Manual on international trade statistics principles 2016

1. Purpose of use and central concepts of International Trade Statistics

1. 1. Phenomenon to be described

International Trade Statistics describes the commodity trade between Finland and other Member States of the European Union (EU) and between Finland and Third Countries i.e. the internal and external trade. International Trade Statistics is the official information source on the importation, exportation, and balance of trade of Finland. The legislation regulating the compilation of statistics on the external (Extrastat) and internal (Intrastat) trade of the European Community ensures that the statistics are based on an accurately defined set of norms applied in all the EU Member States. Furthermore, uniform definitions and methods have been issued in regulations or decisions of the Commission on the practice of compiling statistics on international trade.

Intrastat, the statistical system of internal trade, was introduced within the European Community as of January 1993. In Finland this system is being applied since the beginning of January 1995, when Finland became an EU Member State. Intrastat requires the collection of data direct from enterprises. The collection of data is closely linked to the value-added taxation system of the EU internal trade (the VAT system). The practice of threshold levels applied at the collection of data means that the majority of all enterprises engaged in internal trade are exempted from supplying the data.

Extrastat data are obtained from the information contained in customs declarations.

1. 2. Purpose of use of International Trade Statistics

International Trade Statistics is an instrument of primary importance for innumerable decision makers, planners, and researchers in the public and private sectors. International trade statistics are applied i.a. in the following fields:

- preparation of multinational and bilateral negotiations between the authorities of the European Community on common commercial policy
- monitoring of the development of the EU internal market and national economies
- preparation and monitoring of the operation policies of other national and international organisations
- safeguarding of national interests within economic and trade policies
- source of information for enterprises at drafting market research reports and developing commercial strategies
- essential source of information for balance-of-payment statistics, national accounts, and economic studies
- monitoring of the development of globalisation and its impacts
- media and "the general public"

These few examples describe the width and diversity of the use and user community of International Trade Statistics

1. 3. Statutory basis

Finnish international trade statistics is based on the legislation of the European Community and on the national Statistics Act (280/04) and Customs Act (304/2016) of Finland.

The legislative basis of the EU is divided into two parts; one on the compilation of internal trade statistics and one on the compilation of international trade statistics. Furthermore, EU statistics regulation (EC) No 223/2009 of the European Parliament and of the Council, is applied. The commodity nomenclature applied at the statistics on both internal and external trade is based on the Council Regulation (EEC) No 2658/87 on tariff and statistical headings, and the common customs tariff. The country classification, which is also common to both systems, is based on the Commission Regulation 1106/2012 on the country classification of the statistics on the Community external trade and the trade between the Member States. With a few exceptions (XK Kosovo, XS Serbia, XC Ceuta and XL Melilla), the classification complies with the so-called ISO alpha standard (ISO 3166) having two-letter country identifications.

The Council's basic regulation on internal trade statistics (EC) No 638/2004, changes (EC) No 222/2009, (EU) No 1093/2013 and (EC) No 695/2014, creates the methodological basis for Intrastat, and its implementation is enacted by the Commission Regulation (EC) No 1982/2004, amendments (EC) No 1915/2005, (EU) No 91/2010, (EU) No 96/2010 and (EU) No 1093/2013.

Extrastat i.e. the statistics on the trade in goods between the Community and its Member States and Third Countries has been enacted by the basic European Parliament and Council Regulation (EC) No 471/2009. The provisions on the implementation of external trade statistics are issued in the Commission Regulations (EU) No 92/2010 and (EU) No 113/2010.

As far as possible, the legislation of the European Community observes the recommendations issued by the United Nations' Statistical Office concerning statistics on the international trade of goods (International Merchandise Trade Statistics: Concepts and Definitions, United Nations 2010).

1. 4. Applied concepts, definitions, and classifications

International Trade Statistics registers the value and quantity data on the export and import of merchandise by the subheading, country, and land territory. Importation is registered according to both country of origin and country of consignment. Exportation has been registered according to the country of destination.

