

#### INTERNATIONAL MONETARY FUND

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## **MEXICO**

November 2013

# REPORT ON THE OBSERVANCE OF STANDARDS CODES—DATA MODULE

This Report on the Observance of Standards and Codes—Data Module for Mexico was prepared by a staff team of the International Monetary Fund as background documentation for the periodic consultation with the member country. It is based on the information available at the time it was completed on November 8, 2013. The views expressed in this document are those of the staff team and do not necessarily reflect the views of the government of Mexico or the Executive Board of the IMF.

The Response by the Authorities to this report and the Detailed Assessments Using the Data Quality Assessment Framework (DQAF) are also included.

The policy of publication of staff reports and other documents by the IMF allows for the deletion of market-sensitive information.

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#### INTERNATIONAL MONETARY FUND

## **MEXICO**

November 8, 2013

# REPORT ON THE OBSERVANCE OF STANDARDS AND CODES (ROSC)—DATA MODULE VOLUME I

The Report on the Observance of Standards and Codes (ROSC)—Data Module provides an assessment of Mexico'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) 2012. The DQAF lays out internationally accepted practices in statistics, ranging from good governance in data-producing agencies to practices specific to datasets.

The datasets covered in this report are consumer and producer price indices statistics. The agency that compiles the datasets assessed in this report is The National Institute of Statistics and Geography (INEGI).

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

INEGI (<a href="http://www.inegi.org.mx">http://www.inegi.org.mx</a>)

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This report is based on information provided prior to and during a staff mission from November 26 to November 30, 2012 and publicly available information. The mission was conducted by Mr. Dale Smith (Expert),

Mexico is a member of The Group of Twenty, the Organization for Economic Cooperation and Development, and the North American Free Trade Agreement.

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#### **Glossary**

1993 SNA System of National Accounts 19932008 SNA System of National Accounts 2008

COICOP Classification of Individual Consumption by Purpose

CPI Consumer Price Index

DQAF Data Quality Assessment Framework
DSBB Dissemination Standards Bulletin Board

EEA European Economic Area

ENIGH National Survey of Household Income and Expenditure

GDDS General Data Dissemination System

INEGI National Institute of Statistics and Geography

LSNIEG National System of Statistical and Geographical Information Law

PPI Producer Price Index

ROSC Report on the Observance of Standards and Codes

SDDS Special Data Dissemination Standard

SNIEG National System of Statistical and Geographical Information

#### OVERALL ASSESSMENT

- 1. Mexico has been a subscriber of the Special Data Dissemination Standard (SDDS) since August 1996, posting its metadata on the Fund's Dissemination Standards Bulletin Board (DSBB) in March 1998. Mexico is in observance of the SDDS, meeting the specifications for data coverage, periodicity and timeliness, and the dissemination of advance release calendars. Mexico avails itself of a flexibility option on the timeliness of general government or public sector operations. Appendix Table 4 provides an overview of Mexico's dissemination practices compared with the SDDS. This Report on Observance of Standards and Codes—Data Module (data ROSC) focuses on the consumer price index (CPI) and the producer price index (PPI), complementing a 2010 data ROSC covering Mexico's national accounts, government finance, monetary, and balance of payments statistics. This data ROSC is based on the 2012 version of the IMF's Data Quality Assessment Framework (DQAF), which explicitly incorporates international standards updated since the July 2003 version on which the 2010 data ROSC was based. The relevant updates for this assessment are:
- The Consumer Price Index Manual (CPI Manual) was published in 2004 by the Inter Secretariat Working Group on Price Statistics, updating previous guidance from the International Labor Organization of 1983.
- The *Producer Price Index Manual (PPI Manual)* was published in 2004 by the Inter Secretariat Working Group on Price Statistics.
- The System of National Accounts was updated from its 1993 version (1993 SNA) to 2008 version (2008 SNA).
- 2. This data ROSC contains the following main observations. Mexico's CPI and PPI have solid institutional, conceptual and methodological, and source data foundations achieved through implementation of international best practices. Implementation of good practice extends to the serviceability and dissemination aspects of both indexes. Responsibility for compiling and releasing the CPI and PPI were transferred from the Bank of Mexico (BM) to the National Institute of Statistics and Geography (INEGI) in July 2011. This evaluation found the collaboration between the BM and INEGI in the transfer of these two key economic indicators exceptionally successful in view of the improvements concurrently implemented in both the CPI and PPI with the move. A new total quality management system was implemented at INEGI, a new Technical Committee Specializing in Price Statistics (TCSPS) was organized to obtain feedback from user groups, a new system for analysis of the index series was developed, and improvements were made for several important CPI modules such as mobile telephone service, automobile purchase, electricity, gas, and computers.

