# UNITED STATES SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

# FORM SD

## SPECIALIZED DISCLOSURE REPORT

# **RIBBON COMMUNICATIONS INC.**

(Exact Name of Registrant as Specified in its Charter)

**DELAWARE** (State or Other Jurisdiction

of Incorporation)

**001-38267** (Commission File Number) 82-1669692 (IRS Employer Identification No.)

4 TECHNOLOGY PARK DRIVE, WESTFORD, MASSACHUSETTS 01886 (Address of Principal Executive Offices) (Zip Code)

Justin K. Ferguson, Executive Vice President, General Counsel and Secretary (978) 614-8100

(Name and telephone number, including area code, of the person to contact in connection with this report)

Check the appropriate box to indicate the rule pursuant to which this form is being filed, and provide the period to which the information in this form applies:

x Rule 13p-1 under the Securities Exchange Act (17 CFR 240.13p-1) for the reporting period from January 1 to December 31, 2018.

#### Section 1 — Conflict Minerals Disclosure

#### Item 1.01. Conflict Minerals Disclosure and Report

Ribbon Communications Inc. (the "Company" or "Ribbon") has determined that some of the products that it manufactured or contracted to manufacture through the end of reporting year 2018 ("Ribbon Products"), include gold, columbite-tantalite (coltan), cassiterite and wolframite, including their derivatives, tantalum, tin and tungsten (collectively, "Conflict Minerals"). The Company has further determined that these Conflict Minerals are necessary to the functionality or production of the Ribbon Products.

The Company conducted a Reasonable Country of Origin Inquiry ("RCOI") to determine whether any of the Conflict Minerals in the Ribbon Products originated in the Democratic Republic of the Congo or an adjoining country ("Covered Country") and whether the Conflict Minerals are from recycled or scrap sources. Based on its RCOI, the Company knows or has reason to believe that some of the Conflict Minerals in the Ribbon Products originated in the Covered Countries and are not from recycled or scrap sources. The Company therefore engaged in due diligence on the source and chain of custody of the Conflict Minerals in the Ribbon Products that originated or may have originated in the Covered Countries, as described in its Conflict Minerals Report filed herewith as Exhibit 1.01, and available on the Investor Relations — Corporate Governance section of the Company's website at http://investors.ribboncommunications.com/governance.cfm.

## Item 1.02. Exhibit

In accordance with Rule 13p-1 under the Securities Exchange Act of 1934, the Company is filing as an exhibit to this Form SD the Conflict Minerals Report required by Item 1.01.

## Section 2 — Exhibits

## Item 2.01. Exhibits

The following exhibit is filed as part of this Form SD:

Exhibit 1.01 Conflict Minerals Report for the year ended December 31, 2018, as required by Items 1.01 and 1.02 of this Form SD.

# SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned hereunto duly authorized.

Date: May 30, 2019

# **RIBBON COMMUNICATIONS INC.**

By: /s/ Justin K. Ferguson Justin K. Ferguson Executive Vice President, General Counsel and Secretary

## CONFLICT MINERALS REPORT For the Year Ended December 31, 2018

## Introduction

This report for the year ended December 31, 2018 has been prepared by Ribbon Communications Inc. (the "Company", "Ribbon", "we," "us," or "our") to comply with Rule 13p-1 (the "Rule") under the Securities Exchange Act of 1934, as amended. The Rule imposes certain disclosure and reporting obligations on companies that report with the SEC and which manufacture, or contract to have manufactured, products containing conflict minerals that are necessary to the functionality or production of those products. Conflict Minerals are defined as cassiterite, columbite-tantalite, gold, wolframite, and their derivatives, which are limited to tin, tantalum, tungsten, and gold (collectively, "Conflict Minerals").

Ribbon has determined that some of the products that it manufactured or contracted to manufacture, and which continue to be manufactured or contracted to manufacture by Ribbon through the end of reporting year 2018 ("Ribbon Products") include Conflict Minerals.

## **Company Overview**

Built on world-class technology and intellectual property, Ribbon delivers highly reliable, unified and embedded real-time communications capabilities to customers in more than 25 countries and on 6 continents. The Company transforms fixed, mobile and enterprise networks from legacy environments to all IP and fully virtualized, secure, cloud-based architectures, enabling highly productive communications for consumers and businesses. Ribbon's market-leading communications security solutions are based on a big data behavioral analytics platform and offer customers enhanced network intelligence and security. The Company's Kandy Communications Platform as a Service (CPaaS) enables rapid service creation and digital transformation by delivering customers a comprehensive set of advanced embedded and unified communications capabilities.

## **Conflict Minerals Policy**

Ribbon has adopted a Conflict Minerals Policy and communicated such policy to its suppliers. This policy is available on the Investor Relations-Corporate Governance section of the Company's website at http://investors.ribboncommunications.com/governance.cfm.

## **Products Overview**

This report covers the following Ribbon Products that were manufactured in 2018 (the "2018 Ribbon Products"): SBCs, DSCs, Voice over IP (VoIP) trunking solutions, policy/routing servers, media and signaling gateways, including the GSX 9000 High-Density Media Gateway, and network analytics tools.

## Supply Chain and Reasonable Country of Origin Inquiry

Ribbon has determined that Conflict Minerals are necessary to the functionality or production of Ribbon Products manufactured or contracted to be manufactured during 2018. We utilize an outsourced supply chain model pursuant to which our contract manufacturers procure materials on our behalf. Our supply chain is multi-tiered, global and complex, and we outsource the manufacturing of our hardware products such that we are many steps removed from the mining and smelting or refining of Conflict Minerals. Therefore, we rely upon our suppliers to provide information on the origin, source and chain of custody of the Conflict Minerals contained in product components and materials. Some of these suppliers may themselves purchase from lower tier suppliers and not directly from a miner, smelter or refiner.

The Company conducted a Reasonable Country of Origin Inquiry ("RCOI") to determine whether any of the Conflict Minerals in our 2018 Ribbon Products originated in the Democratic Republic of the Congo ("DRC") or an adjoining country (collectively, the "Covered Countries") and whether the Conflict Minerals are from recycled or scrap sources. Based on our RCOI, we



know or have reason to believe that some of the Conflict Minerals in our 2018 Ribbon Products originated in the Covered Countries and are not from recycled or scrap sources.

Ribbon's RCOI measures included conducting a supply-chain survey with in-scope suppliers using the Responsible Minerals Initiative ("RMI") Reporting Template (the "Template"). The Template was developed to facilitate disclosure and communication of information regarding smelters that provide material to a company's supply chain. It includes questions regarding the supplier's conflict-free policy, engagement with its direct suppliers, and a listing of the smelters the company and its suppliers use. In addition, the Template contains questions about the origin of Conflict Minerals included in the company's products, as well as supplier due diligence. The Template was designed to provide companies with sufficient information regarding their suppliers' practices with respect to the sourcing of Conflict Minerals to enable such companies to comply with the requirements of the Rule.

#### **Due Diligence Process**

In accordance with the Rule, Ribbon undertook due diligence on the source and chain of custody of the Conflict Minerals in the 2018 Ribbon Products that originated or may have originated in the Covered Countries. The Company's due diligence measures were designed to conform, in all material respects, to the internationally recognized due diligence framework in The Organization for Economic Co-operation and Development ("OECD") Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas ("OECD Guidance") and the related supplements. The OECD Guidance is written for the entire mineral supply chain and our due diligence measures were tailored to include steps appropriate for "downstream" companies.