The concepts referring to countries are as follows:

- As the country of origin is considered the country where the merchandise was produced or where the latest economically most important part of the production took place. The packaging of the merchandise is not considered production.
- As the country of origin of such a merchandise being returned to Finland is registered the country of consignment, and likewise at business transactions where the country of origin is not identifiable.
- At the external trade, merchandise referred to Chapter 97 of the Combined Nomenclature is declared according to the country of consignment instead of the country of origin.
- At the external trade, merchandise of Community origin is declared according to the country of consignment instead of the country of origin.
- As the origin of merchandise produced by wage work and of merchandise returned after repair is registered the country where the production took place.
- As the country of origin of used vessels and aircraft is declared the country where the previous holder of economic ownership was established.
- At export, as the country of destination is considered the latest country known at the time of exportation (in internal trade, an EU Member State) to which the merchandise is intended to be exported from Finland either direct or via some other country.
- As the country of destination of merchandise to be produced by wage work and of merchandise delivered for repair is declared the country in which the production takes place.

- At export, as the country of destination of vessels and aircraft is declared the country where the next holder of economic ownership is established.

The primary unit of measuring the quantity of the merchandise is the net quantity in kilograms. Certain merchandise also has a supplementary measure unit such as piece, pair, square metre, etc. The quantity units and their identifications are available on the Customs website at http://tulli.fi/en/statistics/quantity-units.

International trade data are published in accordance with the statistical value concept. This means that at export/deliveries, the FOB (free on board) value of the merchandise is used, and at import/acquisitions the CIF (cost, insurance, freight) value at the Finnish border. The statistical value may deviate from the monetary sum indicated on the selling contract i.e. the invoice value, due to the terms of delivery applied at the business transaction. The statistical value is used as a uniform measure variable in all the Member States, and it also complies with the recommendations regarding statistics issued by the UN on international commodity trade. The value data do not contain any taxes or duties levied in Finland.

Finnish international trade statistics are published in accordance with the following standards of statistical classification:

- Combined Nomenclature (CN)
- Standard International Trade Classification (SITC, rev.4)
- Classification of Products by Activities (CPA)
- Main Industrial Groupings (MIG), according to primary purpose of use
- Exports and Imports by Industries (TOL2008) and Nomenclature générale des Activités économiques dans les Communautés européennes (NACE Rev.2)

The Combined Nomenclature (CN) is based on the Harmonised System (Harmonised Commodity Description and Coding System, World Customs Organisation, WCO), and it is applied at both the tariff classification and the compilation of statistics within the European Community. The commodity subheadings of the Combined Nomenclature, about 9 400 in total, are used at the compilation of statistics on both internal and external trade. SITC is the classification of international trade issued by the United Nations (UN). CPA is the classification system of goods and services applied by the European Community. MIG is a European (Eurostat) classification without an official status where various industries are aggregated according to the purposes of use of their products. NACE is the industrial classification of units dealing in economic activities.

The Combined Nomenclature (CN) is the primary classification standard used by Finnish international trade statistics. All exported and imported merchandise is classified according to the CN both in the statistical declarations of the internal trade and the customs declarations of the external trade. Also the classification standards SITC rev.4, CPA, and MIG are applied at statistics published on international trade. The conversion keys from CN to SITC, from CN to CPA, and from CPA to MIG are used.

International trade statistics are also published since 1997 according to the NACE branch classification of the EU. Until 1997, the ISIC branch classification was applied. From 1997 to 2002 the conversion from CN to NACE took place via CPA. Since 2003 the branch classification is based on the TOL branch classification of the company register of the Central Statistical Office.

The method applied within the national international trade statistics towards producing other statistics than those complying with the CN classification of goods is based on the conversion key between the different classification standards, except for NACE. Until 2002 the most important criterion for producing international trade figures by the branches of activity consisted in the origin of the production of goods, where the typical branch of activity had been defined for each CN heading through using the CPA categories as the conversion keys between CN and NACE. This method implied that the majority

of the value of goods trade got to be classified under the branches of industrial and primary production. In reality, however, a considerable part of the enterprises dealing in goods trade are working in the branches of construction and services such as wholesale and retail business etc. Accordingly, the application of the conversion key as a classification method gave a picture somewhat misleading from the viewpoint of the branch specific structural statistics on enterprises. Since 2003 the branch specific statistics have been less biased, because NACE is based on the TOL branch classification of the company register. Lost replies, i.e. delayed or neglected declarations, are not estimated according to the branches of industries. Lost replies are being estimated since 2006 (Table 2).

1. 5. Data to be registered into statistics

As a general rule all goods exported from and imported into Finland incur in the statistics on the international trade in goods. The trade of services is not included in these statistics. The compilation of statistics requires that the merchandise arrives in or departs from the country physically, except for ships and aircrafts for which the compilation takes place after the economic ownership has changed. Economic ownership means the right to claim the benefits associated with the use of a vessel or aircraft in the course of an economic activity by virtue of accepting the associated risks. On the other hand, it is not important from the viewpoint of the compilation of statistics whether any payments take place at the importation or exportation of the merchandise.

