

# QUALITY REPORT FOR STATISTICAL SURVEY BIH INTERNATIONAL TRADE IN GOODS STATISTICS

2016



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QUALITY REPORT FOR STATISTICAL SURVEY – BiH international trade in goods statistics 2016

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#### 1 STATISTICAL PROCESS AND STATISTICAL PRODUCTS

#### 1.1 Purpose of the survey

International trade forms an important part of the world economy and, as such, must be measured reliably and the relevant statistical data should be comparable and widely disseminated.

BiH international trade in goods statistics measure trade in goods (value and quantity) between BiH and other countries. It is the official source of data for exports, imports and trade balance of BiH.

BiH international trade in goods statistics are an important primary source for most public- and private-sector decision-makers. For example, BiH international trade in goods statistics:

- enable BiH authorities to prepare for bilateral and multilateral negotiations in the framework of trade agreements,
- constitute an essential source of information for balance of payments statistics, national accounts and economic studies,
- help enterprises to conduct market research and develop their commercial strategy.

#### 1.2 Legal basis and the duties of the statistical institution

- Law on Statistics of Bosnia and Herzegovina
- Multi-annual statistical programs and annual work plans for BiH
- BiH international trade in goods statistics Methodology
- International recommendations and manuals (Eurostat, IMF, UN)

This statistical survey is a part of the annual programme of operations of the Agency for Statistics of Bosnia and Herzegovina.

#### 1.3. **Classification system**

- Customs Tariff of Bosnia and Herzegovina 2016
- Combined Nomenclature (CN 2016)
- Harmonized System (HS 2012)
- Standard International Trade Classification (SITC rev.4)
- BiH Classification of Activities (KDBiH 2010)/Statistical classification of economic activities in the EU (NACE rev.2)
- BiH Classification of Products by Activity (KPD2010)/Classification of Products by Activity in the EU (CPA 2008)
- Main Industrial Groupings (MIG 2009)
- Geonomenclature 2013

Customs Tariff of BiH is the national classification of products used for customs and statistical purposes. It comprises ten digit codes and is in line with international classifications CN and HS.

### 1.4. Reporting unit

Reporting unit is every entity which exports and/or imports goods.

### 1.5 Observation unit

Observation unit in BiH international trade in goods statistics are legal and physical entities which export and import goods i.e. lodge the SAD to ITA.

### 1.6 Coverage and scope

The statistical compilation of ITGS is not based on sampling as administrative data are used as a source. Every Single Administrative Document i.e. export and import transaction is processed.

As a general guideline, United Nations Statistics Division recommends that international trade in goods statistics record all goods, which add to or subtract from the stock of material resources of a country by entering (imports) or leaving (exports) its economic territory. Goods simply being transported through a country (goods in transit) or temporarily admitted or withdrawn (except for goods for inward or outward processing) do not add to or subtract from the stock of material resources of a country and are not included in the international trade in goods statistics. In many countries, a country's economic territory largely coincides with its customs territory, which is the territory in which the customs law of a country applies in full.

The above general guidelines serve as a basis for formulating a set of specific recommendations on the inclusion or exclusion of certain categories of goods.

The following transactions are generally included in international trade in goods statistics: barter trade, goods on consignment, goods on financial lease, goods traded between enterprises under common ownership, goods traded on government account, processing trade.

The following transactions are excluded in international trade in goods statistics for conceptual or methodological reasons: goods in simple transit, temporary trade, particular trade not subject to a commercial transaction, means of payment and monetary gold, and goods for and after repair.

BiH international trade in goods statistics apply the special trade system (relaxed definition) which means that goods from another country which are received into customs warehouses are not recorded in international trade in goods statistics unless they subsequently go into free circulation in BiH (or are placed under the customs procedures for inward processing). Similarly, outgoing goods from customs warehouses are not recorded as exports.

### 1.7 Statistical concepts and definitions

Export of goods means flow of goods where goods physically leave customs teritorry of BiH.

Import of goods means flow of goods where goods physically enter customs territorry of BiH.

Goods mean every tangible movable product.

Country of origin of goods is the country where the goods are manufactured.

Country of final destination of goods is the country where the goods should be delivered.

*Statistical value* represents value of goods according to FOB term of delivery for exports and CIF term of delivery for imports.