## **Due Diligence Measures**

Ribbon performed the following due diligence measures in accordance with the OECD Guidance and the Rule:

OECD Guidance Step 1: Establish Strong Company Management Systems

- Ribbon's Conflict Minerals compliance efforts are overseen by the Company's Vice President, Manufacturing, Operations and Supply Chain and its
  manufacturing department, and supported and sponsored by the Company's engineering, audit and legal departments. Ribbon employees who are
  responsible for Conflict Minerals compliance have received training regarding Conflict Minerals compliance. The team was structured to ensure
  critical information, including our policies related to this subject matter, reached relevant employees and suppliers. To the extent red flags or other
  issues are identified in the supplier data acquisition or engagement processes, these issues and red flags will be addressed first by the responsible
  individuals within the engineering, audit and legal departments, and, if deemed necessary, will then be reported to and reviewed by the Audit
  Committee (the "Audit Committee") of the Board of Directors at regularly schedule meetings on an annual basis.
- Ribbon also engaged SiliconExpert Technologies, a provider of electronic component data and BOM Management software to the electronics industry ("SiliconExpert"), to assist with its Conflict Minerals compliance efforts. Frequent status meetings are held between Ribbon's Conflict Minerals support team and SiliconExpert, with Ribbon management receiving status updates on progress and due diligence efforts on a regular and timely basis.
- In addition, Ribbon has a Conflict Minerals Policy and communicates such policy to its suppliers, which is available on our Investor Relations Corporate Governance section of our website at http://investors.ribboncommunications.com/governance.cfm.
- To the extent any employee, officer or director has concerns or grievances about the Company's potential use of Conflict Minerals, such individual is
  urged to contact his or her manager, the Company's Chief Financial Officer, the General Counsel or other member of senior management, the
  Employee Hotline (which can be used on an anonymous basis) or the Audit Committee.

• Ribbon established documentation and record maintenance mechanisms to ensure the retention of information relevant to the Company's Conflict Minerals Policy electronically.

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

- Ribbon reviewed the information reported on the Template by its suppliers and followed up with any additional questions. To the extent an in-scope supplier had follow-up questions, Ribbon responded with all requested information, including part numbers and manufacturing lots to identify how the supplies were used in the Ribbon Products.
- Untimely or incomplete responses as well as inconsistencies within the data reported by suppliers were addressed directly with respective suppliers to
  provide the required and/or revised responses. Ribbon utilizes a series of escalating responses to address the failure of a supplier to provide the
  information required by the Template.
- Ribbon's engineering, audit and legal departments manage the collection of information reported on the Template by its suppliers.
- Ribbon collected a list of smelters/processors that are in our supply chain for the Ribbon Products using the Template and reconciled this list to the list of smelter facilities designated by the Responsible Minerals Assurance Process ("RMAP"). Ribbon has provided that list in this report.
- · Ribbon, through SiliconExpert, followed up with suppliers that did not respond initially to our requests to complete the Template.

## OECD Guidance Step 3: Design and Implement a Strategy to Respond to Identified Risks

- · Ribbon adopted and used the Template to monitor and mitigate supply chain risk and took the steps described above.
- · Ribbon worked with certain suppliers to better educate them on the Conflict Minerals process.
- Members of the Conflict Minerals team periodically report to senior management as well as the Audit Committee on program developments and progress.

#### OECD Guidance Step 4: Carry Out Independent Third-Party Audit of Supply Chain Due Diligence

 Given that we do not generally have a direct relationship with the smelters and refineries that process the Conflict Minerals that are present in our Ribbon Products, we rely on the RMI to conduct audits of and validate the conflict-free status of smelters and refineries that source from Covered Countries. We have not relied on supplier representations concerning the conflict status of their smelters, but have required industry certification such as through the RMAP before concluding that a smelter or refinery is conflict free. We understand that this program is continuing to audit smelters and refineries to add to its Conflict-Free Smelter List.

## OECD Guidance Step 5: Report on Supply Chain Due Diligence

 As required by the Rule, we have filed a Form SD and a Conflict Minerals Report as an exhibit thereto for the 2018 calendar year reporting period. In accordance with OECD Guidance and the Rule, this report is available on our Investor Relations — Corporate Governance section of our website at http://investors.ribboncommunications.com/governance.cfm.



## **Due Diligence Results**

Ribbon contacted 100% of in-scope suppliers for the 2018 Ribbon Products and received some degree of a response from all of them. Approximately 92% of the suppliers provided completed responses to the survey. The large majority of the completed responses received provided conflict mineral data and a declaration at a "Company Level" (supplier/company declaration represents all the supplier's products) or "Divisional Level" (supplier/company declaration represents all the supplier's products) or "Divisional Level" (supplier/company declaration represents all the supplier's products from a division of the company). As a result, we are unable to determine whether any of the Conflict Minerals reported by the suppliers were contained in specific components or parts supplied to us with regard to Ribbon Products.

Further, while our suppliers for the Ribbon Products identified certain of the smelters and refineries that provided Conflict Minerals, the responses did not provide specific information regarding the smelters or refineries of the Conflict Minerals in the particular components used in the 2018 Ribbon Products. Due to this lack of information, Ribbon is unable to determine with specificity the facilities used to process those necessary Conflict Minerals or their country of origin for the 2018 Ribbon Products. Based on the responses we received from our suppliers, however, we believe the facilities used to produce the Conflict Minerals in the 2018 Ribbon Products may include the smelters and refineries listed in <u>Annex A</u>. In addition, based on the supplier responses, we believe the countries of origin of the Conflict Minerals in the 2018 Ribbon Products may include those listed in <u>Annex B</u>.

#### Risk Mitigation Steps to be Taken for 2019 Due Diligence

Ribbon intends to take the following steps, as appropriate, during the next compliance period to further improve our due diligence process and results and to further mitigate the risk that our necessary Conflict Minerals benefit armed groups in the DRC or adjoining countries:

- · Continue to focus on additional ways to improve quality and quantity of supplier response rates;
- · Continue to work with suppliers to better educate them on the process;
- · Continue to compare survey results to information collected via independent conflict free smelter validation programs such as the RMAP;
- · Seek to implement standard procedures for corrective action or phasing out of suppliers not found to be DRC conflict free;
- · Continue to adhere to the OECD Guidance; and
- Seek to work with suppliers who use appropriate due diligence methods and have continuous monitoring of both the direct and indirect supply chain to avoid procurement or use of Conflict Minerals.

#### Audit

An independent private sector audit was not required for reporting year 2018.

## **Important Information Regarding Forward-Looking Statements**

The information in this report contains "forward-looking statements" within the meaning of the U.S. Private Securities Litigation Reform Act of 1995, which are subject to a number of risks and uncertainties. All statements other than statements of historical facts contained in this report, including statements in the section "Risk Mitigation Steps to be Taken for 2019 Due Diligence," are forward-looking statements. Without limiting the foregoing, the words "anticipates", "believes", "could", "estimates", "expects", "expectations", "intends", "may", "plans", "seeks", "projects" and other similar language, whether in the negative or affirmative, are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

Forward-looking statements are based on our current expectations and assumptions regarding our business, the economy and other future conditions. Because forward-looking statements relate to the future, they are subject to inherent uncertainties, risks and changes in circumstances that are difficult to predict.

Ribbon therefore cautions readers against undue reliance on any of these forward-looking statements. Any forward-looking statement made by Ribbon in this report speaks only as of the date of this report. Ribbon undertakes no obligation to publicly update any forward-looking statement, whether as a result of new information, future developments or otherwise, except as may be required by law.

## **Documents Incorporated by Reference**

Unless otherwise stated herein, any documents, third party materials or references to websites (including Ribbon's) are not incorporated by reference in, or considered to be a part of, this report unless expressly incorporated by reference herein.