A statistical record at internal trade comprises the following data: commodity heading, statistical value, invoice value, quantity or amount (net kilograms and supplementary amount, if any), country of origin and consignment at importation and country of destination at exportation, mode of transport, and nature of business transaction. *A statistical record at external trade* comprises the same data as the statistical record at the internal trade except invoice value. Besides, the record even includes the following data declared at external trade only: inland mode of transport, transport by container, nationality of means of transport, code of customs procedure, preferential treatment at importation, and National Procedure code or the so-called paragraph code. Beside statistical data proper, the statistical records at internal and external trade comprise beside statistical data proper also identification data of various other kinds.

To commodity statistics are also referred the following activities which do not usually involve the buying or selling of merchandise:

- gratuitous guarantee and replacement deliveries
- various aid consignments (e.g. developmental aid exports)
- merchandise delivered to be processed by wage work and merchandise returned after processing by wage work
- returned goods

1. 6. Data not to be registered into statistics

Certain phenomena have not been included in the official International Trade Statistics. These are economic transactions not having any significant commercial value. Intrastat does not cover the acquisitions and deliveries by small enterprises and individuals exempted from lodging regular VAT declarations.

The following specification includes data not included in the International Trade Statistics:

a. monetary gold
b. means of payment which are legal tender and securities, including means which are payments for services such as postage, taxes, user fees
c. goods for following temporary use, (e.g. hire, loan, operational leasing), provided all the following conditions are met:

- no processing is or was planned or carried out
- the expected duration of the temporary use was or is not intended to be longer than 24 months
- the dispatch/arrival has not to be declared as a supply/acquisition for VAT purposes

  For example:
  - goods on hire, loan etc.
  - goods intended for fairs and exhibitions
  - theatrical scenery, merry-go-rounds and other fairground attractions
  - professional equipment
  - cinematographic films (demonstration films, news matter etc.)
  - animals for show, breeding, racing, etc.
  - means of transport, containers and equipment connected with transport
  - goods for the repair of the means of transport, containers and related transport equipment and parts replaced during the repairs
  - packaging
  - goods destined for examination, analysis or test purposes

d. goods moving between
   - a Member State and its territorial enclaves in other Member States, and
   - the host Member State and territorial enclaves of the other Member States or international organisations.

     Territorial enclaves include embassies and national armed forces stationed outside the territory of the mother country
e. goods used as carriers of customised information, including software
   - Special computer software saved in a data medium is considered a service and should not be declared in the statistical declaration
f. software downloaded from the internet
g. goods supplied free of charge which are themselves not the subject of a commercial transaction, provided that the movement is with the sole intention of preparing or supporting an intended subsequent trade transaction by demonstrating the characteristics of goods or services such as:
   - advertising material
h. goods imported and exported for repair and goods returned after repair (repair goods except for repair of vessels and aircraft are included in the transport statistics)
i. means of transport travelling in the course of their work, including spacecraft launchers at the time of launching
j. through transports (transito)

2. Reliability and sources of errors

2. 1. Threshold values within internal trade statistics

Each EU Member State defines the threshold value to be applied by it at the compilation of international trade statistics independently and complying with the coverage limits set for the compilation of data by the Statistics Regulation on internal trade. The Member States shall annually set their respective threshold values for enterprises concerning the acquisitions and deliveries of goods before the beginning of the following statistical year. The threshold values aim to decrease the obligation to supply data which burdens enterprises. In Finland, those enterprises remaining below the limit threshold values need not answer at all the enquiry on internal trade data (Table 1).

Table 1: Threshold values in euro		
Year	**Acquisitions**	**Deliveries**
2012	275 000	500 000
2013	275 000	500 000
2014	500 000	500 000
2015	500 000	500 000
2016	550 000	500 000

Since 2010, it is optional for all enterprises to declare the statistical value. The Statistics of the Finnish Customs estimates the statistical value of all consignments for which only an invoice value has been declared.

2. 2. Threshold values at external trade statistics

The external trade statistics comprise the commodity trade of the EU Member States with Third Countries. In accordance with the Commission Regulations (EC) No 1917/2000 and (EC) No 1669/2001, information in customs declarations exceeding the threshold of EUR 1 000 must be included in international trade statistics. Application by the Member States of the threshold shall remain optional. In Finland, the threshold is not applied.

