

Annex 1. Notes about tantalum statistics

Disclaimer – ITSCI focuses on collection and evaluation of our own data. While we make general comparisons to other available figures for supporting information, we are not tantalum market analysts.

Numerous claims have been made by various commentators alleging significant changes in the export of tantalum concentrate from Rwanda due to vast uncontrolled smuggling from DRC. These claims appear to be based on assumptions related to annual trade data available from public databases.

ITSCI is happy to provide information and clarify some factual aspects important to understanding the usefulness and limitations of such data.

Addressing the 50% increase question

Recent [media](#) articles have carried quotes stating that “Figures from the US Geological Survey show Rwanda's tantalum concentrate exports rose by 50% between 2022 and 2023”.

The USGS annual publications make rounded estimates of mine production figures and do not generally include verified mine production nor export figures. As a result, USGS estimated figures for one year can change and be improved. There are two estimates published for mine production of any given year. They are quoted as **tonnes of tantalum** whereas ITSCI and other trade data, are usually quoted as **tonnes of tantalum concentrates**.

By referring to **Rwanda tantalum mine production** figures in USGS online documents (and copied below) it is seen that;

- The initial **January 2024 USGS Publication** estimate for 2023 Rwanda production of 520t of tantalum was a 50% increase on their figure for 2022 (347t).
- The revised **January 2025 USGS Publication** reduced the estimate for 2023 Rwanda production from 520t to 350t of tantalum, effectively the same as given for 2022 .

While the USGS made an initial estimate of an expected 50% increase from 2022 to 2023, the revised January 2025 estimate has indicated no material increase (347t in 2022 to 350t in 2023). Claims that USGS figures show a 50% increase between 2022 and 2023 are based on out-dated estimates.

In using USGS publications it is important to understand that figures are estimated based on assumptions about tantalum grade of exports and tantalum content. USGS may use and adjust official Rwandan concentrate export figures to estimate mine production, but this is not stated and could be clarified.

The UN Group of Experts [Report](#) of June 2024 also claimed that there was an unprecedented 50% increase in tantalum concentrate export from Rwanda between 2022 and 2023. ITSCI requested further information from the UN and MONUSCO on the basis of that claim but has not yet received any response. We must assume the UN GOE claim is also based on now revised USGS figures.

ITSCI previously [confirmed](#) that the 50% figure did not reflect and was significantly higher than the level of tantalum concentrate exports recorded by ITSCI noting that we cannot comment on non-ITSCI minerals exported from, or smelted in Rwanda by non-ITSCI actors.

Sharing ITSCI Data on Rwanda exports

In light of the current questions on Rwandan exports ITSCI is happy to share our own figures.

Note that ITSCI tracks minerals both domestically within production countries, and internationally until shipments are delivered to the smelter. In addition to mineral traceability within mining countries we also hold multiple documents on the international transport route of exports and the contents of each shipment. Many of these documents are produced by independent assay companies or other bodies. This allows us to closely analyse exports and have confidence in our data.

We make the following observations on Rwandan tantalum concentrate exports;

- There has been ongoing documented development and investment in the Rwandan mineral sector over many years, including efforts at tin and tantalum smelting. A number of government donor organisations have contributed to this development.
- While ITSCI export figures for 2024 are provisional, we note a variation of 12% compared to 2023, which equates to an increase of 239 tonnes of tantalum concentrates¹ and a total of approximately 2,297 tonnes. This is the lowest increase in recent years. It is not unusual for mineral exports from any area to increase or decrease by 20-30% in a year, and sometimes much more, due to multiple factors (pricing, licence regulations, or other factors).
- ITSCI operations were suspended in the key tantalum areas of Masisi, North Kivu for almost the entirety of 2024. We have not observed a significant jump in Rwandan exports from 2023 to 2024 but a continuation of the long-term trend.
- Statements from MONUSCO and the UN Group of Experts in their December 2024 claim that 120 tonnes per month of tantalum is smuggled by M23 from Masisi to Rwanda. **That would equate to 1,440 tonnes per year. As above, this is drastically higher than the increase observed in ITSCI tantalum concentrate export figures in Rwanda in 2024.**
- We emphasise that not all 3T operators – whether mine company, exporters or smelters – in Rwanda participate in ITSCI and we do not report on non-ITSCI tonnages.

Notwithstanding all comments above, ITSCI remains highly concerned over the high risk of infiltration of minerals associated with M23. We strive to implement measures that enable us to identify and address that risk including through continual dialogue with our partners. We welcome suggestions and support to enable further improvements in our measures.

Notes on trade data in general

For completeness we also provide some general information on trade databases.

- There is no individual trade code only for tantalum ores and concentrates; trade in tantalum ores and concentrates are normally only reported aggregated with niobium, vanadium and sometimes zirconium ores and concentrates. This increases difficulty in use of trade data for tantalum.
- Trade data of all commodities is known to be liable to mis-categorisation errors on paperwork used to compile the databases. For example, mis-categorisation may occur for ores vs. metal, or metal vs. waste, or one material vs. a different material. Errors can also be made in country names such as Congo (Brazzaville) or Democratic Republic of Congo.

¹ As explained, this figure of 225t corresponds to tantalum concentrate which will be several times higher than, and cannot be compared to, the USGS estimates in tonnes of tantalum.

- Trade data is reported for both exports and imports; **exports** by country A to any other countries X, Y, Z, and **imports** into countries X, Y, Z from country A. The two sets of data invariably do not match and benefit from refining by expert analysis.
- A commonly referenced trade database is UN Comtrade. Differences can be observed in government vs. Comtrade figures, as well as mismatches between Comtrade export and import data.
- Note that some country governments, for example in the EU, do not report trade data to protect confidentiality of their business sector.

Source: US Geological Survey, Mineral Commodities Summaries, January 2024: Tantalum.

<https://pubs.usgs.gov/periodicals/mcs2024/mcs2024-tantalum.pdf>

World Mine Production and Reserves: Reserves for Australia and China were revised based on Government reports.

	Mine production		Reserves⁹
	<u>2022</u>	<u>2023^e</u>	
United States	—	—	—
Australia	46	43	¹⁰ 110,000
Brazil	^e 370	360	40,000
Burundi	^e 59	36	NA
China	^e 78	79	240,000
Congo (Kinshasa)	^e 890	980	NA
Nigeria	^e 110	110	NA
Russia	^e 31	20	NA
Rwanda	^e 347	520	NA
Other	^e 120	260	NA
World total (rounded)	1,990	2,400	NA

Source: US Geological Survey, Mineral Commodities Summaries, January 2025: Tantalum.

<https://pubs.usgs.gov/periodicals/mcs2025/mcs2025-tantalum.pdf>

World Mine Production and Reserves:

	Mine production		Reserves⁹
	<u>2023</u>	<u>2024^e</u>	
United States	—	—	—
Australia	44	52	¹⁰ 110,000
Bolivia	1	2	NA
Brazil	138	210	40,000
Burundi	^e 1	2	NA
China	^e 78	76	240,000
Congo (Kinshasa)	^e 920	880	NA
Ethiopia	^e 40	40	NA
Mozambique	51	55	NA
Nigeria	^e 390	390	NA
Russia	^e 23	29	NA
Rwanda	^e 350	350	NA
World total (rounded)	2,040	2,100	NA