Statistical value for exports (FOB – Free On Board) is defined in the following way:

- if the place of delivery is abroad, statistical value comprises invoice value minus transport, insurance and other costs from the border of BiH to the place of delivery abroad,
- if the place of delivery is in BiH, statistical value comprises invoice value plus transport, insurance and other costs from the place of delivery in BiH to the border of BiH.

Statistical value for imports (CIF – Cost, Insurance, Freight) is defined in the following way:

- if the place of delivery is abroad, statistical value comprises invoice value plus transport, insurance and other costs from the place of delivery abroad to the border of BiH,
- if the place of delivery is in BiH, statistical value comprises invoice value minus transport, insurance and other costs from the border of BiH to the place of delivery in BiH.

Quantity of goods represents net weight of goods in kilograms or quantity expressed in one of supplementary quantity units.

### 1.8 Statistical outputs

Detailed BiH ITGS data (e.g. 10 digit BiH Customs tariff codes, 8 digit CN codes, 6 digit HS codes, partner country, statistical value, net mass etc.) are produced and sent to various international and domestic institutions like Eurostat, UN, Ministry of Foreign Trade and Economic Relations of BiH and Directorate for Economic Planning under Council of Ministers of BiH, Central Bank of BiH etc.

Aggregated BiH ITGS data (e.g. sections of HS, sections and divisions of SITC, sections and divisions of KDBiH/NACE, statistical value etc.) are produced and published in the Monthly Press Release and Yearly Thematic Bulletin. These publications can be found on website www.bhas.ba.

### 1.9 Other quality reports

Quality Report on Unit Value Indices of Export and Import of BiH is produced as well.

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### 2 RELEVANCE

### 2.1 Data users, their needs and satisfaction

### 2.1.1 Main users

Main users of BiH international trade in goods statistics are:

- Ministry of Foreign Trade and Economic Relations of BiH,
- Directorate for Economic Planning under Council of Ministers of BiH,
- Central Bank of BiH,
- Eurostat,
- United Nations Statistics Division,
- Embassies and consulates of foreign countries,
- · Companies,
- Other statistics, like National Accounts Statistics (GDP production).

### 2.1.2 Users needs

The main indicators required by users are:

- Flow (imports or exports),
- Year,
- Month,
- Partner country,
- Product defined by Customs tariff of BiH,
- Statistical value,
- Quantity in kilograms,
- Quantity in supplementary units,
- Statistical procedure,
- Mode of transport at the frontier,
- Nationality of the means of transport at the frontier,
- Container.

The data are used for public and private sector decision making.

### 2.1.3 Users satisfaction

Looking at the overall quality of the data for statistical domains (their timeliness, accessibility, accuracy, relevance and comparability), users evaluated data in the area of BiH international trade in goods statistics and gave an average score of 4,12 (scale 1 - 5).

#### 2.2 **Statistics available**

### 2.2.1 Quality and performance indicator – The rate of the ESS statistics available (R1)

The rate of available data is 100 %. All key indicators, required by international standards, are produced.

### 3 ACCURACY AND RELIABILITY

### 3.1 Sampling errors

Statistical survey is not based on sampling. Sampling errors do not exist.

### 3.2 Non-sampling errors

### 3.2.1 Coverage errors

Coverage errors do not exist. All Single Adiministrative Documents i.e. transactions are processed.

### 3.2.2 Mesurement and processing errors

### 3.2.2.1 Causes of measurement and processing errors

Errors can arise while inputing data i.e. inputing and submitting Single Administrative Documents.

### 3.2.2.2 Measures taken to reduce the number of measurement and processing errors

Primary data checks are performed by the Indirect Taxation Authority. The Agency for Statistics of BiH performs subsequent validity and credibility checks on data from Single Administrative Documents. A validity error is found when a record is not correct therefore it may cause processing problems, it cannot be included in the statistical analysis and so it must be removed or corrected. Examples of this kind of errors are incorrect or missing codes, missing values in the Single Administrative Documents, character data in numeric field and vice versa, etc. Credibility controls mean checks on the accuracy of data and assessment of all possible errors associated with the data. Indeed, some data passing the previous validity checks can still be not correct. Residual errors can be pointed out by looking for variable inconsistencies. The Single Administrative Document, for example, is inconsistent internally in the comparison of the different variables, or it is not consistent with what was submitted in the previous months. If errors arise, they are corrected.