2. 3. Estimated share of internal trade by enterprises falling short of threshold value

The share of the trade by enterprises which falls short of the threshold values has been estimated and added to the registered statistical figures. The statistical practice of National Board of Customs is based on the VAT data of Tax Administration. The share of the trade under the threshold value is reported as a separate category ("unspecified") among acquisitions and deliveries.

Table 2 shows that the estimated data have a considerably larger impact on acquisitions than on deliveries. The shares of the estimates have been calculated on the values of exportation and importation. Due to this asymmetry and the missing assessments of certain Member States, the acquisitions by the Member States are at the EU level underestimated against the deliveries.

Table 2: Share of estimation in trade between Finland and other EU Member States					
Acquisitions	**2012**	**2013**	**2014**	**2015**	**2016**
Below threshold value	3,5%	3,8%	4,6%	5,1%	5,4%
Non-response	1,6%	1,0%	1,3%	1,5%	1,6%
Total	**5,1%**	**4,8%**	**5,9%**	**6,6%**	**7,0%**
Deliveries	**2012**	**2013**	**2014**	**2015**	**2016**
Below threshold value	1,9%	1,8%	1,8%	1,9%	1,9%
Non-response	0,8%	0,9%	0,8%	0,8%	0,9%
Total	**2,7%**	**2,7%**	**2,6%**	**2,7%**	**2,8%**

2. 4. Share of estimates due to non-response

The share of non-responses i.e. delayed or neglected declarations, has been insignificant in Finland. The assessment of single data significant for the final outcome of the statistics bases itself on the values of corresponding data on the earlier months. The yearly nonresponse level has been estimated since 2006 (Table 2).

The problem caused by non-responses does not exist within the compilation of statistics on external trade, because statistical data on external trade are based on customs declarations.

2. 5. Estimation of statistical value

For internal trade statistics, an invoice value is collected from all providers of statistics data. In addition, a statistical value can be provided as optional information. If no statistical value has been submitted, it is estimated using multipliers specific to different commodity codes.

At external trade statistics, the statistical value corresponds to the value concept of the customs declaration.

2. 6. Revisions

The statistical figures on international trade by the calendar month are published as early as possible, and they may include estimates on missing or inadequate data. Accordingly, the database of each month within the international trade statistics can be updated even repeatedly after the first publication of the statistics. The corrected figures are published monthly in Finnish National Statistics. Finland conveys the revised figures monthly also to the European statistical office Eurostat. The data are checked and corrected at their most detailed classification level. The statistical data of the previous calendar year are verified by the end of August of the following year, whereupon no more corrections can be made in the data on that statistical year.

Table 3: Preliminary and final monthly import and export figures for 2016, EUR million

	Exports		**Imports**	
Month	*Preliminary figures*	*Final figures*	*Preliminary figures*	*Final figures*
January	3 550	3 582	3 870	4 019
February	4 070	4 118	4 170	4 306
March	4 380	4 449	4 645	4 741
April	4 270	4 322	4 495	4 607
May	4 315	4 365	4 415	4 550
June	4 935	4 966	4 610	4 735
July	3 900	3 913	4 145	4 247
August	3 910	3 993	4 365	4 474
September	4 530	4 570	4 600	4 673
October	4 480	4 533	4 670	4 789
November	4 505	4 566	4 655	4 822
December	4 400	4 503	4 930	5 040
Total	**51 245**	**51 880**	**53 570**	**55 003**
Difference MEUR		**635**		**1 433**
Deviation %		**1,2**		**2,7**

2. 6. 1. Revisions of primary data

This passage sheds further light for the users of the statistics on the coverage and diversity of the data material contained in International Trade Statistics. It is hoped that this presentation would enable a better understanding by the users of the problems and difficulties connected with the compilation of statistics on international trade.

The adjustments and corrections of errors are a production phase of the international trade statistics which takes a lot of work and other resources. The adjustment work requires consideration and power of decision when the error in the statistical data is genuine and needs to be corrected. The EU Member States are using different criteria to locate errors and they are working out different statistical methods for testing and checking mistakes. At comparisons between the Member States on statistics, differing adjustment methods may also account for the differences between the statistics of the Member States.

Table 4 presents information on the volumes of the internal trade declarations. In the average, as many as about six million export and import lots are processed altogether in the international trade statistics during one calendar year.