## Annex A

We present in this report a list of smelters or refineries provided by those suppliers who completed the smelter list on our Template, to the extent reasonably determinable, and that may have provided Conflict Minerals in any of the 2018 Ribbon Products. The table below includes only facilities, to the extent known, that have been validated by the RMI as facilities that are certified Conflict-Free or are listed on the Template as a "known smelters or refineries". Smelters and refineries that are denoted with an asterisk (\*) in the table below have received a "conflict free" designation from an independent third party audit program.

Metal	Smelter Name	Smelter Country
Gold (Au)	8853 S.p.A.*	ITALY
Gold (Au)	Abington Reldan Metals, LLC	UNITED STATES OF AMERICA
Gold (Au)	Acade Metals Co. Ltd.	CHINA
Gold (Au)	Advanced Chemical Company*	UNITED STATES OF AMERICA
Gold (Au)	African Gold Refinery	UGANDA
Gold (Au)	Aida Chemical Industries Co., Ltd.*	JAPAN
Gold (Au)	Aktyubinsk Copper Company TOO	KAZAKHSTAN
Gold (Au)	Al Etihad Gold Refinery DMCC*	UNITED ARAB EMIRATES
Gold (Au)	Allgemeine Gold-und Silberscheideanstalt A.G.*	GERMANY
Gold (Au)	Almalyk Mining and Metallurgical Complex (AMMC)*	UZBEKISTAN
Gold (Au)	AngloGold Ashanti Corrego do Sitio Mineracao*	BRAZIL
Gold (Au)	Argor-Heraeus S.A.*	SWITZERLAND
Gold (Au)	Asahi Pretec Corp.*	JAPAN
Gold (Au)	Asahi Refining Canada Ltd.*	CANADA
Gold (Au)	Asahi Refining USA Inc.*	UNITED STATES OF AMERICA
Gold (Au)	Asaka Riken Co., Ltd.*	JAPAN
Gold (Au)	Atasay Kuyumculuk Sanayi Ve Ticaret A.S.	TURKEY
Gold (Au)	AU Traders and Refiners*	SOUTH AFRICA
Gold (Au)	AURA-II	UNITED STATES OF AMERICA
Gold (Au)	Aurubis AG*	GERMANY
Gold (Au)	Baiyin Nonferrous Group Co., Ltd.	CHINA
Gold (Au)	Bangalore Refinery*	INDIA
Gold (Au)	Bangko Sentral ng Pilipinas (Central Bank of the Philippines)*	PHILIPPINES
Gold (Au)	Bauer Walser AG	GERMANY
Gold (Au)	Boliden AB*	SWEDEN
Gold (Au)	C. Hafner GmbH + Co. KG*	GERMANY
Gold (Au)	Caridad	MEXICO
Gold (Au)	CCR Refinery - Glencore Canada Corporation*	CANADA
Gold (Au)	Cendres + Metaux S.A.*	SWITZERLAND
Gold (Au)	Central Bank of the DPR of Korea	KOREA, REPUBLIC OF
Gold (Au)	Changzhou Chenical Researh Institute Co. Ltd.	CHINA
Gold (Au)	Chimet S.p.A.*	ITALY
Gold (Au)	China Gold International Resources Corp., Ltd.	CHINA
Gold (Au)	China National Gold Group Corporation	CHINA
Gold (Au)	Chugai Mining	JAPAN
Gold (Au)	Codelco	CHILE
Gold (Au)	Colt Refining	UNITED STATES OF AMERICA
Gold (Au)	Daejin Indus Co., Ltd.*	KOREA, REPUBLIC OF
Gold (Au)	DaeryongENC	KOREA, REPUBLIC OF
Gold (Au)	Daye Non-Ferrous Metals Mining Ltd.	CHINA
Gold (Au)	Degussa Sonne / Mond Goldhandel GmbH	GERMANY
Gold (Au)	Dijllah Gold Refinery FZC	UNITED ARAB EMIRATES
	DODUCO Contacts and Refining GmbH*	GERMANY
Gold (Au)		
Gold (Au)	Dongguan Standard Electronic Material Co., Ltd Dowa*	CHINA JAPAN
Gold (Au)		
Gold (Au)	DS PRETECH Co., Ltd.*	KOREA, REPUBLIC OF

Smelter Name	Smelter Country
DSC (Do Sung Corporation)*	KOREA, REPUBLIC OF
Eco-System Recycling Co., Ltd.*	JAPAN
Elemetal Refining, LLC	UNITED STATES OF AMERICA
Emirates Gold DMCC*	UNITED ARAB EMIRATES
Faggi Enrico S.p.A.	ITALY
Fidelity Printers and Refiners Ltd.	ZIMBABWE
Fujairah Gold FZC	UNITED ARAB EMIRATES
GCC Gujrat Gold Centre Pvt. Ltd.	INDIA
Geib Refining Corporation*	UNITED STATES OF AMERICA
Gejiu Non-Ferrous Metal Processing Co., Ltd.	CHINA
Global Advanced Metals	UNITED STATES OF AMERICA
Gold Refinery of Zijin Mining Group Co., Ltd.*	CHINA
	SOUTH AFRICA
	SOUTH AFRICA
	KOREA, REPUBLIC OF
Heimerle + Meule GmbH*	GERMANY
Henan Yuguang Gold & Lead Co., Ltd.	CHINA
	CHINA
	CHINA
	GERMANY
	CHINA
0 0	BRAZIL
	CHINA
	CHINA
	CHINA
	KOREA, REPUBLIC OF
	CHINA
International Precious Metal Refiners	UNITED ARAB EMIRATES
Ishifuku Metal Industry Co., Ltd.*	JAPAN
-	TURKEY
	ITALY
-	JAPAN
	CHINA
	CHINA
	CHINA
	RUSSIAN FEDERATION
JSC Uralelectromed*	RUSSIAN FEDERATION
JX Nippon Mining & Metals Co., Ltd.*	JAPAN
K.A.Rasmussen as	NORWAY
Kaloti Precious Metals	UNITED ARAB EMIRATES
Kazakhmys Smelting LLC	KAZAKHSTAN
Kazzinc*	KAZAKHSTAN
Kennecott Utah Copper LLC*	UNITED STATES OF AMERICA
KGHM Polska Miedz Spolka Akcyjna	POLAND
	JAPAN
	KOREA, REPUBLIC OF
Korea Zinc Co., Ltd.*	KOREA, REPUBLIC OF
Kosak Seiren	JAPAN
Kyoei Metal	JAPAN
	Eco-System Recycling Co., Ltd.* Elemetal Refining, LLC Emirates Gold DMCC* Faggi Enrico S.p.A. Fidelity Printers and Refiners Ltd. Fujairah Gold FZC GCC Gujrat Gold Centre Pvt. Ltd. Geib Refining Corporation* Gejiu Non-Ferrous Metal Processing Co., Ltd. Global Advanced Metals Gold Refinery of Zijin Mining Group Co., Ltd.* Great Wall Precious Metals Co., Ltd. of CBPM Guangdong Jinding Gold Limited Guoda Safina High-Tech Environmental Refinery Co., Ltd. Harmony Gold Mining Company Ltd. Harmony Gold Refinery HeeSumg Metal Ltd. Heimerle + Meule GmbH* Henan Yuguang Gold & Lead Co., Ltd. Heraeus Metals Hong Kong Ltd.* Heraeus Precious Metals Gold Mineral GuangDong Ltd. Co. House of Currency of Brazil (Casa da Moeda do Brazil) Hunan Chenzhou Mining Co., Ltd. Hunan Guiyang yinxing Nonferrous Smelting Co., Ltd. Hunan Guiyang yinxing Nonferrous Smelting Co., Ltd. Hunan Guiyang Gold & Lead Co., Ltd. Hunan Guiyang inxing Nonferrous Smelting Co., Ltd. Hunan Guiyang yinxing Nonferrous Smelting Co., Ltd. Hunan Frecious Metals Refiners Ishifuku Metal Industry Co., Ltd. Hunan Frecious Metal Refiners Ishifuku Metal Industry Co., Ltd.* Intermational Precious Metal Refiners Ishifuku Metal Industry Co., Ltd.* International Precious Metal Refiners Ishifuku Metal Industry Co., Ltd.* Jin Jinyin refining company limited Jinlong Copper Co., Ltd. JSC Ekaterinburg Non-Ferrous Metal Processing Plant JSC Uralelectromed* JX Nippon Mining & Metals Co., Ltd.* K.A.Rasmussen as Kaloti Precious Metals Kazakhmys Smelting LLC Kazzinc* Kennecott Utah Copper LLC* KGHM Polska Miedz Spolka Akcyjna Kojima Chemicals Co., Ltd.* Korea Atten Co., Ltd.* Korea Atten Co., Ltd.* Korea Keiren