### 3.2.3 Non-response errors

Statistical survey is not based on sampling. Non-response errors do no exist.

### 3.2.4 Imputation

The Indirect Taxation Authority does not provide the Agency for Statistics of BiH with supplementary quantity, except for natural gas and electricity. Eurostat's conversion factors are used to obtain supplementary quantity.

### 3.2.4.1 Quality and performance indicator – Imputation rate (A7)

The rate of imputed data for the indicator supplementary quantity is 99,9%. Eurostat's conversion factors are used to substitute missing values with estimates.

### *3.2.5 Other difficulties*

Overall ITGS data accuracy is affected by the errors that can arise when trying to capture movements of goods or trade activities about which little information is available or which are inherently complex to measure, such as: goods that by their nature are difficult to classify; processing trade valuation; product with embedded services; repairs versus processing; quasi transit. Further reasons for discrepancies and mirror flows asymmetries are mentioned under the point 5.2.

### 3.3 Revisions

The Agency for Statistics of BiH does not have an official paper on revision policy.

Data are revised monthly and annually. Revisions are based on the updates of the data provided by the Indirect Taxation Authority. Monthly revision is performed every month for the period from the beginning of the year onwards. Revised data are published every month in the Press Release. Yearly revision is performed on the final data of the previous year which are disseminated in July of the following year in the Thematic Bulletin.

Users are informed about revisions in methodology part of the Press Release and Thematic Bulletin.

### 3.3.1 Quality and performance indicator – Average size of data revision (A6)

Relative mean absolute revision (RMAR) for the period 2013-2015, comparing final and provisional monthly data, is 0,22%.

### 3.4 Confidentiality

The application of confidentiality has an impact on the accuracy, in particular at the most detailed level, as some characteristics are not shown at all or are available only at more aggregated level of data.

There are three types of confidentiality:

- Partner confidentiality (in order to conceal the destination or the origin of a product, the code of the partner country is replaced by a »secret country code«),
- Product confidentiality (in order to supress the nature of the commdoity involved, all or part of the trade is allocated to a confidential product code. Information about a product may be regarded as commercially sensitive either for the value, the quantity or their ratio, since it would give an indication of the price of the product),
- Product and partner confidentiality (the two preceding types are applied at the same time. Therefore both the partner and the product are hidden).

Confidentiality can concern either value or quantity variables (net mass or supplementary quantity) or both measurement units.

Regarding the data from Eurostat Comext database, in 2015, the Agency for Statistics of BiH confidentialised 3,09% data on exports and 0,12% on imports (share of the total value).

### 4 TIMELINESS AND PUNCTUALITY OF THE RELEASE

### 4.1 Timeliness of the release

### 4.1.1 Quality and performance indicator – Time lag of first results (TP1)

			,					, ,		1 /			
Reference period	I	Ш	III	IV	V	VI	VII	VIII	IX	Х	ΧI	XII	Average
Date of publishin g of the first results	19.2	21.3	20.4	20.5	20.6	20.7	20.8	19.9	20.10	20.11	21.12	20.1	/
Time gap (number of days or months)	T+19	T+20	T+20	T+20	T+20	T+20	T+20	T+19	T+20	T+20	T+21	T+20	T + 20

Time lag of first results (annual average) is T+20.

### 4.1.2 Quality and performance indicator – Time lag of final results (TP2)

The time lag of first results is the same as the time lag of final results.

### 4.2 Punctuality of the release

### 4.2.1 Quality and performance indicator – Punctuality of delivery and publication (TP3)

### Indicator for producers:

Reference period	-	П	≡	IV	<b>V</b>	VI	VII	VIII	IX	Х	ΧI	XII	Average
Expected date of publishing	19.2	21.3	20.4	20.5	20.6	20.7	20.8	19.9	20.10	20.11	21.12	20.1	/
Actual date of publishing	19.2	21.3	20.4	20.5	20.6	20.7	20.8	19.9	20.10	20.11	21.12	20.1	/
Time gap (number of days)	T+0	T+0	T+0	T+0	T+0	T+0	T+0	T+0	T+0	T+0	T+0	T+0	T+0

Punctuality of delivery and publication is T+0. (there is no gap between expected date of the publication from the Calender of publication and the actual date of publication).