Table 4: General information on providers of Intrastat information and number of declarations		
Acquisitions	**2015**	**2016**
Number of Providers of Statistical Information [1]	5 570	5 212
Number of Declarations	235 119	241 524
% Electronic Declarations [2] (Number of declarations)	97,7	97,9
% Electronic Declarations (Value [3])	93,6	93,3
Deliveries	**2015**	**2016**
Number of Providers of Statistical Information [1]	2 290	2 346
Number of Declarations	83 442	87 661
% Electronic Declarations [2] (Number of declarations)	97,9	98,1
% Electronic Declarations (Value [3])	95,0	95,4

[1] Total number during the whole year.

[2] Finnish Customs is encouraging traders to submit their declarations electronically. Generally, where electronic declarations are linked to the trader's system, the incoming data is judged to be more accurate. This facility can also reduce the burdens placed on businesses and reduce the costs of inputting the data.

[3] The calculation of the value is based on the total value of the trade exceeding the threshold value.

International trade statistics apply two kinds of error checks: *validity and reliability checks*.

Validity errors are involved when the compiler of the statistics can be certain that the data sent by the statistical declarer is incorrect. Invalid data are not inserted in statistics but they are always corrected.

Validity errors may include the following:

- incorrect or missing commodity code (CN heading)
- incorrect or missing country identification
- missing value of variable
- incorrect procedure code (business transaction)

The data contained in all statistical declarations are checked for validity errors before insertion in the database.

Reliability errors concern international trade data whose incorrectness is not known certainly. The values of these data deviate from or are in conflict with earlier corresponding data, or they do not fit into the normal distribution of the unit values under the subheading involved. Their deviation from other data material makes them look incorrect, wherefore they have to be checked.

The reliability checks are mainly based on analytic methods by regression. Calculated confidence intervals against which the data to be included in the material are checked have been set for each commodity subheading. These confidence intervals are set to test the ratios of following variables:

- ratio of statistical value to quantity 1
- ratio of statistical value to quantity 2 (only if the commodity subheading has a quantity 2)
- ratio of quantity 1 to quantity 2

If the ratio of a new lot declared to statistics under a certain subheading does not fall within given confidence interval, the business transaction is considered possibly incorrect. All such transactions which are significant for the end result of the statistics are examined individually and the data are corrected if they really prove to be incorrect.

Even some other tests are applied as reliability checks which are connected with commodity subheadings and trade partner countries. These tests are targeted at business transactions with countries which are extremely rare as trading partners or commodity codes, wherefore the data are probably incorrect.

2. 6. 2. Checks based on secondary data

In Finland and in most other EU Member States, the statistical data of the internal trade are checked by comparing them at least with the VAT data. Even other data sources are utilised. The purpose of these sources of secondary data is to acquire further information in addition to and as support of the data declared for the statistics. These secondary data can also be used for testing the reliability of the declared data or for the verification of the correctness of those data submitted by the statistical declarers.

Finnish Customs uses the data of VAT declarations in its international trade statistics for the following purposes:

- maintenance and updating of the register on the statistical declarers within internal trade
- definition of the threshold value of the trade concerning the liability to declare data
- definition of the statistics declarers exceeding the threshold value
- comparison between and adjustment of the data of VAT declarations and internal trade declarations
- estimation of the internal trade value of the enterprises falling short of the threshold value

2.7. Confidentiality of data

All the EU Member States are applying their own national procedures and instructions with a view to ensuring the confidentiality of the data. Enterprises have the possibility to suppress such data relating to trade in cases where enterprise-specific data are recognisable in publications and this would harm its business. This kind of passive practice to suppress data (suppression at the request of a declarer) exists in most countries which publish international trade statistics.

At the processing of confidential data, information on one trade operator or one business transaction can be suppressed by aggregating statistical data before publishing. In certain cases the information may have to be suppressed totally when data on quantities or country-specific data on a certain commodity subheading are concerned. Finnish Customs suppresses statistical data only at the request of an enterprise engaged in trade. Suppression is granted if the study of statistical data on commerce supports the request of the enterprise i.e. that the business transaction of the enterprise is clearly revealed by the statistics. Normally this refers to a case where one statistical class contains fewer than three enterprises or the enterprise which presented the request dominates i.e. represents at least 75 % of the total value of the statistical class.

