SERIES
CAPACITY BUILDING LEARNING MODULES

Online public databases for Arms Trade Research

IPIS

PREFACE

In recent years IPIS has published several publications in collaboration with local African organisations. Such cooperation has allowed us to share know-how from over 30 years of research experience while benefitting from our partners' networks and understanding of local issues.

Although IPIS' research assignments are often limited to a few months, we are increasingly trying to improve our working relationship with organisations and individual researchers in Africa. Through intense collaboration on specific reports, IPIS helps building the capacity of local researchers because the collaboration becomes an exercise. Furthermore, when a report is published, we help local researchers to gain access to stakeholders and interested publics in Europe and the US.

However, to ensure that our relatively short collaborations with local partners have a lasting effect on their know-how and skills, we have developed a series of learning modules. IPIS teaches the most relevant of these modules during 1-3 days workshop organised at the outset of a new research project. The subsequent execution of joint research guarantees that the partners can immediately practice the skills they have acquired through the workshop during a relevant exercise.

This particular module familiarises arms trade researchers with relevant online databases that are indispensable for investigating arms trafficking. The module aims to help local partners to use the Internet as a source of valuable information, to substantiate their reports with factual data. There is a wide range of public databases on the Internet that contain valuable information, and which can be accessed for free. This module does not aim to offer an exhaustive list of all these publically accessible databases. It rather wishes to introduce our local partners to some tools that we use frequently and consider very useful.

In the beginning these databases are not always that easy to use. Therefore this module explains step by step how the required information can be obtained from each database. To illustrate its usefulness, we will use one or more examples, for each tool or database, that we have used ourselves in the past.

Despite the value of these tools, all of them have their limitations, which we will also describe. It is very important to understand these limitations, as a researcher should always keep these in mind when using the data obtained from these databases.

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United Nations Commodity Trade Statistics Database

The United Nations Commodity Trade Statistics Database, or UN Comtrade, is a comprehensive database of international trade statistics. It contains import and export statistics reported by almost 200 countries.[1] The data is publicly accessible at the weblink http://comtrade.un.org/.

The UN Comtrade database is a very useful tool to analyse trade between several countries regarding a large number of commodities, including those commodities that IPIS researches: arms and natural resources. Consequently, IPIS uses the database frequently during its research, and recommends other researchers to do this as well, including local researchers in the south. Therefore we deem it important to give a short introduction on UN Comtrade in this document and explain the reader how to get started with this tool.

Hereafter we will explain step-by-step how trade figures can be obtained from the UN Comtrade database. Throughout the explanation we will use an example to help the reader to better understand how the database works. The example that we will use is the Rwandan export of tin ores to the world market between 2001 and 2005.

The homepage of the UN Comtrade (http://comtrade.un.org/) is displayed below (illustration 1). In order to enter the database, click 'database'.

(SCREENSHOT 1)
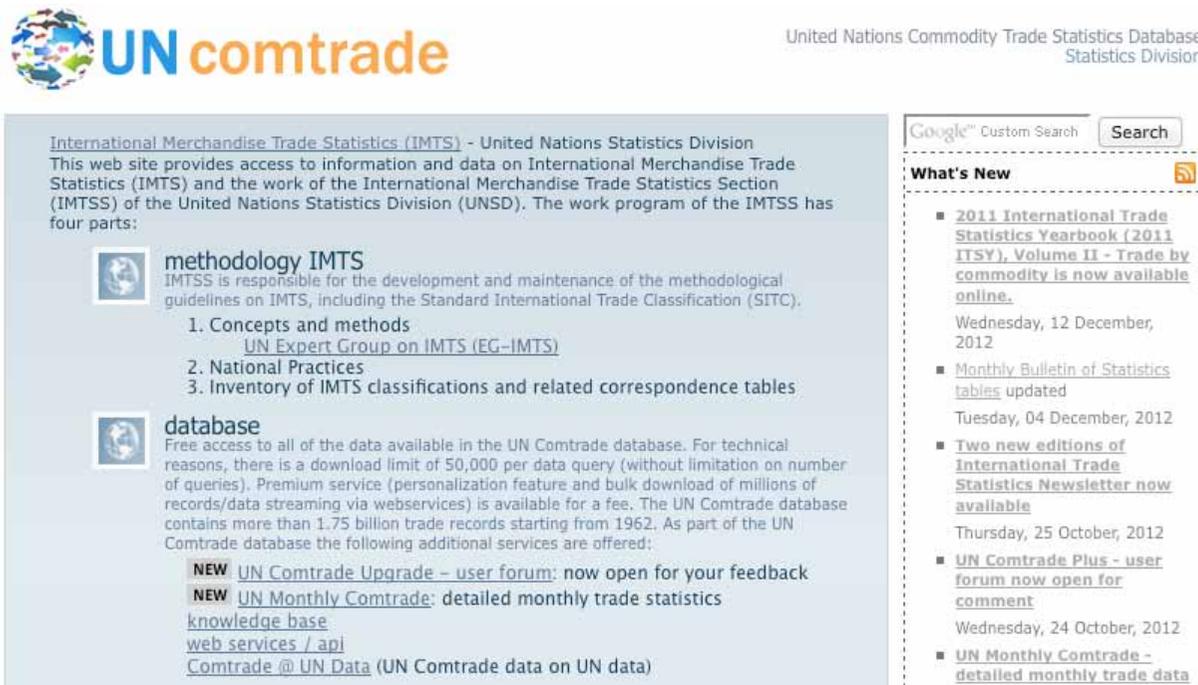
1 UN Comtrade website, accessed on 03 January 2013.

