

INTERNATIONAL MONETARY FUND

AZERBAIJAN

**Report on the Observance of Standards and Codes (ROSC)—Data Module
Volume I**

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This Data Module of the Report on the Observance of Standards and Codes (ROSC) provides an assessment of Azerbaijan's macroeconomic statistics against the Special Data Dissemination Standard (SDDS) complemented by an assessment of data quality based on the IMF's Data Quality Assessment Framework (DQAF), July 2003. The DQAF lays out internationally accepted practices in statistics, ranging from good governance in data-producing agencies to practices specific to datasets.

The dataset covered in this report is the consumer price index. The agency that compiles the dataset assessed in this report is the State Statistical Committee (SSC).

The datasets to which this report pertains can be accessed in print and on the Internet:

SSC: <http://www.azstat.org/indexen.php>

This report is based on information provided prior to and during a mission that took place during February 11–22, 2008 and publicly available information. The mission comprised Mr. Kimberly D. Zieschang.

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Acronyms

<i>1993 SNA</i>	<i>System of National Accounts 1993</i>
COICOP	Classification of Individual Consumption by Purpose
CPI	Consumer Price Index
<i>CPI Manual</i>	<i>Consumer Price Index Manual 2004</i>
DQAF	Data Quality Assessment Framework
DSBB	Dissemination Standards Bulletin Board
GDDS	General Data Dissemination System
HBS	Household Budget Survey
ROSC	Report on the Observance of Standards and Codes
SDDS	Special Data Dissemination Standard
STA	IMF Statistics Department

I. OVERALL ASSESSMENT

1. Azerbaijan began participation in the General Data Dissemination System (GDDS) on July 6, 2001, with metadata posted on the Dissemination Standards Bulletin Board (DSBB). Azerbaijan's Consumer Price Index (CPI) meets Special Data Dissemination Standard (SDDS) specifications for coverage, periodicity, and timeliness. Appendix Table 4 provides an overview of Azerbaijan's dissemination practices for the CPI compared with the SDDS.
2. This Report on the Observance of Standards and Codes (ROSC) data module covers consumer price statistics. This report assesses this dataset against the requirements of the SDDS using the July 2003 version of the IMF's Data Quality Assessment Framework (DQAF). It is a reassessment of the CPI component of the data module for Azerbaijan conducted in 2002 against the recommendations of the GDDS on the basis of the July 2001 version of the DQAF. In the interval since the last assessment, practices have been strengthened in confidentiality, relevance, professional independence, transparency, classification, source data, statistical techniques, cross-dataset consistency, and metadata accessibility. Applying the more demanding standard of the most recent version of the DQAF against the broadly improved statistical practices of the CPI has changed somewhat the pattern of the assessments for the CPI in this ROSC as compared with the 2002 ROSC.
3. The CPI is compiled and disseminated by the State Statistical Committee (SSC) within a strong legal and institutional framework and with adequate resources. The SSC is established at the center of the statistical system by the Law on Official Statistics (as amended October 20, 2006) and the Statute on the State Statistical Committee (November 24, 2005). The SSC has broad data collection, data sharing, and coordination functions and powers in the statistical domain. Confidentiality of individual reporters' information is strongly supported in law and practice. The CPI statistical program has adequate resources, including staff to achieve its objectives, and is directed by a five-year Program of Statistical Development and an annual Program of Statistical Work covering all SSC statistical products that are approved at the executive levels of government. Concerning relevance, the legal and institutional framework in place since 2006 provides a solid basis for user feedback with the creation of a broadly-representative Statistical Council. The Council is charged with taking user concerns into account in its already functioning and legally sanctioned consultative role to the SSC in determining the five-year Program of Statistical Development and Annual Program of Statistical Work. The minutes of the Council's meetings are available on request, and it may express its views to the public.
4. Foreshadowing the assessment below, the mission considers that the CPI currently is a methodologically sound and reliable inflation indicator, but there is scope to maintain the relevance of the CPI by taking sustained action to address user concerns about how well it measures inflationary pressure. Based on its current channels of information, the SSC believes that most users give greatest attention to the level and importance in the index of inflation in basic goods and services in the CPI, such as food. A recent user issue has concerned how well the CPI represents, and combines into the national index, the regional price developments in Azerbaijan. Looking ahead, the treatment of housing may need further examination in view of recent economic developments.

5. In applying the IMF's DQAF, the remainder of this section presents the mission's main conclusions. The presentation is done at the level of the DQAF's quality dimensions, focusing on the SSC for the first two dimensions and on the CPI dataset for the remaining four.