Metal	Smelter Name	Smelter Country
Gold (Au)	Kyshtym Copper-Electrolytic Plant ZAO	RUSSIAN FEDERATION
Gold (Au)	L'azurde Company For Jewelry	SAUDI ARABIA
Gold (Au)	Lingbao Gold Co., Ltd.	CHINA
Gold (Au)	Lingbao Jinyuan Tonghui Refinery Co., Ltd.	CHINA
Gold (Au)	L'Orfebre S.A.*	ANDORRA
Gold (Au)	LS-NIKKO Copper Inc.*	KOREA, REPUBLIC OF
Gold (Au)	Luoyang Zijin Yinhui Gold Refinery Co., Ltd.	CHINA
Gold (Au)	Marsam Metals*	BRAZIL
Gold (Au)	Materion*	UNITED STATES OF AMERICA
Gold (Au)	Matsuda Sangyo Co., Ltd.*	JAPAN
Gold (Au)	Metahub Industries Sdn. Bhd.	MALAYSIA
Gold (Au)	Metalor Technologies (Hong Kong) Ltd.*	CHINA
Gold (Au)	Metalor Technologies (Singapore) Pte., Ltd.*	SINGAPORE
Gold (Au)	Metalor Technologies (Suzhou) Ltd.*	CHINA
Gold (Au)	Metalor Technologies S.A.*	SWITZERLAND
Gold (Au)	Metalor USA Refining Corporation*	UNITED STATES OF AMERICA
Gold (Au)	Metalurgica Met-Mex Penoles S.A. De C.V.*	MEXICO
Gold (Au)	Mitsubishi Materials Corporation*	JAPAN
Gold (Au)	Mitsui Mining and Smelting Co., Ltd.*	JAPAN
Gold (Au)	MMTC-PAMP India Pvt., Ltd.*	INDIA
Gold (Au)	Modeltech Sdn Bhd	MALAYSIA
Gold (Au)	Morris and Watson	NEW ZEALAND
Gold (Au)	Morris and Watson Gold Coast	AUSTRALIA
Gold (Au)	Moscow Special Alloys Processing Plant*	RUSSIAN FEDERATION
Gold (Au)	Nadir Metal Rafineri San. Ve Tic. A.S.*	TURKEY
	Navoi Mining and Metallurgical Combinat	UZBEKISTAN
Gold (Au)		
Gold (Au)	NH Recytech Company	KOREA, REPUBLIC OF
Gold (Au)	Nihon Material Co., Ltd.*	JAPAN
Gold (Au)	Nyrstar Metals	UNITED STATES OF AMERICA
Gold (Au)	Ogussa Osterreichische Gold- und Silber-Scheideanstalt GmbH*	AUSTRIA
Gold (Au)	Ohio Precious Metals LLC.	UNITED STATES OF AMERICA
Gold (Au)	Ohura Precious Metal Industry Co., Ltd.*	JAPAN
Gold (Au)	OJSC "The Gulidov Krasnoyarsk Non-Ferrous Metals Plant" (OJSC	RUSSIAN FEDERATION
	Krastsvetmet)*	
Gold (Au)	OJSC Kolyma Refinery	RUSSIAN FEDERATION
Gold (Au)	OJSC Novosibirsk Refinery*	RUSSIAN FEDERATION
Gold (Au)	PAMP S.A.*	SWITZERLAND
Gold (Au)	Pease & Curren	UNITED STATES OF AMERICA
Gold (Au)	Penglai Penggang Gold Industry Co., Ltd.	CHINA
Gold (Au)	Planta Recuperadora de Metales SpA*	CHILE
Gold (Au)	Prioksky Plant of Non-Ferrous Metals*	RUSSIAN FEDERATION
Gold (Au)	PT Aneka Tambang (Persero) Tbk*	INDONESIA
Gold (Au)	PX Precinox S.A.*	SWITZERLAND
Gold (Au)	QG Refining, LLC	UNITED STATES OF AMERICA
Gold (Au)	Rand Refinery (Pty) Ltd.*	SOUTH AFRICA
Gold (Au)	Refinery of Seemine Gold Co., Ltd.	CHINA
Gold (Au)	REMONDIS PMR B.V.*	NETHERLANDS
Gold (Au)	Republic Metals Corporation	UNITED STATES OF AMERICA
Gold (Au)	Royal Canadian Mint*	CANADA
Gold (Au)	SAAMP*	FRANCE
Gold (Au)	Sabin Metal Corp.	UNITED STATES OF AMERICA
Gold (Au)	Safimet S.p.A*	ITALY
Gold (Au)	SAFINA A.S.	CZECH REPUBLIC
Gold (Au)	Sai Refinery	INDIA
GOIULAUI		

