applicable. In some countries taxes for natural resource exports may not be required under national law. In the case where covered by law, the export record can suffice as the legal taxes and royalty record.

¹¹ ICGLR Certificates will be acceptable when coming from ICGLR Member Countries who have implemented all ICGLR expectations, including the independent audits.



<i>Validate mine site, location, security and plausibility (on the ground assessments)</i>	<ul style="list-style-type: none"> • Government issued mine license (LSM only)¹² • Mine visit report from smelter, supplier or other representative.¹³ 	
<i>Validate due diligence on smelter and their suppliers relative to potential conflict links</i>	<ul style="list-style-type: none"> • <i>Independent 3rd party evaluation from a credible OECD conformant industry program (ex. iTSCI) membership acceptance)</i> • <i>Independent 3rd party evaluation from a credible consulting entity familiar with OECD expectations¹⁴</i> 	

¹² Replaces export record for domestic source

¹³ The source information used to determine whether the mine was under control of armed groups must be credible and documented (ex. iTSCI or Certified Trading Chains (CTC) baseline reports). While making such a determination, the smelter may rely on such sources as the US State Department's Conflict Minerals Map, other recognized equivalent maps and other official sources, as they exist. If the smelter has more accurate, timely and reliable sources of information than the maps mentioned above, these are acceptable in terms of this determination but credibility must be clearly demonstrated.

¹⁴ See the Conflict Free Smelter website for a list of consultants who are able to provide these services (<http://www.conflictreesmelter.org/consultantsauditors.htm>)



<i>Validate internal source country traceability including mine, processor, transport route and company/individual</i>	<ul style="list-style-type: none"> <i>The final tracking devices and shipment reference number</i> <i>Traceability report correlating tracking devices and shipment reference number (i.e. iTSCi shipment tag report)</i> 	
<i>Validate regular monitoring on the mine(s) companies and transport routes (on the ground assessments and ongoing mitigation)</i>	<ul style="list-style-type: none"> <i>Incident or monitoring reports (i.e. iTSCi incident report summaries)¹⁵</i> 	
<i>Validate field governance assessments of wider provincial or country risk/issues such as smuggling and security</i>	<ul style="list-style-type: none"> <i>Independent 3rd party governance assessment report¹⁶</i> <i>Local stakeholder engagement effort documents (i.e. iTSCi governance assessment or incident report summaries)</i> 	
<i>Validate risk-based and/or random audit reports of sample suppliers reflecting assessment of trade records, any untraced materials, and their conformance to OECD guidance</i>	<ul style="list-style-type: none"> <i>Independent 3rd party company audit reports (i.e. iTSCi company audits)</i> 	

¹⁵ Monitoring reports should include descriptions of any and all incidences that are mitigated at the mine site(s) or en route to export relative to data collection, security, illegal trade or handling, etc.

¹⁶ Governance assessments should show engagement with local and central government officials, as well as non-government civil society and local community. These reports should be kept up to date on some reasonable frequency relative to changing conditions in the area, greater than once per year.

Validate international transportation to the smelter if applicable	<ul style="list-style-type: none"> • Inland forwarding note • Bill of lading (by sea) • Customs import record (smelter country import) 	<ul style="list-style-type: none"> • Through bill of lading • <i>Ta specific note: international transportation regulations documentation (Class 7) required</i>
Validate existence of a grievance system (at the company or through an industry mechanism)	<ul style="list-style-type: none"> • Grievance system description/operating manual reference 	<ul style="list-style-type: none"> • Available grievance reports of follow-up actions (i.e. iTSCI ombudsman)
Validate public disclosure as related to step 5 of the OECD Guidance	<ul style="list-style-type: none"> • Public disclosure statement on related company or industry program website¹⁷ 	<ul style="list-style-type: none"> • Public disclosure statement within a published company document, such as an Annual Report
Validate existence of communication to downstream customers on the smelter's due diligence	<ul style="list-style-type: none"> • Dissemination of public disclosure directly to customers 	<ul style="list-style-type: none"> • Customer letter • Due diligence report • Completed Conflict Minerals Reporting Template (CMRT) for supplying smelter sourcing

Note: For a Level 3 smelter, a relevant charge number must also be provided and connected to traceability records for each input lot in that charge.