<sup>&</sup>lt;sup>1</sup> The membership of the IWGPS comprises Eurostat, International Labor Organization (ILO), IMF, Organization for Economic Cooperation and Development (OECD), and United Nations Economic Commission for Europe (UNECE).

- 3. 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, by agency (INEGI) for the first two dimensions and across datasets for the remaining four.
- 4. The CPI and PPI are produced by INEGI under a strong legal and institutional environment preserving the professional independence of, and providing adequate resources for, statistical compilations. The National System of Statistical and Geographical Information Law places INEGI at the center of the statistical system and gives it substantial autonomy in the statistical sphere.
- **5.** The CPI and PPI both benefit from the application of sound practices in concepts and methods. The CPI has commendable coverage of expenditure, including both equivalent rent of owner-occupied dwellings and employer-provided goods as compensation in-kind. The PPI's product indices have a commendably broad coverage of industrial activities comprising 80 percent of total output; however, industry price indexes inclusive of the secondary products of each industry are not available.
- 6. The price surveys of both indices are well designed and carefully implemented, following systematic quality assurance practices. The household expenditure data underlying the CPI's weights need to cover a full year rather than the current three months so that the weights cover a full seasonal cycle. INEGI has begun a continuous household expenditure survey that will supply such information in the future. The PPI weights derive directly from the national accounts supply and use system. Index quality adjustment methodology in both index programs is strong. Both index programs conduct studies of the impacts of weight, methodology, and source data revisions.
- **7. Both indexes exceed SDDS periodicity and timeliness requirements.** The set index revision policy is every four years for the CPI, with weight updates at a more frequent two year interval, and every five years for the PPI, consistent with international good practice. Data are monitored for consistency over time and with other comparable price indicators. Revision policy is clear and public for current revisions to both indexes—up to four months for the PPI—as well as major revisions including to scope, methodology, weights, and baskets. The CPI is internally consistent in aggregation by product/expenditure category and geographic area. Both indexes are available at high levels of detail.
- **8. Accessibility to users is very good.** Data are published in several formats and are available in detail. Detailed and summary methodology documents are available for both indexes. INEGI provides quick and reliable service to index users who have questions, or who need publications or further information on the index, via telephone, through its sales centers, and through its website, including an online chat facility. The INEGI website allows the user to create and download tables and graphs with virtually any format using the data available on the website.

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

#### ASSESSMENT BY AGENCY AND DATASET

**10.** Assessment of the quality of two macroeconomic datasets—CPI and PPI statistics—were conducted using the DQAF. 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. For each dataset, the assessment of methodological soundness, accuracy and reliability, serviceability, and accessibility (Dimensions "2" to "5" of the DQAF) are shown in Tables 3a and b.

#### **Table 1. Data Quality Assessment Framework 2012—Summary Results**

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

	Datasets	Consumer Price Index	Producer Price Index
	nsions/Elements		
0. Pre	requisites of quality		
0.1	Legal and institutional environment	0	0
0.2	Resources	0	0
0.3	Relevance	0	0
0.4	Other quality management	0	0
1. Ass	urances of integrity		
1.1	Institutional integrity	0	0
1.2	Transparency	0	0
1.3	Ethical standards	0	0
2. Met	thodological soundness		
2.1	Concepts and definitions	0	LO
2.2	Scope	LO	0
2.3	Classification/sectorization	0	0
2.4	Basis for recording	0	0
3. Acc	curacy and reliability		
3.1	Source data	LO	0
3.2	Assessment of source data	0	0
3.3	Statistical techniques	0	0
3.4	Assessment and validation of intermediate data and statistical outputs	0	0
3.5	Revision studies	0	0
l. Ser	viceability		
1.1	Periodicity and timeliness	0	0
4.2	Consistency	0	0
1.3	Revision policy and practice	0	0
5. Acc	essibility		
5.1	Data accessibility	0	0
5.2	Metadata accessibility	0	0
5.3	Assistance to users	0	0

**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 Mexico's circumstances.

#### Table 2. Assessment of Data Quality—Dimensions 0 and 1—National Institute of Statistics and Geography (INEGI)

#### 0. Prerequisites of quality

Legal and institutional environment. INEGI's responsibility for compiling and disseminating the consumer and producer price indexes (CPI and PPI) is established under Article 59 of the National System of Statistical and Geographical Information Law (LSNIEG) of April 16, 2008. Article 52 of the LSNIEG provides that INEGI is an agency with technical and managerial autonomy, its own legal status, and its own assets and liabilities. INEGI is responsible also for regulating and coordinating the National System of Statistical and Geographical Information. Under Article 26 of the Constitution it is a public institution with technical and managerial autonomy. All of the key data used for the compilation of the CPI and PPI are generated within INEGI; data sharing across relevant statistical programs is effective. Personnel involved in price index production are aware of the confidentiality of data, which is stressed in personnel training sessions, and in requests for price information to respondents. The legal powers of INEGI to compile information are clearly set out in Chapter V of the LSNIEG. Article 45 defines the obligations of respondents, while Article 40 requires respondents to provide the information requested in a truthful and timely manner.