Indicator for users:

Punctuality of delivery and publication is 100%.

## 4.3 Reasons for major delays and the measures taken to improve the timeliness and punctuality of releases

There were no delays regarding the release of the results.

#### 5 COHERENCE AND COMPARABILITY

#### 5.1 Coherence

### 5.1.1 Quality and performance indicator – Coherence with results from referent source (CH1)

The only source for BiH international trade in goods statistics is the Indirect Taxation Authority Customs (data from Single Administrative Documents).

### 5.1.2 Reasons for dicrepancies

Apart from the BiH international trade in goods statistics, information on trade flows can be found in National Accounts, Business Statistics and Balance of Payments. The compilation of the data and the production of the mentioned statistics follow the recommendations (sources and methods) of different international organizations, i.e. Eurostat, International Monetary Fund (IMF), United Nations (UN), etc. Due to the different methodology, results can differ, but the source of data for all statistics using BiH trade in goods data is the Indirect Taxation Authority – Customs.

#### 5.2 Comparability

### 5.2.1 Comparability over space

The most common reasons for data disrepancies between countries are:

- Methodological differences: trade system applied (general or special trade system), trade coverage, definition of partner country, definition of statistical territory, different valuation principles,
- Time lag: the same operation can be recorded under a different reference period,
- Statistical confidentiality: the same operation cannot be recorded in the trade of one of the two partners because of statistical confidentiality,
- Different practices in the treatment of revisions,
- Problems of currency conversion,
- Misclassification of goods and other errors.

BiH international trade in goods statistics are produced in accordance to international recommendations. Data are comparable to data of other members of European Statistical System.

### 5.2.1.1 Quality and performance indicator – Asymmetry for mirror flows statistics (CC1)

For bilateral mirror international trade in goods statistics, this coefficient represents the difference or the absolute difference of exports and imports between a pair of countries divided by the average of these two values. The value of this indicator should be as close to zero as possible, since – at least in theory – the value of exports and imports between pairs of countries should match.

The main BiH trade partners were analysed for 2015. Mirror statistics were compared, using the statistical value in euros. The results are following:

BiH - EU CC1AB=0,041 or 4,1%

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•	BiH – Germany	CC1AB=0,240 or 24,0%
•	BiH – Italy	CC1AB=0,229 or 22,9%
•	BiH – Croatia	CC1AB=0,196 or 16,9%
•	BiH – Slovenia	CC1AB=0,646 or 64,6%
•	BiH – Serbia	CC1AB=0,042 or 4,2%

The asymmetry between BiH data and EU data is low. The asymmetry between BiH data and Member States data is high. The Agency for Statistics of BiH analysed the asymmetries and found the main reasons for discrepancies:

- Country of origin vs. country of consignment (for imports, country of origin is used as partner country for the analysis),
- "Rotterdam effect" (particulary affects the trade with Slovenia and Germany;
  "Rotterdam effect" cannot be avoided since Community customs legislation has always afforded Community importers the possibility of having goods released into free circulation at basically any customs office in the Community).

### 5.2.2 Comparability over time

Comparability over time is another important aspect of quality. Changes due to definitions, coverage or methods and other changes will have an impact on the continuity of trade series.

### 5.2.2.1 Quality and performance indicator – The length of comparable time series (CC2)

The data on BiH international trade in goods are produced and published from 2005 onwards.

By 2015, there is an 11 year long data time series for BiH. The value of this indicator, considering that these are monthly series is 11x12=132 (CC2=132).

### *5.2.2.2 Interruptions within the time series*

There have been no interruptions in BiH international trade in goods statistics series, since their introduction in 2005.

#### 6 **ACCESSIBILITY AND CLARITY, DISSEMINATION FORMATS**

#### 6.1 **Data releases**

Preliminary monthly and annual data on BiH international trade in goods statistics are disseminated in the Press Release "BiH foreign trade in goods statistics". The following aggregated sets of data are presented:

- Export and import by country of destination and origin,
- Export and import by sections of Customs tariff of BiH (Harmonised System HS),
- Export and import by sections and divisions of Classification of Activities of BiH (NACE rev.2),
- Export and import by sections and division of Standard International Trade Classification (SITC rev.4),
- Export and import by main trading partners and sections of Standard International Trade Classification (SITC rev.4),
- Export and import by Main Industrial Groupings (MIG),
- Export and import by statistical procedure.