Metal	Smelter Name	Smelter Country
Gold (Au)	Samwon Metals Corp.	KOREA, REPUBLIC OF
Gold (Au)	SAXONIA Edelmetalle GmbH*	GERMANY
Gold (Au)	Schone Edelmetaal B.V.	NETHERLANDS
Gold (Au)	SEMPSA Joyeria Plateria S.A.*	SPAIN
Gold (Au)	Shan Dong Huangjin	CHINA
Gold (Au)	Shan Tou Shi Yong Yuan Jin Shu Zai Sheng Co. Ltd.	CHINA
Gold (Au)	Shandong Gold Smelting Co., Ltd.	CHINA
Gold (Au)	Shandong Humon Smelting Co., Ltd.	CHINA
Gold (Au)	Shandong Tiancheng Biological Gold Industrial Co., Ltd.	CHINA
Gold (Au)	Shandong Yanggu Xiangguang Co. Ltd.	CHINA
Gold (Au)	Shandong Zhaojin Gold & Silver Refinery Co., Ltd.*	CHINA
Gold (Au)	Shandong Zhongkuang Group Co. Ltd	CHINA
Gold (Au)	Shenzhen Fujun Material Technology Co., Ltd.	CHINA
Gold (Au)	Shenzhen Heng Zhong Industry Co., Ltd.	CHINA
Gold (Au)	Shenzhen Zhonghenglong Real Industry Co., Ltd.	CHINA
Gold (Au)	Sichuan Tianze Precious Metals Co., Ltd.*	CHINA
Gold (Au)	Singway Technology Co., Ltd.*	TAIWAN, PROVINCE OF CHINA
Gold (Au)	Sino-Platinum Metals Co.,Ltd	CHINA
Gold (Au)	So Accurate Group, Inc.	UNITED STATES OF AMERICA
Gold (Au)	SOE Shyolkovsky Factory of Secondary Precious Metals*	RUSSIAN FEDERATION
Gold (Au)	Solar Applied Materials Technology Corp.*	TAIWAN, PROVINCE OF CHINA
Gold (Au)	State Research Institute Center for Physical Sciences and Technology	LITHUANIA
Gold (Au)	Sudan Gold Refinery	SUDAN
Gold (Au)	Sumitomo Metal Mining Co., Ltd.*	JAPAN
Gold (Au)	SungEel HiMetal Co., Ltd.	KOREA, REPUBLIC OF
	Super Dragon Technology Co., Ltd	TAIWAN, PROVINCE OF CHINA
Gold (Au)	Suzhou Xingrui Noble	CHINA
Gold (Au)	T.C.A S.p.A*	ITALY
Gold (Au)	Taicang City Nancang Metal Material Co.,Ltd	CHINA
Gold (Au)	· · ·	JAPAN
Gold (Au)	Tanaka Kikinzoku Kogyo K.K.*	INDIA
Gold (Au)	The Hutti Gold Company	CHINA
Gold (Au)	The Refinery of Shandong Gold Mining Co., Ltd.*	JAPAN
Gold (Au)	Tokuriki Honten Co., Ltd.*	
Gold (Au)	Ton Yi Industrial Corporation	TAIWAN, PROVINCE OF CHINA
Gold (Au)	Tongling Nonferrous Metals Group Co., Ltd.	CHINA
Gold (Au)	Tony Goetz NV	BELGIUM
Gold (Au)	TOO Tau-Ken-Altyn	KAZAKHSTAN
Gold (Au)	Torecom*	KOREA, REPUBLIC OF
Gold (Au)	Umicore Brasil Ltda.*	BRAZIL
Gold (Au)	Umicore Precious Metal Refining	UNITED STATES OF AMERICA
Gold (Au)	Umicore Precious Metals Thailand*	THAILAND
Gold (Au)	Umicore S.A. Business Unit Precious Metals Refining*	BELGIUM
Gold (Au)	United Precious Metal Refining, Inc.*	UNITED STATES OF AMERICA
Gold (Au)	Universal Precious Metals Refining Zambia	ZAMBIA
Gold (Au)	Valcambi S.A.*	SWITZERLAND
Gold (Au)	Western Australian Mint (T/a The Perth Mint)*	AUSTRALIA
Gold (Au)	WIELAND Edelmetalle GmbH*	GERMANY
Gold (Au)	Xstrata Canada Corporation	CANADA
Gold (Au)	Yamakin Co., Ltd.*	JAPAN
Gold (Au)	Yokohama Metal Co., Ltd.*	JAPAN
Gold (Au)	Yunnan Copper Industry Co., Ltd.	CHINA
Gold (Au)	Zhe Jiang Guang Yuan Noble Metal Smelting Factory	CHINA
Gold (Au)	Zhongkuang Gold Industry Co., Ltd.	CHINA

Metal	Smelter Name	Smelter Country
Gold (Au)	Zhongyuan Gold Smelter of Zhongjin Gold Corporation*	CHINA
Tantalum (Ta)	Advanced Metallurgical Group N.V. (AMG)	UNITED STATES OF AMERICA
Tantalum (Ta)	AMG (Advanced Metallurgical Group)	BRAZIL
Tantalum (Ta)	ANHUI HERRMAN IMPEX CO.	CHINA
Tantalum (Ta)	Asaka Riken Co., Ltd.*	JAPAN
Tantalum (Ta)	Avon Specialty Metals Ltd.	UNITED KINGDOM OF GREAT BRITAIN AND NORTHERN IRELAND
Tantalum (Ta)	Cabot	UNITED STATES OF AMERICA
Tantalum (Ta)	Changsha South Tantalum Niobium Co., Ltd.*	CHINA
Tantalum (Ta)	China Shenzhen Morgan Sputtering Targets & Technology Co., Ltd.	CHINA
Tantalum (Ta)	D Block Metals, LLC*	UNITED STATES OF AMERICA
Tantalum (Ta)	Duoluoshan	CHINA
Tantalum (Ta)	E.S.R. Electronics	UNITED STATES OF AMERICA
Tantalum (Ta)	Exotech Inc.*	UNITED STATES OF AMERICA
Tantalum (Ta)	F&X Electro-Materials Ltd.*	CHINA
Tantalum (Ta)	FIR Metals & Resource Ltd.*	CHINA
Tantalum (Ta)	Gannon & Scott	UNITED STATES OF AMERICA
Tantalum (Ta)	Global Advanced Metals	UNITED STATES OF AMERICA
Tantalum (Ta)	Global Advanced Metals Aizu*	JAPAN
Tantalum (Ta)	Global Advanced Metals Boyertown*	UNITED STATES OF AMERICA
Tantalum (Ta)	Guangdong Rising Rare Metals-EO Materials Ltd.*	CHINA
Tantalum (Ta)	Guangdong Zhiyuan New Material Co., Ltd.*	CHINA
Tantalum (Ta)	Guizhou Zhenhua Xinyun Technology Ltd., Kaili branch	CHINA
Tantalum (Ta)	H.C. Starck Co., Ltd.*	THAILAND
Tantalum (Ta)	H.C. Starck GmbH	GERMANY
Tantalum (Ta)	H.C. Starck Group	GERMANY
Tantalum (Ta)	H.C. Starck Hermsdorf GmbH*	GERMANY
Tantalum (Ta)	H.C. Starck Inc.*	UNITED STATES OF AMERICA
Tantalum (Ta)	H.C. Starck Ltd.*	JAPAN
Tantalum (Ta)	H.C. Starck Smelting GmbH & Co. KG*	GERMANY
Tantalum (Ta)	H.C. Starck Surface Technology and Ceramic Powders GmbH	GERMANY
Tantalum (Ta)	H.C. Starck Tantalum and Niobium GmbH*	GERMANY
Tantalum (Ta)	Hengyang King Xing Lifeng New Materials Co., Ltd.*	CHINA
Tantalum (Ta)	Hi-Temp Specialty Metals, Inc.	UNITED STATES OF AMERICA

Metal	Smelter Name	Smelter Country
Tantalum (Ta)	Jiangxi Dinghai Tantalum & Niobium Co., Ltd.*	CHINA
Tantalum (Ta)	Jiangxi Tuohong New Raw Material*	CHINA
Tantalum (Ta)	Jiujiang Janny New Material Co., Ltd.*	CHINA
Tantalum (Ta)	JiuJiang JinXin Nonferrous Metals Co., Ltd.*	CHINA
Tantalum (Ta)	Jiujiang Tanbre Co., Ltd.*	CHINA
Tantalum (Ta)	Jiujiang Zhongao Tantalum & Niobium Co., Ltd.*	CHINA
Tantalum (Ta)	KEMET Blue Metals*	MEXICO
Tantalum (Ta)	KEMET Blue Powder*	UNITED STATES OF AMERICA
Tantalum (Ta)	Kennametal Huntsville	UNITED STATES OF AMERICA
Tantalum (Ta)	King-Tan Tantalum Industry Ltd.	CHINA
Tantalum (Ta)	LSM Brasil S.A.*	BRAZIL
Tantalum (Ta)	Metallurgical Products India Pvt., Ltd.*	INDIA
Tantalum (Ta)	Mineracao Taboca S.A.*	BRAZIL
Tantalum (Ta)	Mitsui Mining and Smelting Co., Ltd.*	JAPAN
Tantalum (Ta)	Ningxia Orient Tantalum Industry Co., Ltd.*	CHINA
Tantalum (Ta)	NPM Silmet AS*	ESTONIA
Tantalum (Ta)	Plansee	AUSTRIA
Tantalum (Ta)	Plansee SE Liezen	AUSTRIA
Tantalum (Ta)	Plansee SE Reutte	AUSTRIA
Tantalum (Ta)	Power Resources Ltd.*	NORTH MACEDONIA, REPUBLIC OF
Tantalum (Ta)	PT Bangka Timah Utama Sejahtera	INDONESIA
Tantalum (Ta)	QuantumClean*	UNITED STATES OF AMERICA
Tantalum (Ta)	Resind Industria e Comercio Ltda.*	BRAZIL
Tantalum (Ta)	Shanghai Jiangxi Metals Co., Ltd.	CHINA
Tantalum (Ta)	Solikamsk Magnesium Works OAO*	RUSSIAN FEDERATION
Tantalum (Ta)	Taki Chemical Co., Ltd.*	JAPAN
Tantalum (Ta)	Tantalite Resources	SOUTH AFRICA
Tantalum (Ta)	Telex Metals*	UNITED STATES OF AMERICA
Tantalum (Ta)	Tranzact, Inc.	UNITED STATES OF AMERICA
Tantalum (Ta)	Ulba Metallurgical Plant JSC*	KAZAKHSTAN
Tantalum (Ta)	XinXing HaoRong Electronic Material Co., Ltd.*	CHINA
Tantalum (Ta)	Yanling Jincheng Tantalum & Niobium Co., Ltd.*	CHINA
Tantalum (Ta)	Yichun Jin Yang Rare Metal Co., Ltd.	CHINA