The following suppression classes applied at the Common Nomenclature are in use within the Finnish international trade statistics:

- country-specific quantity data are not published
- quantity data are not published at all
- only the data on the total value are published
- only the data on the total value and total quantity are published

Regardless of the data being partly or completely suppressed, the data on the total value of the so-called suppressed commodity subheadings are published. Accordingly, the published value data on import and export are not short-covering because of the suppressions like the case may be in certain other countries. The suppressed data can also be published at classification levels, as long as the statistics ensure that individual suppressed data cannot be traced from the statistics by calculation. Applying this latter procedure, the total figures of international trade are always available at a certain classification level.

2. 8. Measures contributing to reliability of data

Finnish Customs has developed and is developing reliability tests for statistical data which will warn of a probably incorrect observation.

With a view to improving the accuracy of the basic data submitted by the statistical declarers within internal trade, the Customs personnel is liable to give instructions to statistical declarers towards correcting errors and to advise them how to avoid reporting incorrect data on statistical declarations in the future.

The monthly deadlines for submitting Intrastat declarations are confirmed by Finnish Customs for one year at a time. A penalty fee is imposed if the statistical data has not been submitted within the set time limit. If the enterprise completely neglects to lodge the declaration, Customs can take legal measures against it e.g. by imposing a fine for the omission. Such a procedure has to be used in Finland only very rarely.

3. Access to and up-to-dateness of results

Statistical data are of best operational value when they are available to all users easily and at equal terms in the form preferred by the users. The data contained in the International Trade Statistics are accessible to the general public at their most detailed publishable accuracy and, with certain restrictions, to researchers at an even more detailed level.

3. 1. Publication of international trade statistics

Finnish Customs produces on a regular basis following publication series:

- Preliminary statistics on the international trade in goods, monthly on a date announced previously
- Monthly statistics on the international trade in goods, monthly on a date announced previously
- Monthly publication on the international trade in goods, monthly
- Pocket statistics, annually in Finnish, Swedish and English
- International trade in goods, annual publication (CD-Rom)
- Transit transports, monthly in Uljas and a publication annually
- International trade in goods by enterprise size, quarterly
- International trade in goods by the type of the enterprise, annually
- International trade transports, monthly in Uljas and a publication annually
- Re-exports, annually
- International trade in high technology, annually

Besides, there are publications which are produced occasionally on various themes such as: "Trade between Finland and Germany", and "Trade between Finland and developing countries", etc.

3. 2. Deadlines and channels of publishing statistics

The lengths of time required for the statistics to be published are as follows: Preliminary statistics no later than 40 days, Monthly statistics 9 weeks, Monthly publication 13 weeks, Pocket statistics 5 months,

Annual publication 11-12 months, Transit transports 30 days, International trade transports 60 days, International trade in goods by enterprise size about 3 months and International trade by the type of the enterprise about 6 months after the period of reference.

The preliminary statistics, monthly statistics, other statistical publications on various topics as well as the pocket statistics are available for free on the Finnish Customs website http://tulli.fi/ under the heading 'Statistics', or can be ordered free of charge via the e-mail address statistics@tulli.fi. The only publications still published in paper form are the pocket statistics which can be ordered from Statistics service and the monthly surveys which can be ordered from Grano. The last-mentioned publication is subject to charges.

All statistical data on Finnish international trade in goods are available on the International Trade Statistics System (ULJAS) managed by Finnish Customs. The service is free of charge and available online at http://uljas.tulli.fi. The database is updated on a monthly basis according to the timetable for the monthly statistics. The service is available in Finnish, Swedish and English.

Statistics Service answers questions related to the international trade statistics and assists with the use of Uljas-database. The e-mail address of Statistics Service is statistics@tulli.fi. Telephone service is available at +358 295 52335 on weekdays between 9 a.m. and 3 p.m. Statistics service can also be contacted via the Customs website web form. Guidance is provided free of charge. Statistics ordered from Statistics Service are charged according to valid price list.

As a result of cooperation between Statistics Finland and the Finnish Customs, researchers can access detailed international trade statistics on a company level via Statistics Finland's Research Laboratory. This research work always requires a licence to use the material approved by the Finnish Customs.

4. Comparability

4. 1. Comparability of statistics of different countries

The different concepts and definitions applied by the EU Member States and their most important trading partners have impact on the comparability of the statistics.