Data are presented for free on internet, in PDF file format only.

http://www.bhas.ba/index.php?option=com\_publikacija&view=publikacija\_pregled&ids=2&id= 7&n=Vanjska%20trgovina&Itemid=&lang=en

#### 6.2 **Data publications**

Final monthly and annual data on BiH international trade in goods statistics are disseminated in the Thematic Bulletin "International Trade in Goods of BiH". The following aggregated sets of data are presented:

- Export and import by years and months, trade balance and export/import ratio,
- Export and import by country of destination and origin,
- Export and import by sections of Customs tariff of BiH (Harmonised System HS),
- Export and import by sections and divisions of Classification of Activities of BiH (NACE rev.2),
- Export and import by sections and division of Standard International Trade Classification (SITC rev.4),
- Export and import by main trading partners and sections of Standard International Trade Classification (SITC rev.4),
- Export and import by Main Industrial Groupings (MIG),
- Export and import by statistical procedure,
- Export and import by invoicing currency.

Data are presented for free on internet in PDF file format only.

http://www.bhas.ba/index.php?option=com\_publikacija&view=publikacija\_pregled&ids=2&id= 7&n=Vanjska%20trgovina&Itemid=&lang=en

Final annual data on BiH international trade in goods are disseminated in the publication "BiH in numbers" (part Foreign Trade) as well. The following data are presented:

- Export and import by branches,
- Export and import by top products,
- Export and import by top partner countries.

Data are presented for free on internet in PDF file format only.

http://www.bhas.ba/index.php?option=com\_publikacija&view=publikacija pregled&ids=6&id= 8&n=BiH%20in%20numbers

#### 6.3 Online database

There is no online database for the BiH international trade in goods statistics.

#### 6.4 Accessibility to microdata

The microdata are not accessible.

#### 6.5 Accessibility to methodology documents

Methodolgy documents can be found on the Internet:

- Quick User Guide BiH International Trade in Goods Statistics http://www.bhas.ba/metodoloskidokumenti/K N-BiH ITGS-eng.pdf
- BiH National Reference Metadata in Euro SDMX Metadata Structure (ESMS) http://ec.europa.eu/eurostat/cache/metadata/EN/ext go esms ba.htm

Information on methodology can also be found in the Press Release and Thematic Bulletin.

#### 6.6 Measures used to improve the accessability and clarity of disseminated results

Data posted at the web page of the Agency for Statistic of BiH are shown in PDF file format only. The Agency for Statistics of BiH is in the process of production of a new website. The new website will present data in excel tables and database with more detailed data.

Users can contact statisticians for any clarifications regarding data.

#### Quality and performance indicator – Consultation of data tables (AC1) 6.7

There is no information for this indicator.

#### 6.8 Quality and performance indicator – Consultation of metadata (AC2)

There is no information for this indicator.

#### 6.9 Quality and performance indicator – Completness rate of metadata (AC3)

The total number of metadata elements from the ESMS v.2.0 (EURO-SDMX Metadata Structure) is 60. The number of available metadata elements for statistical survey "BiH international trade in goods" is 54. Thus, the metadata completeness rate (AC3) for the mentioned survey is 0,9 or 90% (54/60x100).

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#### 7 SURVEY COSTS AND RESPONDENTS/REPORTING UNITS WORKLOAD

#### 7.1 Survey costs for the statistical office

Regarding the cost of human resources, there are two persons working full time on the production of BiH international trade in goods statistics and BiH export and import unit value indices in the Agency for Statistics of BiH.

#### Respondents/reporting units workload 7.2

Administrative data are used. Source of data is the Indirect Taxation Authority and data from Single Administrative Documents are used. Information on respondents' annual workload is not available at the Agency for Statistics of BiH. Only the Indirect Taxation Authority has information regarding these indicators.

### Measures taken to reduce the costs and workload

Administrative data are used. Source of data is the Indirect Taxation Authority. This institution is responsible for introducing measures to reduce respondents' costs and burden.

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### 8 CONFIDENTIALITY

### 8.1 Confidentiality – policy

Statistical data confidentiality is required by law, while the staff in charge of the statistical compilation is also, according to the same legislation, bound to protect that confidentiality.