Metal	Smelter Name	Smelter Country
Cantalum (Ta)	Zhuzhou Cemented Carbide Group Co., Ltd.	CHINA
ïn (Sn)	5N Plus	CANADA
in (Sn)	Academy Precious Metals (China) Co. Ltd.	CHINA
ïn (Sn)	Alpha*	UNITED STATES OF AMERICA
ïn (Sn)	Alpha Metals (Taiwan) Inc.	TAIWAN, PROVINCE OF CHINA
ïn (Sn)	AMC (A Member of the AMC Group)	THAILAND
ïn (Sn)	An Thai Minerals Co., Ltd.	VIETNAM
ïn (Sn)	An Vinh Joint Stock Mineral Processing Company	VIETNAM
ïn (Sn)	Aoki Laboratories Ltd.	UNITED STATES OF AMERICA
ïn (Sn)	BML	INDONESIA
ïn (Sn)	Changzhou Galaxy Century Micro-Electronics Co., Ltd.	CHINA
ïn (Sn)	Chenzhou Yunxiang Mining and Metallurgy Co., Ltd.*	CHINA
ïn (Sn)	Chifeng Dajingzi Tin Industry Co., Ltd.*	CHINA
ïn (Sn)	China Guangxi Tin Metal Material	CHINA
ïn (Sn)	China Tin Group Co., Ltd.*	CHINA
ïn (Sn)	CNMC (Guangxi) PGMA Co., Ltd.	CHINA
ïn (Sn)	Complejo Metalurgico Vinto S.A.	BOLIVIA (PLURINATIONAL STATE OF)
ïn (Sn)	Cooperativa Metalurgica de Rondonia Ltda.	BRAZIL
in (Sn)	CV Ayi Jaya*	INDONESIA
ïn (Sn)	CV Dua Sekawan*	INDONESIA
in (Sn)	CV Duta Putra Bangka	INDONESIA
ïn (Sn)	CV Gita Pesona*	INDONESIA
in (Sn)	CV Makmur Jaya	INDONESIA
ïn (Sn)	CV Nurjanah	INDONESIA
ïn (Sn)	CV Prima Timah Utama	INDONESIA
ïn (Sn)	CV United Smelting*	INDONESIA
ïn (Sn)	CV Venus Inti Perkasa*	INDONESIA
ïn (Sn)	Dowa*	JAPAN
in (Sn)	Electro-Mechanical Facility of the Cao Bang Minerals & Metallurgy Joint	VIETNAM
	Stock Company	
ïn (Sn)	Elmet S.A. de C.V.	MEXICO
ïn (Sn)	EM Vinto*	BOLIVIA (PLURINATIONAL STATE OF)
în (Sn)	Estanho de Rondonia S.A.	BRAZIL
ïn (Sn)	Faggi Enrico S.p.A.	ITALY
ïn (Sn)	Feinhutte Halsbrucke GmbH	GERMANY
in (Sn)	Fenix Metals*	POLAND
in (Sn)	Ganzhou Liansheng	CHINA
	Geiju Non-Ferrous Metal Processing Co. Ltd.	CHINA
in (Sn)	Gejiu Fengming Metallurgy Chemical Plant*	CHINA
in (Sn)	Gejiu Jinye Mineral Company*	CHINA
in (Sn)	Gejiu Kai Meng Industry and Trade LLC*	CHINA
in (Sn)		
in (Sn)	Gejiu Non-Ferrous Metal Processing Co., Ltd.*	CHINA
in (Sn)	Gejiu Yunxi Group Corp.	CHINA
in (Sn)	Gejiu Yunxin Nonferrous Electrolysis Co., Ltd.*	CHINA
ïn (Sn)	Gejiu Zili Mining And Metallurgy Co., Ltd.*	CHINA
in (Sn)	Gold Bell Group	CHINA
in (Sn)	Guang Xi Hua Xi Corp.	CHINA
in (Sn)	Guangdong Hanhe Non-Ferrous Metal Co., Ltd.*	CHINA
ïn (Sn)	Guangxi Huaxi Group	CHINA
ïn (Sn)	Guanyang Guida Nonferrous Metal Smelting Plant*	CHINA
ïn (Sn)	Hayes Metals	NEW ZEALAND
ïn (Sn)	Hongqiao Metals (Kunshan) Co., Ltd.	CHINA
ïn (Sn)	HuiChang Hill Tin Industry Co., Ltd.*	CHINA
Tin (Sn)	Huichang Jinshunda Tin Co., Ltd.*	CHINA
Fin (Sn)	Hunan Xianghualing tin	CHINA