Subsequently, it is necessary to fill out a query form to obtain the required information. The form can be accessed as follows: Go to 'Data Query' at the top of the page and click 'Express Selection'.

(SCREENSHOT 2)

The next page you will see is shown below (illustration 3).

(SCREENSHOT 3)

From the top to the bottom of the webpage, the visitor first needs to select the type of commodity classification that he wants to use: the 'Harmonized Commodity Description and Coding System' (Harmonised System, or HS), the 'Standard International Trade Classification' (SITC), or the 'Broad Economic Categories' (BEC). The latter categorises commodities according to their main end-use, but has only a small number of subcategories. HS is an international standardised system for the classification of products. Opposed to BEC, there are a wide range of subcategories as the product codes of HS are highly disaggregated. This permits very detailed analyses. Since its inception in 1988, however, several changes in its classification have been implemented through three revisions, in 1996, 2002 and 2007. Consequently, the HS statistics are not easy to compare across time and countries in their original form.[2] Therefore, we prefer to use the SITC categorization, which is based on the commodities' stage of production. It has been developed by the UN and is very suitable for comparisons of international transfers of commodities and manufactured goods. Within the SITC classification we usually opt for the third revision, because this dates back to 1988. The latest revision, four, has been implemented in 2006, and consequently only includes data from 2006 onwards, which is also included in the third revision.

The next box that needs to be filled out is the 'commodity codes box'. In order to know the exact code of the commodity that you want to analyse, it is necessary to look for it under the 'Commodity List', which can be found in the Menu on top of the page under section 'Metadata & Reference' (Illustration 4)

2 Kumakura M., *A Note on Using Comtrade for Empirical Trade Research*, April 2009, p. 1.

Firstly, it is important to select the appropriate classification system, SITC Rev3 in our case. (Illustration 5)

Next it is important to find out under what category you can find the commodity that you are looking for. In our case, tin ore, the right category is the second one, 'Crude materials, inedible, except fuels'. Subsequently, you choose the subcategories '28' ('METALLIFEROUS ORE,SCRAP'), '287' ('ORE,CONCENTR.BASE METALS') and '2876' ('Tin ores and concentrates'). (Illustrations 6 to 9) Consequently, the code for 'tin ores' in SITC Revision 3 is '2876'.

(SCREENSHOT 6)

(SCREENSHOT 7)

(SCREENSHOT 8)

(SCREENSHOT 9)

In case one cannot determine under what category a certain commodity can be found, it is also possible to use a search engine on UN Comtrade. The search engine can be found above the Commodity List, on the same page. (See illustrations 5 to 9) Fill out a keyword in the empty box, next to the caption 'Input keywords:'. In our case we fill out the word 'tin' and click 'search'. Next, an extensive list of categories of all the different classification systems that include the keyword appear. Scroll down until you encounter the appropriate category, within the classification system that you prefer. In our case, this is 'SITC.3-2876 Tin ores and concentrates'. (Illustration 10)