Thus the Article 27 of the Law on Statistics of BiH states that »All measures of organisational, regulatory, administrative and technical nature necessary to protect Confidential Data against unauthorised access, disclosure and use, shall be taken by the Competent Authorities in collecting, processing, transmitting and dissemination of Statistics of Bosnia and Herzegovina including at the Entity level«, while the Article 28 of the same Law states that »Persons having access to Confidential Data in the performance of their tasks shall be subject to compliance with the provisions of this law, even after the cessation of their functions«.

In addition, the document called the »Rulebook on the Protection of Statistical Data at the Agency for Statistics of BiH« describes the procedures to secure confidentiality during collection, processing and dissemination – including protocols to safeguard individual accessible data, rules to define confidential cells in output tables as well as procedures to detect and prevent disclosure and the access to microdata by external users for research purposes.

### 8.2 Confidentiality – data treatment

Only the persons who work on production of BiH international trade in goods statistics have access to micro data. Confidential data on the server machine are protected from unauthorised access. Micro data are not accessible to researchers.

Micro data are treated in accordance with the Law on Statistics of BiH.

### 9 Statistical processing

### 9.1 Data sources

The only source for BiH international trade in goods data is the Single Administrative Documents (customs declarations) provided by the Indirect Taxation Authority.

Single Administrative Document is a document lodged by declarer (business entity or other authorized person, i.e. freight forwarder) to a customs office for customs clearing. Every Single Administrative Document received from the Indirect Taxation Authority comprises, among other data, data on flow of goods (export or import), tariff code (ten digit code in line with Customs Tariff of BiH), statistical value in KM, quantity in kilograms, but not supplementary quantity except for electricity and gas — MWH and TJ. Supplementary quantity is obtained by applying Eurostat's conversion factors.

### 9.2 Frequency of data collection

Data are collected on a monthly basis.

### 9.3 Data collection

The Indirect Taxation Authority transmits the monthly trade data (Single Adminstrative Documents) on a CD/DVD not later than 7 working days after the end of the reference month. Data are presented in an Access database format.

The database always comprises revised data for the previous months, e.g. the database with the new data for April comprises revised data for January, February and March.

### 9.4 Data validation

Regarding the data validation performed by the Indirect Taxation Authority, for electronic declarations, initial checks are built into the EDI system. Consistency checks are applied later together with checks on duties. The Indirect Taxation Authority does not apply any logical controls or credibility checks on the data submitted by the traders or their agents. Some basic checks are made, which ensure that codes are correct. The Indirect Taxation Authority applies many risk analysis checks on the data, but only for customs purposes.

Regarding the data validation performed by the Agency for Statistics of BiH, validity and credibility checks are performed. A validity error is found when a record is not correct therefore it may cause processing problems, it cannot be included in the statistical analysis and so it must be removed or corrected. Examples of this kind of errors are incorrect or missing codes, missing values in the Single Administrative Documents, character data in numeric field and vice versa, etc. Credibility controls mean checks on the accuracy of data and assessment of all possible errors associated with the data. If errors arise, they are corrected.

Validity controls performed by the Agency for Statisticas of BiH are e.g. country of destination or origin code cannot be found in the list of country codes, product code cannot be found in the list of product codes, statistical value is not entered or is equal to zero etc.

Credibility controls performed by the Agency for Statistics of BiH are e.g. product unit value in KM per kilo for export is outside the predefined range, product unit value in KM per kilo for import is outside the predefined range etc.

### 9.5 Data compilation

The Agency for Statistics of BiH performs automatic processing of electronic Single Administrative Documents in order to obtain data on BiH international trade in goods statistics. During processing, some Single Administrative Documents are excluded in accordance to the special trade system (relaxed definition) as well as international standards which recommend that certain products and transactions should be excluded from international trade in goods statistics (e.g. goods for temporary use, goods for repair etc.).

The validity and credibility controls are performed during processing.

The final results of processing are the following indiators:

- Flow (export or import)
- Year
- Month
- Partner country
- Product defined by Customs tariff of BiH
- Statistical value
- Quantity in kilograms
- Quantity in supplementary units
- Statistical procedure
- Mode of transport at the frontier
- Nationality of the means of transport at the frontier
- Container

### 9.6 Data adjustments

Adjustments are not performed with BiH international trade in goods data.