Metal	Smelter Name	Smelter Country
Tin (Sn)	Jean Goldschmidt International	BELGIUM
Tin (Sn)	Jiangxi Huayu Metal Co., Ltd.	CHINA
Tin (Sn)	Jiangxi Ketai Advanced Material Co., Ltd.	CHINA
Tin (Sn)	Jiangxi New Nanshan Technology Ltd.*	CHINA
Tin (Sn)	Jiangxi Tungsten Industry Group Co Ltd	CHINA
Tin (Sn)	JU TAI INDUSTRIAL CO.,LTD.	CHINA
Tin (Sn)	JX Nippon Mining & Metals Co., Ltd.	JAPAN
Tin (Sn)	Korea Metal Co., Ltd.	KOREA, REPUBLIC OF
Tin (Sn)	Leeku industrial Co., Ltd.	KOREA, REPUBLIC OF
Tin (Sn)	Linqu Xianggui Smelter Co., Ltd.	CHINA
Tin (Sn)	Linwu Xianggui Ore Smelting Co., Ltd.	CHINA
Tin (Sn)	Linwu Xianqqui Ore Smelting Co. Ltd.	GERMANY
Tin (Sn)	Liuzhou China Tin	CHINA
Tin (Sn)	Magnu's Minerais Metais e Ligas Ltda.*	BRAZIL
Tin (Sn)	Malaysia Smelting Corporation (MSC)*	MALAYSIA
Tin (Sn)	Matsuo Electric	JAPAN
Tin (Sn)	Melt Metais e Ligas S.A.*	BRAZIL
Tin (Sn)	Metallic Resources, Inc.*	UNITED STATES OF AMERICA
Tin (Sn)	Metallo Belgium N.V.*	BELGIUM
Tin (Sn)	Metallo Spain S.L.U.*	SPAIN
Tin (Sn)	Metallum Group Holding NV	BELGIUM
Tin (Sn)	Mineracao Taboca S.A.*	BRAZIL
Tin (Sn)	Ming Li Jia smelt Metal Factory	CHINA
Tin (Sn)	Minmetals Ganzhou Tin Co. Ltd.	CHINA
Tin (Sn)	Minsur*	PERU
Tin (Sn)	Mitsubishi Materials Corporation*	JAPAN
Tin (Sn)	Modeltech Sdn Bhd*	MALAYSIA
Tin (Sn)	Nathan Trotter & Co.	UNITED STATES OF AMERICA
Tin (Sn)	Nghe Tinh Non-Ferrous Metals Joint Stock Company	VIETNAM
Tin (Sn)	Northern Smelter	AUSTRALIA
Tin (Sn)	Novosibirsk Processing Plant Ltd.	RUSSIAN FEDERATION
Tin (Sn)	O.M. Manufacturing (Thailand) Co., Ltd.*	THAILAND
Tin (Sn)	O.M. Manufacturing Philippines, Inc.*	PHILIPPINES
Tin (Sn)	Operaciones Metalurgicas S.A.*	BOLIVIA (PLURINATIONAL STATE OF)
Tin (Sn)	Phoenix Metal Ltd.	RWANDA
Tin (Sn)	Pohang Iron and Steel Co. Ltd.	KOREA, REPUBLIC OF
Tin (Sn)	Pongpipat Company Limited	MYANMAR
Tin (Sn)	PT Alam Lestari Kencana	INDONESIA
Tin (Sn)	PT Aries Kencana Sejahtera*	INDONESIA
Tin (Sn)	PT Artha Cipta Langgeng*	INDONESIA
Tin (Sn)	PT ATD Makmur Mandiri Jaya*	INDONESIA
Tin (Sn)	PT Babel Inti Perkasa*	INDONESIA
Tin (Sn)	PT Babel Surya Alam Lestari*	INDONESIA
Tin (Sn)	PT Bangka Kudai Tin	INDONESIA
Tin (Sn)	PT Bangka Prima Tin*	INDONESIA
Tin (Sn)	PT Bangka Putra Karya	INDONESIA
Tin (Sn)	PT Bangka Serumpun*	INDONESIA
Tin (Sn)	PT Bangka Timah Utama Sejahtera	INDONESIA
Tin (Sn)	PT Bangka Tin Industry*	INDONESIA
Tin (Sn)	PT Belitung Industri Sejahtera*	INDONESIA
Tin (Sn)	PT BilliTin Makmur Lestari	INDONESIA
Tin (Sn)	PT Bukit Timah*	INDONESIA
Tin (Sn)	PT Cipta Persada Mulia	INDONESIA
Tin (Sn)	PT DS Jaya Abadi*	INDONESIA
Tin (Sn)	PT Eunindo Usaha Mandiri	INDONESIA
Tin (Sn)	PT Fang Di MulTindo	INDONESIA
	-	

Metal	Smelter Name	Smelter Country
Tin (Sn)	PT HP Metals Indonesia	INDONESIA
Tin (Sn)	PT Inti Stania Prima*	INDONESIA
Tin (Sn)	PT Justindo	INDONESIA
Tin (Sn)	PT Karimun Mining*	INDONESIA
Tin (Sn)	PT Kijang Jaya Mandiri*	INDONESIA
Tin (Sn)	PT Koba Tin	INDONESIA
Tin (Sn)	PT Lautan Harmonis Sejahtera*	INDONESIA
Tin (Sn)	PT Menara Cipta Mulia*	INDONESIA
Tin (Sn)	PT Mitra Stania Prima*	INDONESIA
Tin (Sn)	PT O.M. Indonesia	INDONESIA
Tin (Sn)	PT Panca Mega Persada*	INDONESIA
Tin (Sn)	PT Premium Tin Indonesia*	INDONESIA
Tin (Sn)	PT Prima Timah Utama*	INDONESIA
Tin (Sn)	PT Rajehan Ariq*	INDONESIA
Tin (Sn)	PT Refined Bangka Tin*	INDONESIA
Tin (Sn)	PT Sariwiguna Binasentosa*	INDONESIA
Tin (Sn)	PT Seirama Tin Investment	INDONESIA
Tin (Sn)	PT Stanindo Inti Perkasa*	INDONESIA
Tin (Sn)	PT Sukses Inti Makmur*	INDONESIA
Tin (Sn)	PT Sumber Jaya Indah*	INDONESIA
Tin (Sn)	PT Supra Sukses Trinusa	INDONESIA
Tin (Sn)	PT Timah Nusantara	INDONESIA
Tin (Sn)	PT Timah Tbk Kundur*	INDONESIA
Tin (Sn)	PT Timah Tbk Mentok*	INDONESIA
Tin (Sn)	PT Tinindo Inter Nusa*	INDONESIA
Tin (Sn)	PT Tirus Putra Mandiri*	INDONESIA
Tin (Sn)	PT Tommy Utama*	INDONESIA
Tin (Sn)	PT Wahana Perkit Jaya	INDONESIA
Tin (Sn)	PT Yinchendo Mining Industry	INDONESIA
Tin (Sn)	Resind Industria e Comercio Ltda.*	BRAZIL
Tin (Sn)	Rui Da Hung*	TAIWAN, PROVINCE OF CHINA
Tin (Sn)	Shangrao Xuri Smelting Factory	CHINA
Tin (Sn)	Sizer Metals PTE	SINGAPORE
Tin (Sn)	SNPLUS	CANADA
Tin (Sn)	Soft Metais Ltda.*	BRAZIL
Tin (Sn)	Sun Surface Technology Co. Ltd.	CHINA
Tin (Sn)	Super Ligas	BRAZIL
Tin (Sn)	Thaisarco*	THAILAND
Tin (Sn)	Tianshui Ling Bo Technology Co., Ltd.	CHINA
Tin (Sn)	Tin Plating Gejiu	CHINA
Tin (Sn)	Tin Technology & Refining*	UNITED STATES OF AMERICA
Tin (Sn)	Tuyen Quang Non-Ferrous Metals Joint Stock Company	VIETNAM
Tin (Sn)	VQB Mineral and Trading Group JSC	VIETNAM
Tin (Sn)	White Solder Metalurgia e Mineracao Ltda.*	BRAZIL
Tin (Sn)	Wu Xi Shi Yi Zheng Ji Xie She Bei Company	CHINA
Tin (Sn)	Wuxi Lantronic Electronic Co. Ltd.	CHINA
Tin (Sn)	Xianghualing Tin Industry Co. Ltd.	CHINA
Tin (Sn)	Xianghualing Tin Minerals	CHINA
Tin (Sn)	Yifeng Tin	CHINA
Tin (Sn)	Yunnan Chengfeng Non-ferrous Metals Co., Ltd.*	CHINA
Tin (Sn)	Yunnan Chengo Electric Smelting Plant	CHINA
Tin (Sn)	Yunnan Gejiu Jinye Minerals	CHINA
Tin (Sn)	Yunnan Tin Company Limited*	CHINA
Tin (Sn)	Yuntinic Chemical GmbH	GERMANY
Tin (Sn)	Zhuhai Quanjia	CHINA