¹⁷ Per OECD Guidance, the public disclosure should cover the five steps: 1) company management systems, 2) company risk assessment in the supply chain, 3) risk management, 4) audit report, 5) conveyance of information to downstream actors.



XII. References

A. Audit Program Documents

Please visit our smelter introduction page for all relevant documents, including:

- Auditee agreements (AECI and Auditee Agreement)
- Audit procedure
- Line-Item Summary
- Pre-audit checklist

B. External Reference Documents

- OECD Due Diligence Guidance for Responsible Supply Chains on Minerals from Conflict-Affected and High-Risk Areas: <http://www.oecd.org/daf/inv/mne/GuidanceEdition2.pdf>
- Dodd Frank Wall Street Reform and Consumer Protection Act, Section 1502: <http://www.sec.gov/about/laws/wallstreetreform-cpa.pdf>
- US Security and Exchange Commission Conflict Minerals Rule: <http://www.sec.gov/rules/final/2012/34-67716.pdf>
- UN Guidance: <http://www.un.org/sc/committees/1533/egroupguidelines.shtml>

XIII. Annexes

A. Legacy Materials

As noted in Section VII.A, materials "outside the supply chain" prior to January 31, 2013¹⁸, are not considered to be in scope for the purposes of this audit, and do not require any information on mineral origin. However, a smelter may have materials that were "outside the supply chain" that were procured, in inventory, and/or processed during the audit period. This does include material in warehouses, government stockpiles, or in smelter or downstream user facilities.

Materials that may fall into this category include minerals, partially processed materials, already smelted metals, and materials generated from smelting such as slags or intermediates. Reduced documentation is required to provide evidence

¹⁸ Date is aligned with the final rules published by the US Securities and Exchange commission for Section 1502 of the Dodd Frank Act

that, while relevant to the audit period, the materials were "outside the supply chain". Documentation requirements for each scenario are shown in Table 4 for Level 1 and Level 2 countries, and in Table 5 for Level 3 Countries.

Table 6: Documentation Requirements for materials outside the supply chain coming from Level 1 or Level 2 countries

Material Type	Documentary Evidence	Examples
Mineral	<ul style="list-style-type: none"> Date of mineral production 	
Metal / Material generated from smelting, partially processed materials	<ul style="list-style-type: none"> Production Date Identity of immediate supplier storing the materials Transport from storage location of supplier 	Certificate of Analysis (CoA) ¹⁹

Table 7: Documentation Requirements for materials outside the supply chain coming from Level 3 countries

Material Type	Documentary Evidence	Examples
Mineral	<ul style="list-style-type: none"> Date of export from Level 3 country Evidence of a non-level 3 storage location Identity of immediate supplier storing the materials Transport from storage location of supplier 	
Metal ²⁰	<ul style="list-style-type: none"> N/A 	

¹⁹ The CoA should be available for material produced from mineral and should also be available for pure metal produced from secondary sources, but not other types of material.

²⁰ There is no known metal smelted prior to January 31, 2013 stored in Level 3 Countries



Material generated from smelting, partially processed materials	<ul style="list-style-type: none"> • Best available due diligence • 3rd party due diligence of current owner (including OECD Annex II) 	<ul style="list-style-type: none"> • Photographs and assay analysis documents • Documentation demonstrating legacy smelting operations and reasonable plausibility of material being produced in the past • Transportation documents showing movement of material • Inventories of material prior to January 31, 2013
---	--	---

For already smelted materials from Level 3 countries, the weights, physical descriptions, etc., should reasonably match between all documents describing the materials and a discretely different OECD conformant traceability process compared to concentrates, such as one utilizing special iTSCi tags, must be used to secure and trace outbound shipments of the material to receiving smelters.

Minerals stocks are known to exist in Level 3 countries after January 31, 2013. These are not considered to be outside of the supply chain. These minerals may not have all the required documentary evidence and present a high risk. The CFS audit will adopt due diligence requirements once appropriate guidance has been provided by the OECD.

B. Secondary Materials

The purpose of this annex is to enable the auditor to determine which materials covered in the Line Item Summary and mass balance can be treated as secondary materials which are excluded from the requirement to demonstrate origin.²¹ Specific examples of secondary materials that do not require origin determination are included as part of this annex.

