Statistical product – Foreign Trade (import, export) Price Index (without humanitarian aid) / import average (average value) price indexes (monthly), export average (average value) price indexes (monthly)

Processes	Sub-processes	Sub-process description
1. Specify needs		
	1.1 Determination of needs	The necessity of estimating average import and export foreign trade price index is conditioned by securing the statistical observation of change in import and export price level, which is estimated upon statistical indicators on the request of both structural units of Armstat conducting surveys and statistical information users. Foreign trade price index is applied in economics for developing strategies, solving tactical issues, analyzing foreign investments in economic sectors, analyzing business environment, as well as for identifying social development trends and for other purposes, while in national accounts it is used as deflator for Armstat domestic purposes. Foreign trade price index groupings are provided, upon request, to main information users; state government and local self-government bodies, non-governmental, scientific and educational, financial organizations, business community, mass media, Central bank, international organizations and other subjects in demand for it, following the legislative requirements on their confidentiality.
	1.2 Consulting & confirmation of needs	Consultations on estimation methodology of average foreign trade price index have been conducted with International Monetary Fund (IMF).
	1.3 Establishment of output objectives	In order to meet international criteria, methodological surveys of estimating average foreign trade price index are conducted, as required. The opinion of statistical information users related to the Five–Year and Annual Statistical Programs is periodically studied to reveal their attitude related to the inclusion of the proposed new indicator, as well as to the available indicator, the needs and expectations. Information users opinions on the statistical indicators are studied through the work discussions

		with them, as well as through the "User satisfaction survey questionnaire" which is available on Armstat website (see: https://www.armstat.am/am/?nid=131).
	1.4 Identification of concepts	The following concepts lie on the bases of estimating average foreign trade price or unit value index: • Methodological selection of average foreign trade price index estimation, according to international criteria, • The application of classification of Commodity Nomenclature of Foreign Economic Activity (hereafter CNFEA) by the following sectors: all countries, CIS countries, other countries of the world, including European Union (hereafter EU) countries • Information processing of primary import and export customs declaration data, based on customs statistics. The main users of average foreign trade price index are Armstat Macroeconomic Indicators and National Accounts and Balance of Payments and Foreign Trade Statistics structural divisions. The developing strategy also considers to the possible extent all suggestions and requirements that have been presented by the above-mentioned divisions.
	1.5 Checking the data availability	The data are collected based on the Law on "Official Statistics" and "Five Year Statistical Program", as well as the Resolution No. 05-N of RA State Council on Statistics "On Approval of the Procedure for the collection of statistical data" dated 20 June 2016 and Resolution "On Approval of Annual Statistical Program". The information serving as a basis for estimating average foreign trade price index includes data on quantity and volume of imported and exported products, which serves as the basis for further calculations.
	1.6 Preparation of business case	Before the development of calculation methodology of average foreign trade price index, work discussions on key issues were held with both Armstat appropriate structural divisions and other interested bodies, scientific organizations and users, opinion of international experts is considered where available.
1. Design		
	2.1 Design outputs	The main stage of the formation process of average

		foreign trade price index are: 1. Update of foreign trade information database 2. Formation of indicator weighting system in different aggregation levels by the following directions: all countries, CIS countries, other countries of the world, including EU countries. 3. In order to avoid big price deviations, the smoothing method of permissible upper and lower borders of indices is applied by average weighted squared deviations of separate goods and with the help of (through) coefficients of deviations calculated on their basis 4. Calculation of average import, export price index by the following directions of CNFEA classification: all countries, CIS countries, other countries of the world, including EU countries 5. Publication of price indices
	2.2 Design variable descriptions	Population It is the information on import and export volumes (expressed in kind or value) forming the part in the foreign trade of the Republic of Armenia. Geographical coverage It covers the entire economic territory of the Republic of Armenia, which is adjusted to its customs territory. Goods coverage Goods coverage involved in indices calculation is connected with population of goods exported in the base year and with applied border coefficients. Unit value price The ratio of goods and number, when in case of lowest detailing two or a few goods with different qualities are classified with the same 10-digit code. Border coefficients In order to avoid big price deviations, the smoothing method of permissible upper and lower borders of indices is applied by using the border coefficients. Those products that have price deviations more than the calculated border coefficient (with decreasing or increasing way), it means that average value changes

		(indices) are out of those ranges and do not participate in future calculations. The upper and lower permissible borders of the index are defined by the average weighted squared deviations of separate goods and with the help of (through) coefficients of deviations calculated on their basis.
	2.3 Design data collection	Data collection is conducted by RA State Revenue Committee.
	2.4 Design of general population and sampling	See point 4.1
	2.5 Process and analysis design	After the provision of information the statistical indicators are subject to arithmetic and logical checks, and based on them adjustments are made where required.
	2.6 Design production systems & workflow	The preparatory work, particularly the formation of electronic calculating tables, is carried out during all processes started from the provision of information until its publication.
2. *Build*		
	3.1 Build data collection instrument	See point 4.1
	3.2 Build or enhance process components	The methodological guidelines necessary for information verification are available. Input software package (Microsoft Office Access) has necessary tools for arithmetic and logical checks of input data, systems for checking the sum total, logical chains, identification codes and other automated check systems.
	3.3 Build or enhance dissemination components	The dissemination of information is possible in paper, as well as in electronic form of publication of information on monthly, quarterly and annual basis.
	3.4 Regulation of processes	The derivation of statistical product is carried out by the following stages: 1. Retrieving relevant information through MSOffice Access software from Armstat Balance of Payments and Foreign Trade Statistics Division. 2. Arithmetical and logical checks and adjustments, 3. Calculation of final outcome of statistical product