6. Production of the CPI is well supported by ample assurances of integrity. Section IV of the Law on Official Statistics guarantees the professional independence of the SSC and Article 10 provides the statutory basis for independently selecting sources and methods. The SSC has responded, as appropriate, to specific criticism of its estimates by external users, usually through the news media, under its obligations set out in Article 6 of the Law. The Law on Official Statistics and the Statute on the State Statistical Committee specify comprehensively the terms and conditions under which statistics are collected, processed and disseminated, and are posted in Azerbaijani and English on the SSC website. The monthly CPI figures are released to all users simultaneously via the SSC website. All outputs of the SSC are clearly identified as such, including in republication of its CPI data on the website of the National Bank of Azerbaijan. The SSC gives users a one-month advance reminder of its annual update for CPI weights in its statistical bulletin, and a one-month advance notice of updates to the CPI item list, as required. Ethical standards of behavior are well established in law and well known to the staff.

7. The concepts and definitions are generally in line with international standards and guidelines as defined in the *System of National Accounts 1993 (1993 SNA)* and *Consumer Price Index Manual 2004 (CPI Manual)*. The CPI meets scope requirements. Included institutional units and transactions are broadly in line with the *1993 SNA*. The Classification of Individual Consumption by Purpose (COICOP) has been used in the Household Budget Survey (HBS) since 2002 and the CPI since 2003.

8. The CPI has good data sources for both weights and prices. These are based on well-designed household and retail establishment surveys with comprehensive coverage of their target populations, well matched to the concepts and definitions selected for the index, and having sufficient detail by geographical area and category of household expenditure. The surveys produce commendably timely data. HBS data for weights are available by February following the most recent survey year, and price data are in by the fifth of the month after the survey month. Since 2007, HBS expenditure data have been used for the weighting of the CPI survey regions within the economic regions, as well as combining the 11 economic regions into the national index. The goods and services detail of the CPI weights is adequate, with product specifications sufficiently narrow and well described to enable monthly comparison of prices of the same set of items. The index is annually rebased, and a short description of products increasing and decreasing in weight is provided to users in the monthly bulletin. However, the CPI expenditure weight for the expenditures on housing services by households owning their own dwellings deviates from the imputed rentals concept in household final consumption expenditure. Measuring asset prices for housing is noted in the *CPI Manual* as a complementary approach to measuring imputed rentals of housing services for owner-occupants. Given the lack of information in this area, the mission suggests that an expert group study and propose options for improving the measure of housing consumption prices and developing a measure of housing asset prices.

9. The CPI periodicity and timeliness meet and exceed SDDS requirements, respectively. The monthly index is usually published by the 10th of the month following the survey month. It is internally consistent and tracks other SSC price indexes well when matched item for item. The expenditure coverage in the CPI dataset is fully consistent with household final consumption expenditure coverage in the national accounts dataset—apart from owner-occupied dwellings. Both incorporate the National Accounts Division’s adjustment of comparable aggregates from the HBS using selected totals from the retail trade survey and certain adjustments that correct for specific items thought to be under-reported by households on the HBS.

10. Accessibility of the CPI follows good practices regarding availability of metadata and assistance to users. Data accessibility meets or exceeds SDDS periodicity and timeliness. Advance notice of CPI releases can be inferred from the prescribed maximum publication lags in the Annual Statistical Program, and the SSC has posted a sample SDDS advance release calendar on its website. However, the advance release calendar did not contain release dates for at least the next three months at the time of the mission, and is not updated from a “not later than” date to an exact date by the last business day of the week preceding the release.

11. Section II provides a summary assessment based on a four-part scale. This is followed by staff recommendations in Section III. Practices compared to the SDDS are summarized in Appendix Table 4. The authorities’ response to this report and a volume of detailed assessments are presented in separate documents.

II. ASSESSMENT BY AGENCY AND DATASET

12. Assessment of the quality of the CPI was conducted using the DQAF, July 2003. In this section, the results are presented at the level of the DQAF elements and using a four-point rating scale (Table 1). Assessments of the prerequisites of data quality and the assurances of integrity (Dimensions “0” and “1” of the DQAF) are presented in Table 2. The assessment of methodological soundness, accuracy and reliability, serviceability, and accessibility (Dimensions “2” to “5” of the DQAF) are shown in Table 3.