The differences in the statistics on trade between states are examined by means of so-called mirror studies. Mirror studies imply such a compatibilization of the import and export statistics of two countries where the data of the export statistics of one country are compared with the data of the import statistics of another country and vice versa. Such studies are often difficult to perform since owing to the provisions on the confidentiality of data, sufficiently detailed data are not available for the mirror studies. Finnish Customs has undertaken mirror studies in co-operation with EU trade partner countries and with the Statistics and Analysis Department of the Federal Customs Service of Russia.

Both at the internal and external trade each business transaction between individual countries gets collected twice. Merchandise which moves from country A to country B is cleared as deliveries/export in country A and as acquisitions/import in country B. Apart from this, the deliveries/export from A to B deviate from the acquisitions/import from A declared by B. The differences may have many reasons.

Below, the most important methodological differences and problems involved in reporting to statistics are presented:

- At commodity trade, two different registration methods are applied: *general trade principle and special trade principle.*

The general trade principle is the definition recommended by the Statistics Office of the United Nations (UN). According to the general trade principle, merchandise is registered when it enters or leaves the country. At importation this implies the registration of the merchandise at its arrival in a free zone or customs warehouse without paying attention to whether the merchandise is going to be used within the domestic market or delivered further to other countries. Correspondingly, such merchandise is entered into statistics as export which is exported from a free zone or customs warehouse.

The special trade principle is a definition used at trade by the Statistics Office of the European Community (Eurostat), according to which statistics are compiled on the exchange of trade of the EU. According to the special trade principle, the merchandise is registered only when it crosses the customs border of a Member State (i.e. when it is placed in free circulation) or is accepted into the procedure of inward processing. This is why merchandise arriving in the free zone or customs warehouse is not considered at importation as trade exchange but registered only when released in free circulation onto the domestic market or to inward processing. Merchandise in a free zone or customs warehouse which is not released in free circulation on the domestic market but re-exported, cannot be registered into import or export statistics because of the special trade principle.

Accordingly, the merchandise which has arrived in the free zone or customs warehouse for importation purposes is excluded from any registration into statistics, but merchandise which is released from the free zone or customs warehouse in free circulation or in the procedure of inward processing is registered in statistics. Correspondingly, such merchandise is not included in export statistics which is exported from a free zone or customs warehouse to other countries.

- Internal and external EU trade:

  In both internal and external EU trade the problem caused by non-responses exists because neither system is completely dependent any more on customs control but on the direct declaration by enterprises to the competent authority.

  The statistical system of internal trade applies threshold values in order that small and middle sized enterprises get exemption from the compilation of statistics or that the compilation of statistics would at least be more simple on their part. However, these are not the only existing reasons for statistical deviations because there were deviations between the statistics already at the time of the system which was based on customs clearance.

- Preliminary results:

  Within the statistical system of the internal trade, Member States publish their national statistics and send their first statistical outputs also to Eurostat even before all declarations have arrived or have been processed. That is why the differences in statistical data tend to be larger when the first outputs are used, in comparison with the figures published later. This is true to some extent also of the statistics on external trade.

- Triangular trade:

  Triangular trade refers to situations where merchandise is sold from country A to country B so that the merchandise does not physically move from country A to country B. From country B this merchandise can be sold to country C without the merchandise being moved physically from country B to country C. Instead, the physical movement of this merchandise takes place from country A direct to country C.

  According to the Regulation, these business transactions have to be registered in country A as deliveries/exports from country A to country C, and in country C as acquisitions/imports from

country A. As regards country B, no business transactions whatsoever are to be registered there into the statistics. In the case of such a business transaction the risk of incorrect declaration always exists if the enterprises cannot indicate their trade partner country correctly. In the above example, the merchandise may be registered in country A as deliveries/export, and in country C the merchandise is registered as acquisitions/import from country B, even though no statistical registrations whatsoever are made on this merchandise in country B.

- Registration of merchandise into statistics irrespective of whether it is transit merchandise (e.g. basic chemicals, crude oil, or oil distillates) or not

- Rates of exchange

  The values must be in national currencies even in cases where the business transaction was realised in other currency than the national one. The use of different rates of currency may cause divergences to occur in statistics.

- Divergences in declaration times:

  Owing to the movements of the merchandise the dates of submitting the declarations may fall in different months in the respective exporting and importing countries. Within internal trade, large differences directly due to this fact are not to be noticed. Within internal trade it is still possible that acquisitions are registered only after the receipt of the invoice.

- Classification of merchandise:

  Several enterprises – in particular small and medium sized enterprises which do not have sophisticated data systems, and large enterprises which handle huge amounts of different merchandise – must cope with problems pertaining to classification within about 10 000 subheadings of the CN.