1. Sampling Methodology for Secondary Materials

The smelting or re-refining of secondary materials can involve large numbers of transactions at the smelter in order to aggregate an appreciable amount of metal as compared to the numbers of transactions incurred when processing concentrated ore or virgin metal. In the latter case, the large numbers of transactions occur further upstream.

Due to the large numbers of transactions and the need to describe only the due diligence efforts made to show secondary materials are from recycled or scrap sources, the below table represents the sampling requirements/quantities relative to the total number of secondary material transactions and corresponding documentation reviews.

²¹ Requirement based on the August 2012 final rule of the US Securities and Exchange Commission to implement the Dodd-Frank Act, Section 1502 provisions on conflict minerals

**Table 8: Sampling Sizes**

Number of secondary material purchasing transactions	Minimum sampling of secondary material
1 - 200	→ 100% if sample is ≤125 transactions → 125 samples if 126 to 200 transactions
201 - 3200	125
3201 - 10000	200
10001 - 35000	315
35001 - 150000	500

The above table is based on MIL-STD-105D, a globally accepted standard for sampling methodology.

- A. The auditor conducts a sampling to obtain a selection of transactions distributed evenly over the audit period based on all transactions within the audit period received from each supplier of material, with at least one sample per supplier. The total of all secondary material transactions presented in the Line Item Summary will be used to evaluate the total mass of those materials for the overall mass balance.
- B. For any secondary materials noted by the smelter as being procured from an immediate supplier for tin or supplying smelter for tantalum in a Level 2 or Level 3 country, all related purchasing transactions must be reviewed above and beyond the required sample for the remaining transactions.

2. Secondary Materials: Validation Examples

- A. Tin: Tin has many hundreds of uses both as the metal, and as organic and inorganic compounds. Tin containing material may therefore arise from hundreds of sources and cannot be specifically described. As an indication, secondary materials and sources may include, but are not limited to those described below:
 - 1) Manufacture of tin tubes, foils, and other similar forms. Producers of tin and tin alloys, lead, copper (e.g. brasses, bronzes, gunmetal, Babbitt metal, etc.), zinc, titanium, aluminum, steel, cast iron and a variety of other metal alloy manufacturers.
 - Melting drosses, skimmings, ashes and runouts from the casting processes



- Refining and spent dross and refining slag (dross produced in liquid form)
 - Off-cuts, or out of specification or contaminated material
 - Gas cleaning sludge and dust
 - Water treatment sludge
 - Filter dust or similar materials (e.g. tin oxides)
- 2) Manufacturers of alloy - components, powders or final products, for a range of industries such as automotive, electrical and electronics, plumbing and building, radiator manufacturing, bearings, brazing, coins, printing, model making, jigging and fixturing, ammunition, dental, ornamental items, toys and jewelry, and for various types of general engineering.
- Ashes, drosses, skimmings and runouts from the anode casting melting dross
 - Contaminated or waste metal
 - Out of specification or contaminated material
 - Metallic blocks or items as off-cuts of casting failures
 - Runners and risers from casting processes
 - Scrap wire, strip, stampings, trimmings, turnings, pieces, cuttings, dust, powder, etc.
 - Machining, grinding and polishing waste, ball mill fines
 - Gas cleaning sludge and dust
 - Water treatment sludge
 - Filter dust or similar materials (e.g. tin oxides)
 - Copper slags and refractory slags from the copper alloying or other alloying industries.
- 3) Printed circuit board manufacturers and other industrial solder users of any kind of lead, lead-free, high temperature or other solders
- Solder dross
 - Spent anodes



- Return solder products (e.g. bar, paste, spheres, preforms, wire)
 - Contaminated solder pot material
 - Waste solder paste
 - Spillings and drippings
 - Filter dust or similar materials (e.g. tin oxides)
- 4) Users of tin metal or chemicals in the plating industry, for example, manufacture of components for automotive, electrical, electronic, medical and general engineering industries, etch resist material as well as canning and other types of packaging. Plating may be pure tin or tin alloy coatings such as tin-nickel, tin-zinc, tin-copper, tin-lead or any other combination of materials producing the required final properties. Tin plating may be applied to almost any other metal alloy, including but not limited to steel and copper and their alloys.
- Ashes, drosses, skimmings and runouts from the anode casting process
 - Spent anodes
 - Plating sludges from any hydro-metallurgical or electrolytic tinning process
 - Plated off-cuts or reject items
- 5) Hot tinning and solder dipping operations as well as thermal spray coating processes in general engineering, electrical and electronic and other product manufacture
- Drosses
 - Contaminated metal
 - Filter dust or similar materials (e.g. tin oxides)
 - Overspray
- 6) The glass manufacturing, forming, and coating industries using tin metal and/or compounds
- Metal and drosses from glass float processes
 - Metal and drosses from sputtering targets
 - Filter dust or similar materials (e.g. tin oxides)