Table 1. Azerbaijan: Data Quality Assessment Framework, July 2003—Summary Results

Key to symbols: O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed;
NO = Practice Not Observed; NA = Not Applicable

Dimensions/Elements	Datasets	Consumer Price Index
0. Prerequisites of quality		
0.1 Legal and institutional environment		O
0.2 Resources		O
0.3 Relevance		LO
0.4 Other quality management		O
1. Assurances of integrity		
1.1 Professionalism		O
1.2 Transparency		O
1.3 Ethical standards		O
2. Methodological soundness		
2.1 Concepts and definitions		O
2.2 Scope		O
2.3 Classification/sectorization		O
2.4 Basis for recording		O
3. Accuracy and reliability		
3.1 Source data		O
3.2 Assessment of source data		O
3.3 Statistical techniques		LO
3.4 Assessment and validation of intermediate data and statistical outputs		O
3.5 Revision studies		O
4. Serviceability		
4.1 Periodicity and timeliness		O
4.2 Consistency		O
4.3 Revision policy and practice		O
5. Accessibility		
5.1 Data accessibility		LO
5.2 Metadata accessibility		O
5.3 Assistance to users		O

Practice observed: Current practices generally meet or achieve the objectives of DQAF internationally accepted statistical practices without any significant deficiencies. **Practice largely observed:** Some departures, but these are not seen as sufficient to raise doubts about the authorities' ability to observe the DQAF practices. **Practice largely not observed:** Significant departures and the authorities will need to take significant action to achieve observance. **Practice not observed:** Most DQAF practices are not met. **Not applicable:** Used only exceptionally when statistical practices do not apply to a country's circumstances.

Table 2. Azerbaijan: Assessment of Data Quality—Dimensions 0 and 1—State Statistical Committee

0. Prerequisites of quality	1. Assurances of integrity
<p>Legal and institutional environment The Law on Official Statistics and the Statute on the State Statistical Committee strongly support the SSC's role as the central national statistical organization with broad powers in statistical collection, processing, and dissemination. SSC access to administrative records across the government is legally assured. Confidentiality is strongly protected at multiple points throughout the Law and the Statute. Reporting on SSC surveys is legally mandatory, but the SSC is required to consider respondent burden in survey design.</p> <p>Resources The CPI Section of the SSC Price Statistics Division is adequately staffed. Access to and design of IT infrastructure supports smooth operation of the CPI program.</p> <p>Relevance The Law on Official Statistics directs the establishment of a Statistical Council of users from government, business, unions, academia, and the public to ensure the CPI is relevant for user needs. The SSC could use the Council to help identify underlying user concerns that may undermine confidence in the published CPI. In addition to issues arising such as the representativeness of product and area weighting, there is scope to discuss the CPI's treatment of housing inflation within the Council. The SSC believes user concerns now focus more on inflation in other areas such as food. The SSC intends to continue efforts at user education.</p> <p>Other quality management The SSC proposes the Program of Statistical Work in consultation with the Statistical Council for approval by the Council of Ministers. Plan development follows a systematic procedure and execution of the plan is broadly successful. Quality is a strong consideration in survey design and management as well as the design of index calculation and dissemination procedures.</p>	<p>Professionalism The legislation governing the SSC strongly supports the independence of statistical compilation from the policy stance taken by the government, including the choice of sources and methods used in statistics. The mission found no evidence that the SSC and the other agencies of the government have not fully adhered to the legal requirements ensuring the SSC's autonomy in statistical matters. The SSC responds, and has responded, as appropriate, to specific criticisms of its estimates by external users, usually through the news media, under its obligations set out in the Law on Official Statistics.</p> <p>Transparency The Law on Official Statistics and the Statute on the State Statistical Committee specify comprehensively the terms and conditions under which statistics are collected, processed and disseminated. The monthly CPI figures are released to all users simultaneously via the SSC website. All outputs of the SSC are clearly identified as such, including in republication of its CPI data on the website of the National Bank of Azerbaijan. Users are given one month notice in the monthly bulletin on price statistics of changes in methodology.</p> <p>Ethical standards Guidelines prohibiting outside work and breaching the security of confidential data are stated in law and clearly known to the staff. The law provides for legal liability for nonobservance of its provisions and makes reference to established penalties for offenses.</p>

Table 3. Azerbaijan: Assessment of Data Quality—Dimensions 2 to 5—Consumer Price Index