Metal	Smelter Name	Smelter Country
Tungsten (W)	A.L.M.T. Corp.*	JAPAN
Tungsten (W)	ACL Metais Eireli*	BRAZIL
Tungsten (W)	Air Products	UNITED STATES OF AMERICA
Tungsten (W)	Asia Tungsten Products Vietnam Ltd.*	VIETNAM
Tungsten (W)	Baiyin Nonferrous Metals Corporation (BNMC)	CHINA
Tungsten (W)	Buffalo Tungsten	UNITED STATES OF AMERICA
Tungsten (W)	Chaozhou Xianglu Tungsten Industry Co Ltd	CHINA
Tungsten (W)	Chenzhou Diamond Tungsten Products Co., Ltd.*	CHINA
Tungsten (W)	China Minmetals Nonferrous Metals Co. Ltd.	CHINA
Tungsten (W)	China Minmetals Non-ferrous Metals Holding Co., Ltd.	CHINA
Tungsten (W)	Chongyi Zhangyuan Tungsten Co., Ltd.*	CHINA
Tungsten (W)	Dayu Jincheng Tungsten Industry Co., Ltd.	CHINA
Tungsten (W)	Dayu Weiliang Tungsten Co., Ltd.	CHINA
Tungsten (W)	Exotech Inc.	UNITED STATES OF AMERICA
Tungsten (W)	Fujian Jinxin Tungsten Co., Ltd.*	CHINA
Tungsten (W)	Ganxian Shirui New Material Co., Ltd.	CHINA
Tungsten (W)	Ganzhou BESEEM Ferrotungsten Co. Ltd.	CHINA
Tungsten (W)	Ganzhou Grand Sea W & Mo Group Co., Ltd.	CHINA
Tungsten (W)	Ganzhou Haichuang Tungsten Co., Ltd.*	CHINA
Tungsten (W)	Ganzhou Huaxing Tungsten Products Co., Ltd.*	CHINA
Tungsten (W)	Ganzhou Jiangwu Ferrotungsten Co., Ltd.*	CHINA
Tungsten (W)	Ganzhou Non-ferrous Metals Smelting Co., Ltd.	CHINA
Tungsten (W)	Ganzhou Seadragon W & Mo Co., Ltd.*	CHINA
Tungsten (W)	Ganzhou Yatai Tungsten Co., Ltd.	CHINA
Tungsten (W)	Global Tungsten & Powders Corp.*	UNITED STATES OF AMERICA
Tungsten (W)	Guangdong Xianglu Tungsten Co., Ltd.*	CHINA
Tungsten (W)	H.C. Starck Group	GERMANY
Tungsten (W)	H.C. Starck Smelting GmbH & Co. KG*	GERMANY
Tungsten (W)	H.C. Starck Tungsten GmbH*	GERMANY
Tungsten (W)	Hunan Chenzhou Mining Co., Ltd.*	CHINA
Tungsten (W)	Hunan Chuangda Metallurgy Group Co. Ltd.	CHINA
Tungsten (W)	Hunan Chuangda Vanadium Tungsten Co., Ltd. Wuji*	CHINA
Tungsten (W)	Hunan Chuangda Vanadium Tungsten Co., Ltd. Yanglin	CHINA

Metal	Smelter Name	Smelter Country
Tungsten (W)	Hunan Chunchang Nonferrous Metals Co., Ltd.*	CHINA
Tungsten (W)	Hunan Litian Tungsten Industry Co., Ltd.	CHINA
Tungsten (W)	Hydrometallurg, JSC*	RUSSIAN FEDERATION
Tungsten (W)	Japan New Metals Co., Ltd.*	JAPAN
Tungsten (W)	Jiangwu H.C. Starck Tungsten Products Co., Ltd.*	CHINA
Tungsten (W)	Jiangxi Dayu Longxintai Tungsten Co., Ltd.	CHINA
Tungsten (W)	Jiangxi Gan Bei Tungsten Co., Ltd.*	CHINA
Tungsten (W)	Jiangxi Minmetals Gao'an Non-ferrous Metals Co., Ltd.	CHINA
Tungsten (W)	Jiangxi Rare Earth & Rare Metals Tungsten Group Corp.	CHINA
Tungsten (W)	Jiangxi Richsea New Materials Co., Ltd.	CHINA
Tungsten (W)	Jiangxi Tonggu Non-ferrous Metallurgical & Chemical Co., Ltd.*	CHINA
Tungsten (W)	Jiangxi Tungsten Industry Group Co Ltd.	CHINA
Tungsten (W)	Jiangxi Xinsheng Tungsten Industry Co., Ltd.*	CHINA
Tungsten (W)	Jiangxi Xiushui Xianggan Nonferrous Metals Co., Ltd.	CHINA
Tungsten (W)	Jiangxi Yaosheng Tungsten Co., Ltd.*	CHINA
Tungsten (W)	Kennametal Fallon*	UNITED STATES OF AMERICA
Tungsten (W)	Kennametal Huntsville*	UNITED STATES OF AMERICA
Tungsten (W)	Luoyang Mudu Tungsten & Molybdenum Technology Co., Ltd	CHINA
Tungsten (W)	Malipo Haiyu Tungsten Co., Ltd.*	CHINA
Tungsten (W)	Masan Tungsten Chemical LLC (MTC)*	VIETNAM
Tungsten (W)	Moliren Ltd.*	RUSSIAN FEDERATION
Tungsten (W)	Niagara Refining LLC*	UNITED STATES OF AMERICA
Tungsten (W)	Philippine Chuangxin Industrial Co., Inc.*	PHILIPPINES
Tungsten (W)	Pobedit, JSC	RUSSIAN FEDERATION
Tungsten (W)	Sanher Tungsten Vietnam Co., Ltd.	VIETNAM
Tungsten (W)	South-East Nonferrous Metal Company Limited of Hengyang City*	CHINA
Tungsten (W)	Tejing (Vietnam) Tungsten Co., Ltd.*	VIETNAM
Tungsten (W)	Unecha Refractory metals plant*	RUSSIAN FEDERATION
Tungsten (W)	Vietnam Youngsun Tungsten Industry Co., Ltd.	VIETNAM
Tungsten (W)	Wolfram Bergbau und Hutten AG*	AUSTRIA
Tungsten (W)	WOLFRAM Company CJSC	RUSSIAN FEDERATION
Tungsten (W)	Woltech Korea Co., Ltd.*	KOREA, REPUBLIC OF
Tungsten (W)	Xiamen Tungsten (H.C.) Co., Ltd.*	CHINA

Metal	Smelter Name	Smelter Country
Tungsten (W)	Xiamen Tungsten Co., Ltd.*	CHINA
Tungsten (W)	Xinfeng Huarui Tungsten & Molybdenum New Material Co., Ltd.	CHINA
Tungsten (W)	Xinhai Rendan Shaoguan Tungsten Co., Ltd.	CHINA
Tungsten (W)	Zhuzhou Cemented Carbide Group Co., Ltd.	CHINA

# <u>Annex B</u>

Countries of origin of the Conflict Minerals in the 2018 Ribbon Products are believed to include:

Countries of Origin
Afghanistan
Albania
Angola
Argentina
Armenia
Australia
Austria
Azerbaijan
Belgium
Bermuda
Bolivia
Brazil
Bulgaria
Burkina Faso
Burundi
Cambodia
Canada
Chile
China
Colombia
Czech Republic
Democratic Republic of Congo
Djibouti
Ecuador
Estonia Ethiopia
Ethiopia European Union
-
Finland
France
Georgia
Germany
Ghana
Guinea
Guyana
Hong Kong
Hungary
India
Indonesia
Ireland
Solomon Islands
Israel
Italy
Japan
Katanga
Kazakhstan
Kenya
Korea, Republic of
Kyrgyzstan
Laos
Liberia
Luxembourg
Madagascar
Malaysia
Mali
Mauritania
Mexico

Countries of Origin
Mongolia
Morocco
Mozambique
Myanmar
Namibia
Netherlands
New Zealand
Niger
Nigeria
Papua New Guinea
Peru
Philippines
Poland
Portugal
Russian Federation
Rwanda
Saudi Arabia
Sierra Leone
Singapore
Slovakia
South Africa
Spain
South Sudan
Suriname
Sweden
Switzerland
Taiwan
Tajikistan
Tanzania
Thailand
Turkey
Uganda
United States of America
Uzbekistan
Vietnam
Zambia
Zimbabwe