



ECONOMIC DEVELOPMENT

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Mashing up trade, aviation and postal data

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5th International Conference on
Big Data for Official Statistics





- Official trade statistics of almost 200 countries/areas
- Most comprehensive trade database with billions of records
- Annual trade in goods since 1962, monthly data since 2010
- Annual trade in services since 2000

<https://comtrade.un.org/>



UN Comtrade Database

Free access to detailed global trade data. UN Comtrade is a repository of official international trade statistics and relevant analytical tables. All data is accessible through *API*.

Get data ▾

Visualize data ▾

Legacy ▾

datasetCode	Internal dataset identification
typeCode	Combination of several keys to identify specific datasetCode
reqCode	Product type: Goods or Services
refPeriodId	The time interval at which observations occur
refYear	The period of time to which the measured observation is intended to refer
refMonth	Year of observation
period	Month of observation. For annual, it would bet set to 52
reporterCode	Combination of year and month (for monthly), year for (annual)
flowCode	The country or geographic area to which the measured statistical phenomenon relates
partnerCode	Trade flow or sub-flow (exports, re-exports, imports, re-imports, etc.)
partner2Code	The primary partner country or geographic area for the respective trade flow
classificationId	A secondary partner country or geographic area for the respective trade flow
classificationCode	Internal id of product classification
classificationSearchCode	It indicates product classification used and which version (HS, SITC)
OriginalClassification	Additional product classification to assist data searching
cmdCode	Flag to indicate whether the classification is reported by country or not
Leaf	Identification whether a product code has the most basic level (sub-heading for HS)
CustomCode	Customs or statistical procedure
motCode	The mode of transport used when goods enter or leave the economic territory of a country
mosCode	The mode of supply on delivery of services (trade in services only)
qtyUnitCode	Unit of primary quantity
ty	Value of primary quantity
QQtyEstimated	Flag whether primary quantity is estimated or not
ItQtyUnitCode	Unit of secondary quantity
ItQty	Value of secondary quantity
AltQtyEstimated	Flag whether secondary quantity is estimated or not
etWgt	Net weight
netWgtEstimated	Flag whether netweight is estimated or not
rossWgt	Gross weight
grossWgtEstimated	Flag whether gross weight is estimated or not
fValue	Trade values in CIF
obValue	Trade values in FOB
primaryValue	Primary trade values (taken from CIF or FOB values)
legacyEstimationFlag	Legacy quantity estimation flag
Reported	Flag to indicate whether a record is reported by country
Aggregate	Flag to indicate whether a record is aggregated by UNSD



Comtrade and Aviation Operational Data

- Utilization of cloud storage – UNGP trade transport data lake and – big data technologies to process data
- Create a link between Comtrade, ADSB operational data, and ICAO reported data
- Analysis and identification of commodities most likely to be transferred by Air
- Analysis of origin and destination of identified trade flows and relate it to ADSB operational data
- Relate to ICAO reported data to compare with air transport mode vis a vis other modes
- Identification of true origin and destination of trade flows and comparison with ICAO and ADSB segment data to determine how well cargo network is optimized



UPU postal data and Comtrade

- Integration of UPU postal data with Comtrade trade data: E-commerce
- Origin destination E-commerce flows by type of goods, value and intermodal market shares
- Study of geographical locations such as landlocked countries and islands and predictive analysis of transport modes of E-commerce trade
- Analyze the competitiveness of air transport vs other modes of transportation.



Economic Trends

- Analysis of trade flows and value of cargo flows and value of goods as early indicators of world trade and GDP activity
- Insights on flow of goods and services by type and geographic region
- Impact and scenario analysis such as exchange rate and tariffs on trade and economy



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Dangerous Goods

- Identify type of Dangerous Goods that are moved by the air transport and other modes of transportation.
- This collaborative work will allow to all stakeholders to know about the economic importance of Dangerous goods, in terms of the value and weight.
- This cooperation will support the activities developed by the Strategic Objective of Safety.
- comprehensive analytics about the development of the international trade for this specific goods.
- Support activities related to the facilitation of international trade flows.



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North American
Central American
and Caribbean
(NACC) Office
Mexico City

South American
(SAM) Office
Lima

ICAO
Headquarters
Montréal

Western and
Central African
(WACAF) Office
Dakar

European and
North Atlantic
(EUR/NAT) Office
Paris

Middle East
(MID) Office
Cairo

Eastern and
Southern African
(ESAF) Office
Nairobi

Asia and Pacific
(APAC) Sub-office
Beijing

Asia and Pacific
(APAC) Office
Bangkok



THANK YOU