- Spent sputtering targets
- 7) Manufacturers and users of tin chemicals in a very wide range of industries such as brake pads, fire retardants, foams, polymers, rubbers, ceramic pigments, glazes, conductive films, crystal glasses, mirrors, textiles, wood and other preservatives, food additives, soaps, toothpastes and cosmetics, veterinary products, cements, mercury sorbants, fluxes and anti-sludge agents
- Tinny sludge from tin chemical or pharmaceutical manufacturing processes
 - Other waste or reject tin containing materials
 - Any other type of residue, drosses, skimmings as a byproduct of production
 - Filter dust or similar materials (e.g. tin oxides)
- 8) Tin or tin compounds used as catalysts for polymerization, alkylation, esterification, oxidation, hydrogenation and use in gas sensors, as well as reducing agents activators, sensitizing agents, passivation, and stabilizers during a manufacturing process.
- Tinny sludge from manufacturing processes
 - Other waste or reject tin containing materials
 - Any other type of residue, drosses, skimmings as a byproduct of production
- 9) De-tinning operations for recovery of tin from any type of plated or coated general items, for example tin-coated copper alloy or steel
- Tin bearing sponge
- 10) Operators reclaiming any tin containing metals and items manufactured from them, such as organ pipes, wires, pewter plates and vessels, costume jewelry, candlesticks, light fittings, clocks, kilt pins
- All forms of materials
- 11) Copper recovery operations using pyro-metallurgical and/or other relevant processes
- All forms of materials, including copper slag or dross
- 12) Lead refiners or similar processors recovering tin as drosses, stannates and other materials from, for example, battery and other lead based alloys



- All forms of materials, including lead slag or dross

13) Recovery of end of life scrap and other wastes from any semi-finished or final products related to the above processes, for example electrical or electronic equipment, automobiles, heat exchangers, plumbing, ships, aircraft, packaging, building demolition, infrastructure replacement and any consumer product

- All forms of materials, which might include any kind of metal process arising from these types of non-smelting production facilities

14) Recovery of end of life engineering components of tin compounds and minerals, such as tin oxide bricks

- All forms of materials

Any forms of tin which have been extracted, smelted and then used for their primary purpose and are no longer used for such purpose are capable of being recycled. Tin containing secondary materials suitable for recovery may arise from practically any type of metal, polymer, ceramic, glass, rubber, chemical production, use or recovery plant as well as numerous types of industrial and consumer products.

Note that residues such as ashes, drosses, skimmings and other forms of similar material mentioned above may be 100% oxidic, 100% metallic or any combination of the two, with or without organic contamination or moisture.

B. Tantalum: Definitions of secondary tantalum-containing material are generally sources reclaimed from end-user products, or post-consumer, such as:

- Capacitors, vacuum and electron tubes, light bulbs, electrodes, watches
- Sputter targets, furnace parts, coating overspray
- Chemical processing equipment such as valves, pipes, tanks, heat exchange coils and heating elements
- Metal wire, sheet, foil, tubes and pipes
- Super alloys in jet engines and gas turbine components such as blades and vanes
- Carbide tools, drill bits, drilling chips
- Camera lenses, optical lenses
- Neutron shielding components from nuclear power applications
- Neutron targets in cyclotrons



- Penetrator component in missile warheads
- Orthopedic implants, medical tools
- Excess cuttings, spills and rejects from the above manufacturing (in the form of whole or partial components, offcuts, stampings, metal turnings, powder, and sludge)

3. Documentation Requirements

To demonstrate materials are secondary, the auditee should be able to provide the following:

- Identification of the supplying smelter of the material for tantalum materials, and the immediate supplier for tin materials
- Information on the composition or form of the materials which acts as evidence that allows the auditor to reasonably conclude that the materials are a) not plausible primary mined concentrates, and/or b) they conform to the OECD definition, and/or c) relate to one or more secondary material examples as defined above.
- Bill of lading or other transportation or purchase agreement

Supporting information such as analysis data, information on physical form, photos, or explicit descriptions of the material lot may be utilized when available.