		4. Provision of information to structural divisions for further calculations 5. Provision of aggregated data to users of statistical information
	3.5 Test statistical system	In case product coding of CNFEA classification (classified according to 1339 commodity subgroups, 97 commodity groups and 21 commodity sections) are changed, testing of estimating unit value index is conducted with appropriate changes in classification.
	3.6 Test statistical business process	Conditioned by methodological changes, relevant changes are also made in software for implementation of software testing.
	3.7 Finalize production system	Accurate implementation of changes in software conditioned by points 3.5 and 3.6 for calculation of foreign trade indices.
3. Collection		
	4.1 Design general population and sampling	*General population* is formed on the bases of import and export product database at the beginning of each accounting year, according to all countries, CIS countries, other countries of the world, including EU countries dirrections; product *sample* is formed each month in base year and in accounting month, on the basis of concurring products.
	4.2 Set up collection	Each month the Customs Service of the Republic of Armenia provides the Balance of Payments and Foreign Trade Statistics Division of Armstat with information database on volumes of RA foreign trade.
	4.3 Run collection	Data collection is implemented by Customs Service of the Republic of Armenia. Import and export customs declarations are considered as primary data source.
	4.4 Finalize collection	See point 4.1
4. Process		
	5.1 Integrate data	Each month the Balance of Payments and Foreign Trade Statistics Division of Armstat provides Price Statistics and International Comparisons Division with information database with MS Office Access software necessary for calculating foreign trade unit value index.
	5.2 Classify & code	Import and export products included in information

		database provided by the Customs Service of the Republic of Armenia are classified and coded according to CNFEA classification.
	5.3 Review and approval	No review and approval is made in information database, provided by Armstat Balance of Payments and Foreign Trade Statistics Division.
	5.4 Edit & input	No calculation of missing product prices is made.
	5.5 Derive new variables & units	The calculation of average foreign trade (import and export) price index is conducted through new variables, i. e. the calculation of price indices, on the bases of price information.
	5.6 Calculate weights	Weighting system is formed in different aggregation levels according to value indicators of import and export volumes of all countries, CIS countries, other countries of the world, including EU countries directions.
	5.7 Calculate aggregates	Calculation of foreign trade indices according to import and export to all countries, CIS countries, other countries of the world, including EU countries directions is conducted via Laspeyres formula, on monthly basis. Monthly price index is calculated by base method.
	5.8 Finalize data files	The calculation of average foreign trade (import and export) price index is considered final. It is recalculated only on the bases of accurate information database provided by the Customs Service of the Republic of Armenia.
5. Analyse		
	6.1 Prepare draft outputs	Quality distinction and seasonal variation adjustments are not made to the calculation of average foreign trade (import and export) price index.
	6.2 Validate outputs	The methodological requirements to the received indicators are strictly followed during the whole process of receiving according to the pre-defined classifications and methodological guidelines.
	6.3 Explanation and interpretation of outputs	After derivation of aggregated indicators their logical analysis is carried out using dynamics of relevant indicators for previous months.
	6.4 Apply disclosure control	The confidentiality of statistical indicators (not containing individual (personal) data) that is subject to publication, as well as requested by the users of statistical information is strictly followed according to the Law on Official Statistics and the Resolution

		of the SCS No 53 " Approval of the Order on Protection of Statistical Confidentiality" dated 25 June 2001, and only summarized data are provided (see: https://www.armstat.am/file/doc/99454478.pdf).
	6.5 Finalize outputs	Before the final information by purposes is applied, the correction of data transfered from database to output tables is checked, according to import and export to all countries, CIS countries, other countries of the world, including EU countries directions.
6. *Dissemination*		
	7.1 Update output systems	At the end of each accounting year information database and calculation tables of imports and exports are updated and prepared for the next accounting year.
	7.2 Produce dissemination	The information on the statistical indicators in Armenian, Russian, English through the yearbooks, statistical handbooks and monthly data reports: • "Statistical Yearbook of Armenia" (Armenian, Russian, English) • "Armenia in Figures", statistical handbook (Armenian, English) • "The Prices and Price Indices in the Republic of Armenia" statistical handbook (Armenian, English) Electronic form Electronic versions of publications are available in Armenian (full), Russian, English at the following address: http://www.armstat.am/am/?nid=82 Monthly and historical datas are available in Armenian, English at https://armstatbank.am/pxweb/en/ArmStatBank/?rxid=602c2fcf-531f-4ed9-b9ad-42a1c546a1b6,602c2fcf-531f-4ed9-b9ad-42a1c546a1b6.
	7.3 Manage release of dissemination products	The dissemination of statistical information is carried out according to the schedule envisaged by the Five-Year and Annual Statistical Programs. In case of the changes and adjustments made in the indicators provided by the providers of statistical information the indicators already published by the Armstat are also being changed and adjusted correspondingly.
	7.4 Promote dissemination products	Submission of dissemination products. Use of tools to manage communication with users. Use of website, facebook, etc.

	7.5 Manage user support	In case of the official request of the users of statistical information related to the information not being published, the calculation of additional indicators is carried out at possible extend and submitted to them following the principle of confidentiality of statistical information.
7. Evaluation		
	8.1 Gather evaluation input	Data (import and export customs declarations) provided by the Customs Service of the Republic of Armenia serve as means of assessing information credibility on indicators included in database of foreign trade (import and export) price statistics.
	8.2 Conduct evaluation	Qualitative assessment of indicators in foreign trade (import and export) price statistics is carried out in collaboration with Armstat Balance of Payments and Foreign Trade Statistics Division.
	8.3 Agree action plan	In the case of detection of discrepancies between the information received from different sources on the same indicator being compared, the revealing of the possible reasons is carried out, and the corresponding final adjustment is implemented based on it.