2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility
<p>Concepts and definitions The concepts and definitions used are generally in line with internationally accepted standards and guidelines.</p> <p>Scope The scope of expenditures coincides with household final consumption expenditures in the national accounts.</p> <p>Classification/sectorization Institutional units and transactions are classified in line with the 1993 SNA. COICOP has been used as the classification system for the HBS since 2002 and in the CPI since 2003.</p> <p>Basis for recording The HBS, which is the basis for the CPI weights, and the CPI price collections themselves measure consumption at market purchasers' prices. Expenditures and price observations pertain to the years and months in which households acquired ownership of the goods or received the services they purchased. The weights for consumer durables, comprising the purchase of cars, furniture, appliances, and so on, are measured net of sales.</p>	<p>Source data The HBS and the retail establishment survey for the CPI use modern designs producing representative samples of households and retail outlets. Household point of purchase information is not believed to be relevant. The source data for the CPI are commendably timely.</p> <p>Assessment of source data Unit and item nonresponse are monitored closely on the HBS. The household sample is periodically augmented to offset attrition. The retail establishment sample is routinely refreshed.</p> <p>Statistical techniques Current standard international recommendations are used in the index formula, in elementary aggregation, in imputation of missing and seasonal items. The treatment of expenditures on the services of owner-occupied housing differs from the national accounts.</p> <p>Assessment and validation of intermediate data and statistical outputs Changes in the CPI are cross-checked against the PPI.</p> <p>Revision studies The SSC reviews changes in the CPI weights at rebasing.</p>	<p>Periodicity and timeliness Periodicity meets and timeliness exceeds SDDS requirements.</p> <p>Consistency The CPI is internally and temporally consistent. Its expenditure aggregate is identical with the household consumption expenditure aggregate in the national accounts, except for owner-occupied housing.</p> <p>Revision policy and practice The CPI weights are updated annually, with HBS-based weights from the previous year incorporated into the index in the April release of the following year.</p>	<p>Data accessibility CPI price index data are published by categories of goods and services and for the 11 economic regions, with charts in some publications. Some commentary is included on the changes that have occurred. The SSC uses "not later than" release dates for the CPI that it almost always more than meets; however the SDDS format release calendar current to SDDS requirements. Unpublished tables can be provided to users as long as they do not violate confidentiality (Article 22, Law on Official Statistics). The CPI price index data are already published at a high level of detail (569 items beginning March 2008).</p> <p>Metadata accessibility Metadata have been posted on the IMF's GDDS website since February 2001 and were most recently updated in November 2007.</p> <p>Assistance to users Contact persons names and telephone numbers are published in the monthly and annual prices publications. The "Catalog of Statistical Publications" is available annually in hard copy and on the SSC website. It contains contact addresses, phone numbers, and expected publication dates of SSC products.</p>

III. STAFF'S RECOMMENDATIONS

13. Based on the review of statistical practices, discussions with the data producing agencies, and responses from data users (see Appendix III of the Detailed Assessments volume), the mission has developed a set of recommendations. They are designed to increase further adherence to internationally accepted statistical practices and would, in the mission's view, enhance the analytical usefulness of the CPI. Some additional technical suggestions are included in the Detailed Assessments volume.

- The SSC could use the recently-formed Statistical Council more proactively to help identify and address users' concerns in order to foster confidence in the published CPI.
 - The Council would be a good forum to inform users about the impacts of the SSC's confidentiality policy. To provide a margin of error in ensuring that its disclosure rules are met, the SSC has had to limit the disseminated detail of the HBS expenditure information that is used for the CPI weights. At least one user did not understand the reason for this.
 - The Council could be made aware of user concerns arising on, for example, the product and area weighting of the CPI, as well as any internal and external assessments of such issues.
 - The SSC also could propose discussion of forward-looking matters such as price indicators to meet new measurement needs with the Council
- The SSC should technically evaluate the rental equivalence and user cost approaches to covering the housing services consumption of households that own their dwellings and the net acquisitions approach to households' capital formation expenditures for dwellings. While collaboration between the Price Statistics Division, National Accounts Division, and Scientific-Methodology Council would be essential, a specific advisory expert group of SSC and outside experts on the topic of housing could be useful in the evaluation as well.
- Keeping the SDDS advance release calendar current and making this site known through user outreach could help improve user confidence in the transparency and professionalism with which the CPI is compiled, and would align this practice with SDDS requirements.

Appendix Table 4. Azerbaijan: Practices Compared to the SDDS Coverage, Periodicity, and Timeliness of Data

SDDS Data Category	Coverage (meets SDDS requirement)	Periodicity		Timeliness		Comments
		SDDS	Azerbaijan	SDDS	Azerbaijan	
Real Sector						
Consumer Price Index	Yes	M	M	M (GDDS 1-2 M)	NLT 10d	—

Note: Periodicity and timeliness: (D) daily; (W) weekly or with a lag of no more than one week from the reference data or the closing of the reference week; (M) monthly or with a lag of no more than one month; (Q) quarterly or with a lag of no more than one quarter; (A) annually; and (...) not applicable.

Italics indicate encouraged categories.