C. Assay Samples and Other Small Quantities

Assay samples and other small quantities of materials from Level 1 and Level 2 countries are excluded from the scope of the compliance audit provided the aggregate amount received by the smelter over the audit period is less than 0.3% of the total receipts over the same period.

Mineral assay samples received from Level 3 countries from exporters participating in an OECD conformant traceability and due diligence program will be assumed to be of known source if within the 0.3% limit specified above, and accompanied by a declaration from the exporter and another party that such quantities are plausible, and taken from mineral batches traceable within that program. Individual source, transport and supply information will not be required for each sample.

D. Supplying Smelter Origin Determination Requirements

- 1) CFS compliant smelters



Deliveries of materials from a CFS-compliant smelter do not need independent origin determination as they are already validated. The reduced documentation requirements in this scenario are as follows:

- Certificate of Analysis (CoA) or other appropriate documentation showing production date
- Identity of the supplying smelter
- Transport documentation from the supplying smelter

2) *Startup arrangements*

Level 1 and Level 2 Supplying smelters: It is recognized that a CFSP audit cannot be performed on a smelter until after operations have begun. Material from a newly established supplying smelter may be accepted by an auditee company as long as the supplying smelter demonstrates prior to any purchase by the auditee that they are involved in the CFSP with an audit due within the first six months of operation. There is no transitional period for this arrangement which will remain in place on an on-going basis.

Level 3 Supplying smelters: There are currently no known operational smelters in Level 3 countries although this situation is expected to change. It is recognized that a CFSP audit cannot be performed until audit operations have begun. Material from a newly established supplying smelter may be accepted by an auditee company as long as the supplying smelter demonstrates prior to any purchase by the auditee that they are involved with a Level 3 in-region due diligence program and that they are involved in the CFS program with an audit due within the first six months of operation. There is no transitional period for this arrangement which will remain in place on an on-going basis.

3) *Transitional arrangements (for tin smelters only)*

Level 1 and Level 2 Supplying smelters: To avoid disruption of the supply chain, and in consideration that it is not possible for all supplying smelters to be audited in a short period of time, transitional arrangements will be in place until December 31, 2014.

Documents required to be obtained by the auditee company for materials produced by supplying smelters during the transitional period in Level 1 and 2 countries are dependent on individual practices of the authorities in those countries. Examples of acceptable documentation sets for companies where the transitional arrangements are likely to apply are listed²² and made available to the auditors and auditee companies separately (to protect

²² The CFSI's CFSP Workgroup will endeavor to clarify the lists as soon as possible. However, they will be subject to regular review and change as knowledge increases and circumstances change. Such changes will be clearly communicated to potential auditees. Any lack of clarity over required documentation during the transitional period will be dealt with in a



commercial confidentiality). This will include the best available documentation certifying origin, license to transport, and similar chain of custody references although these will not be available in every case.

By the end of the transitional period all supplying smelters should be validated. The full non-transitional audit requirements will be applied to any materials with a date of production confirmed by a CoA or other appropriate documentation of January 1, 2015 onwards.

Level 3 Supplying smelters: Transitional arrangements do not apply to Level 3 supplying smelters.

4) Arrangements for metal ingot obtained from warehouses/exchanges

An auditee may receive an ingot from a warehouse/exchange for any form of treatment in their facility, or any activity that makes the auditee part of the physical chain of custody of the material. Such material should be accompanied by a warehouse notice/release warrant and CoA which will provide information on the original production date and the identity of the supplying smelter, as well as the date of purchase by the auditee company.

Materials that can be demonstrated to have a production date within the CFS compliance period of a validated supplying smelter does not require any further documentation except transport documentation from the warehouse location. Origin determination is not required.

If the material is not from a CFS-compliant supplying smelter, or was produced outside the compliance period of a CFS-compliant supplying smelter, origin determination is required via either Section XI.B or Annex D, Sections 2 or 3, as applicable.

The warehouse operator may not be willing to collate a large number of documents on a non-CFS validated material, nor to pass such documents to the auditee. Until and unless appropriate agreements have been made with those warehouse operators, the auditee remains responsible for obtaining the required documents directly from the supplying smelter.