- Concessions and simplifications of declarations:

  Different countries may grant various concessions even to large enterprises. For example parts of vehicles may be referred to one merchandise code only.

- Confidentiality:

  Confidentiality may have an impact either on products (commodity codes) or trade partner countries. The suppression rules ought to influence statistical figures only at their detailed classification level. On the other hand, for example certain military goods are suppressed for strategic reasons in certain countries. This causes divergences also in the total figures of the statistics in different countries. In certain cases the goods are reclassified or they are suppressed because of the risk of disclosing confidential data.

- Differences in CIF and FOB prices:

  In the compilation of statistics, the FOB (free on board) value of the goods is used for exports/deliveries, and the CIF (cost, insurance and freight) value of the goods is used for imports/acquisitions, therefore a difference of several percentage points may occur in the value data of the statistics of the export and import countries, depending on the mode of transport and the product group. The share of freight and insurance costs in Finland's total imports is about five percent, but in the import of certain bulk products with a cheap price per kilogram the share of costs in the import price may be more than 20 percent.

- In addition to the above:
    - methodological differences in registering leasing goods
    - fraudulent customs declaration
    - errors at compilation and processing of data
    - differences between country of consignment and country of origin

4. 2. Comparability over time

The comparability of statistical series over time is one important quality aspect. The impact of changes in the statistical system on definitions, coverage, methods, and other, for a sustained series of figures is impossible to avoid in international trade statistics.

The impact of changes in methods is the larger, the more detailed the application level of the statistics. For example the commodity-code-specific outputs at the CN 8 level by the country are liable to annual changes in commodity and country classifications. Latest major changes in the Harmonised System in 1988 broke the comparability of time series for certain commodity codes almost completely.

The change in the collection of data caused by the EU membership of Finland in 1995 also had an impact on the continuity of the time series of international trade statistics.

5. Coherence of international trade statistics

Coherence is determined by compatibility of the various statistical systems or parts thereof.

In addition to International Trade Statistics, it is possible to obtain statistical data on international trade out of:

- national accounts
- enterprise statistics
- balance of payment statistics

The results of all these four statistical publications ought to be in a certain relation with each other.

However, the compilation and production of the data contained in the above statistics follow the recommendations on data sources and methods issued by various international organisations such as Eurostat, International Monetary Fund (IMF), Organisation of Economic Cooperation and Development (OECD), United Nations (UN), World Trade Organisation (WTO), etc.

The figures of the Finnish International Trade Statistics deviate somewhat from the corresponding data of the national accounts and balance of payment statistics. The Central Statistical Office makes certain additions and corrections to the figures involved in order that the statistics published by them correspond to the recommendations for national accounts (SNA) and balance of payment statistics (BOP).

6. Preparation process of statistics

The data on the merchandise trade between Finland and the Community states, that is, internal trade, are obtained from the Intrastat statistical declarations, which are supplied by the enterprises liable to submit data to Customs by the tenth working day of the month following the months of registration.

The basic data on the commodity trade between Finland and Third Countries are obtained from customs declarations. According to the provisions of the EC Customs Code the importer or exporter has to submit on each import and export consignment the customs declaration. A declaration can be submitted in one or two stages. In the one-stage procedure, the customs declaration is submitted directly as a complete

declaration. In the two-stage procedure, the final, i.e. supplementary, declaration for export has to be submitted within 10 days from the date of submission of the incomplete declaration. As for import, the corresponding time limit is 7 days for declarations submitted manually and 10 days for declarations submitted electronically.

The province of Åland does not belong to the VAT system of the EU and thus not either to the field of the Intrastat system. This is why the basic data on the merchandise trade between Åland and the Community countries are collected by the customs clearance procedure of external trade. By the customs clearance procedure are also collected the data on the trade of Finland with other territories excluded from the VAT system of the EU (e.g. the Canary Islands).

The internal trade statistical declarations submitted to customs, and the customs declarations of external trade are checked preliminarily, whereafter the data are entered into the data systems of internal and external trade. The data declared for registration are checked by different coherence tests and conditional tests (cf. above 2. 6. Revisions). The corresponding adjustments are also made on electronic declarations. Production, revision, and reporting databases are compiled out of the controlled and verified data. Based on these, statistical checks on the correctness of the data are undertaken by the Statistics of the Finnish Customs; outputs are compiled, and publications and other products forwarded to delivery.