(SCREENSHOT 10)
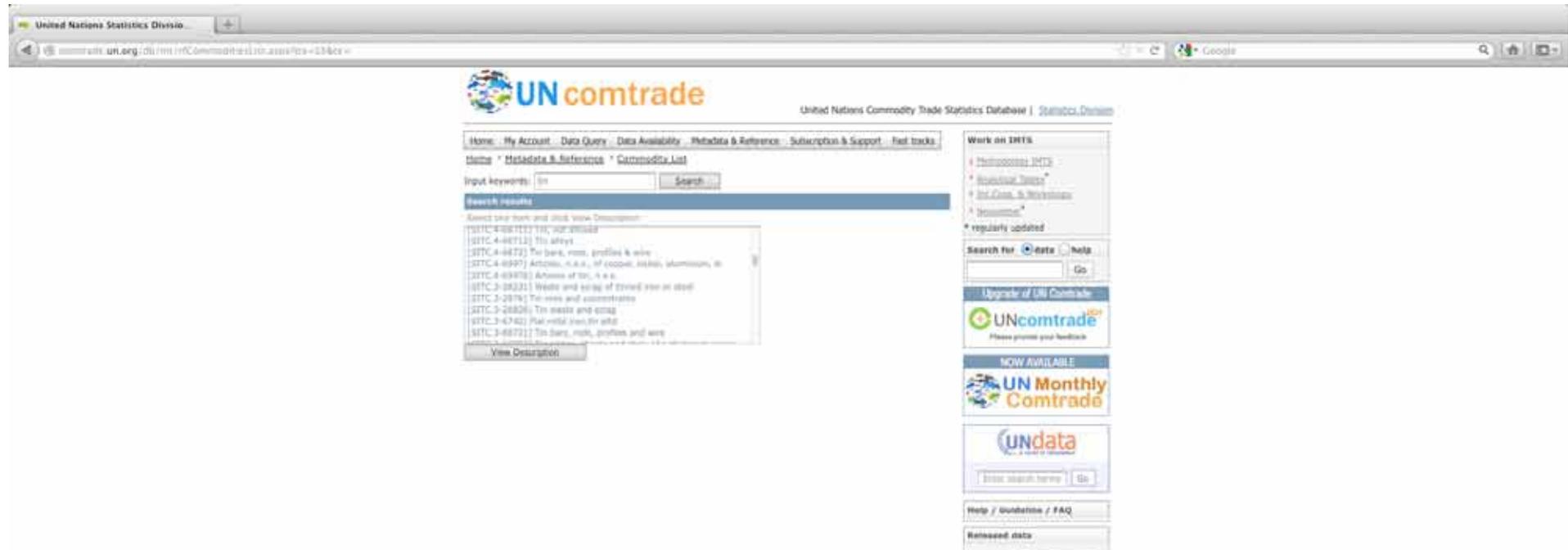
Now that we have obtained the correct commodity code, '2876', we can fill it out in the 'commodity codes box' of the sheet to submit the data query.[3] (Illustration 3) The following box is the 'reporters codes'. Here you have to choose whether you want Rwanda's reported tin ores exports, and thus select Rwanda, as the reporter, or whether you want the rest of the world's reported tin ores imports from Rwanda, and thus select the rest of the world as reporter. It is advisable to do both exercises, as the resulting figures are not always the same, due to underreporting. The issue of underreporting will be discussed in more detail below. For now we will choose to select Rwanda's reported exports to the rest of the world. First, you have to click 'Lookup' next to the 'reporters codes box'. A small window will pop up, as shown in illustration 11. Next, scroll down in the list of countries in the window, and select 'Rwanda', then click the 'Add' button and finally the 'Apply & Close' button. Rwanda's country code will now appear in the 'reporters codes box'.

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3   Other codes that we for example regularly use are '891' (arms and ammunition) and '7921' (helicopters).

Subsequently you have to fill out the 'partners codes box', the trading partners of the reporter. In our case the partners are all the other countries of the world. Click 'Lookup' next to the 'partners codes box', select '(All)' in the list in the window that pops up, and click the 'Add' and 'Apply & Close' buttons.

Next click 'Lookup' next to the 'Years box' and add all the years that you want to analyse, from 2001 until 2005 in our case, and click the 'Apply & Close' button.

Finally, you have to choose whether your request concerns import, export, re-import, or re-export from the reporters' point of view. In our case, it concerns Rwanda's exports to the countries of the world.