5) Arrangements for receipt of non-secondary tin product

An auditee may receive material which is not in ingot form from a supplying smelter or a tin product manufacturer, the composition of which is mainly tin and which is unused for its primary purpose. In this case the material does not fall under the definition of secondary materials as described in Section VI and Annex B. This material will be considered to have the same requirements as a metal ingot, defined by the location of the supplying smelter. Such product may be in a variety of compositions and physical appearances.

reasonable manner by the CFS Audit Review Committee. Smelters can provide example documents for consideration for inclusion in the lists.



Examples of acceptable documentation sets for such material are listed and made available to the auditors and auditee companies separately (for reasons of commercial confidentiality). This will include the best available chain of custody references and will require information on mine source to be shown. If purchased through an intermediary, or from a warehouse, chain of custody documents and, for example, warehouse notice/release documents will be required.

E. Approach for ASM Sourcing

a) Reduced documentation requirements:

ASM material will not be traceable to the mine of origin, and documentation commonly requested for large operators will not be available. Since exact mine cannot be determined, the ASM region of origin within the sourcing country is utilized instead. Going forward after the effective date of this protocol (Section VIII), the smelter should obtain a supplemental document for all ASM sourcing -- a declaration of ASM region of origin from the exporter, trader, supplier, etc. of that material or immediate supplier for domestic sourcing.

b) Limitations of Plausibility Assessment:

It is recognized that statistics on ASM production are not typically collected through official channels, nor is the production known. The smelter should attempt to collect information that is generally available although such information will be sparse. The auditor, if suitably knowledgeable, may assess this information, taking into account that by its very nature, ASM production is informal and quantities produced will vary significantly and unpredictably from day to day due to weather, current metal price, and many other influencing factors. Quantities reportedly available across an area are not directly relevant to one purchasing smelter, since other purchasers may be operating and taking additional unknown quantities from the same locations.

Due to the higher inherent risk for Level 3 countries, the auditor may expect more extensive discussion of efforts made by the smelter to understand any increasing production trends. If the smelter and his/her suppliers are participating in an OECD conformant upstream industry program (i.e. iTSCi) which regularly monitors changes in production, then these direct obligations on the smelter are minimized.



XIV. Revision History

Rev – 15 September 2011 (Sn), 09 Aug 2011 (W), 15 Jan 2011 (Ta)

Changes: Initial release of protocols.

Rev – 21 December 2012

Changes: Merged tin, tantalum and tungsten protocols into one 3T's document. Separated the audit procedure into a separate document. Major reorganization of the content from prior document revisions. Removal of the list of smelters. Addition of secondary materials sampling procedure. Merger of formal level 2B and Level 3 country expectations into a new Level 3, and renaming of Level 2A countries to Level 2. Major realignment of Level 3 documentation requirements with the OECD guidance. Establishment and revision of documentation expectation dates for stocks (legacy materials) and partially-processed an byproduct materials (i.e. slag).

Rev – 21 November 2013

Changes: Reformatted, reorganized and improved language of the entire document. Added several new introductory sections Purpose, Scope, Definitions, etc. Enhanced tin and tantalum smelter definitions. Added an Applicability and Origin Determination Process Flow. Shifted to a document expectation focus versus a document type focus. Added a document expectation table. Added a Level 1 document sampling methodology. Added allowances for supplying smelters, but new startup smelters as well as transitional smelters trying to get into the audit program. Removed tungsten to a separate protocol. Removed the requirement for auditors to conduct an internal lot traceability exercise (from finished product to incoming lots). Change the tantalum initial audit period to by one year.

About the Conflict-Free Sourcing Initiative (CFSI)

Founded in 2008 by members of the Electronic Industry Citizenship Coalition and the Global e-Sustainability Initiative, the Conflict-Free Sourcing Initiative has grown into one of the most utilized and respected resources for companies addressing conflict minerals issues in their supply chains. Over 120 companies participate in the CFSI today, contributing to a range of tools and resources including the Conflict-Free Smelter Program, the Conflict Minerals Reporting Template, Reasonable Country of Origin Inquiry data and a range of white papers and guidance documents on conflict minerals sourcing. The CFSI also runs regular workshops on conflict minerals issues and contributes to policy development and debates with leading civil society organizations and governments.

Special thanks to ITRI, TIC and their members for partnering to improve this document.