In the end, the filled out sheet should look like the one in illustration 12, and the request can be submitted by clicking 'Submit Query' at the bottom of the page.
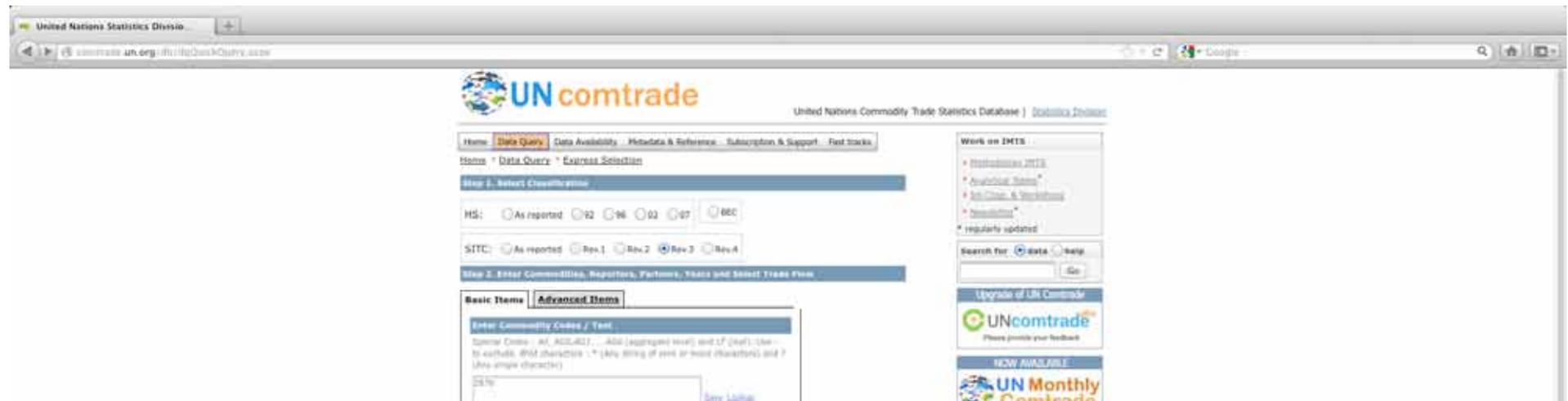
Consequently, the UN Comtrade website draws up a table including all the requested data. As shown in illustration 13, in this case the table gives the weight and the value of the tin ore exports from Rwanda per year, per country.

(SCREENSHOT 13)

The above exercise shows that the database contains a massive amount of data, and our experience learns that can be very useful. Therefore, we highly recommend this tool for all kinds of analyses. Nonetheless, it should be kept in mind that a few shortcomings exist:[4]

- Most countries do not report on the number of items that have been traded, but just on the value of the transfer.

- Often countries tend to underreport, which is illustrated by the fact that exporters' and importers' reports rarely match. This is even the case for the example that we have worked out above. If you do the same exercise with the rest of the world as reporter on its tin ore imports from Rwanda, the resulting figures will be much lower. Consequently, the actual value of trade is undoubtedly higher than the figures extracted from the UN Comtrade database, because of underreporting.

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4 These have largely been taken over from Small Arms Survey. (Source: Small Arms Survey, *The militarization of Sudan: A preliminary review of arms flows and holdings*, Sudan issue brief, April 2007, p. 6.

Un Register of Conventional Arms

The United Nations Office for Disarmament Affairs (UNODA) states on its website that it believes that transparency about arms transfers can help to build confidence among states and helps to prevent conflict. Therefore governments are requested to report regularly to the United Nations Register of Conventional Arms (UNROCA, or UN Register) on their arms imports and exports. UNODA publishes this information on its website (http://www.un-register.org/HeavyWeapons/Index.aspx), which is a very interesting source of information.

The range of arms that are covered by the UN Register is however rather limited. The register covers seven categories of arms, which are deemed the most lethal ones. Those categories are battle tanks, armoured combat vehicles, large-calibre artillery systems, combat aircraft, attack helicopters, warships, and missiles and missile launchers. There are however many arms or military equipment that play an important role in violent conflicts, that are missing from this set of arms. First of all, there are a few categories that are not included, such as munitions, and small arms and light weapons (SALW). Recently, it has however been decided that governments are free to report on small arms transfers as well, and some of governments have already done this. Furthermore, the range of the categories themselves is also limited. Battle tanks and large-calibre artillery systems, for example, include only those with artillery with a calibre of at least 75mm. For armoured combat vehicles the minimum calibre of the weapon is 12.5mm. Short-range missiles and rockets, with range less than 25km, are not covered by the 'missiles category'.

Nevertheless, the UN Register remains a very interesting tool for the analysis of international arms trade. Below we will work out an example to illustrate how this database works.

The example will deal with the Democratic Republic of the Congo's (DRC) arms imports for the entire reporting period (1992-2010). As soon as you are on UNROCA's website, it requires very little effort to retrieve this information. In the blue bar that says 'All years', 'All Countries' and 'National Report: Exports' you have to select the info that you want. (Illustration 14) In our case, this is 'All years', 'Democratic Republic of the Congo' and 'Imports'. To submit the request press 'GO' in the blue bar.

(SCREENSHOT14)