**Resources.** There is sufficient staff to carry out current activities. Gaps in the skills required for the staff are continuously analyzed and identified, with the aim of reducing them through the training program. There are yearly training cycles to introduce new methodology and to refresh instructions for price collectors. The prices program has sufficient computer equipment and administrative support for the efficient compilation and management of databases. Computing resources are adequately protected, inter alia, by providing emergency backup systems for the retrieval of statistical series and updates in the event of natural disasters, accidents or other extraordinary events. Contingency plans have been tested during drills, achieving the compilation of the CPI in remote locations. The headquarters building and regional office space are adequate to perform activities involved in the collection of data and the compilation of the CPI. The ongoing activities for price collection and compilation of the CPI and PPI have adequate funding.

#### 1. Assurances of integrity

**Professionalism.** Professional competence is the basic principle for recruitment and promotions of the INEGI staff. The choice of sources and methods is governed only by statistical considerations.

The INEGI prepares press notes stating its position against errors of interpretation, making these notes available to the public on the web page of the Institute.

**Transparency.** Press releases indicate that the published data are compiled under the responsibility of INEGI and in accordance with the LSNIEG. The autonomy conferred to the INEGI guarantees that no government authority has access to the statistics before their release. The data are published in a press release with the logo of the INEGI. Changes in the base years or methodologies of the CPI and PPI and any substantial modification of the source data are publicized in advance.

**Ethical standards**. The conduct of INEGI's staff is subject to the norms and sanctions established by the Federal Law on Administrative Responsibilities of the Public Servants and to INEGI's ethical code issued under Article 7 of LSNIEG.

Table 2. Assessment of Data Quality—Dimensions 0 and 1—National Institute of Statistics and Geography (INEGI)  (concluded)				
0. Prerequisites of quality	1. Assurances of integrity			
Relevance. The public is able to make requests for information as well as suggestions through the Information Request System provided by INEGI at the web link <a href="http://www.infomex.inegi.org.mx/infomex/">http://www.infomex.inegi.org.mx/infomex/</a> . In addition, INEGI is able to monitor user needs by studying requests for information received via information sales centers and e-mail. INEGI recently established a Committee of Users of Information on Prices (CUIP) that meets regularly to discuss issues relating to the CPI and the PPI. The CUIP membership includes representatives from outside the government.				
<b>Other quality management.</b> Article 3 of the LSNIEG states that the INEGI has the objective of providing to society and to the State quality information that is relevant, trustful, and timely, in order to promote national development. ISO 9001:2008 governs the development of INEGI price indexes. Quality standards are designed to enhance efficiency in the use of resources.				

#### 2. Methodological soundness

Concepts and definitions. The compilation of the CPI uses concepts and definitions that follow international standards given in the 2008 SNA and the 2004 CPI Manual

**Scope.** The CPI measures the change in prices of a fixed basket of goods and services representative of the final consumption expenditures of households located in urban areas with population greater than or equal to 15,000. The CPI weights do not cover expenditures from rural households as well as some urban households from smaller towns. Scope of expenditures by type is notably complete, including the equivalent rent of owner occupants of dwellings and expenditure on goods received as salary in kind.

Classification/sectorization. The CPI is based on the Classification of Individual Consumption by Purpose (COICOP). The market basket for the index consists of 283 elementary items classified into the twelve divisions (major groups) of COICOP.

#### 3. Accuracy and reliability

Source data. The item sample and market basket weights for the CPI are derived from the 2008 National Survey of Household Income and Expenditures (ENIGH), which covers households from all socioeconomic groups in all geographic areas. However, the information for the survey was only collected during a three month period between August and November of 2008, which could lead to potential seasonal biases in the weights. Approximately 117,500 price quotations are collected fortnightly from 20,500 outlets in 46 cities located in 31 states and the Federal District. Rents for approximately 6,500 rental units are also collected semi-annually.

Assessment of source data. Price and product specification data collected for the fortnightly price survey, as well as expenditure data collected for the ENIGH are processed and audited according to procedures established using the total quality management system ISO 9001. These include filters to identify atypical values, temporal and geographic inconsistencies, and periods of no price change.

#### 4. Serviceability

**Periodicity and timeliness.** The CPI is published on a fortnightly basis, exceeding SDDS requirements on both periodicity and timeliness.

Consistency. Compilations are identical regardless of the order of aggregation. The CPI has been compiled and published for elementary concepts (aggregations) that have been in place since January 1969.

Revision policy and practice.
Major CPI revisions were carried out in 1968, 1980, 1994, 2002, and 2010. The next major revision is scheduled for 2014 using expenditure data from the continuous household expenditure survey (ENGASTO) for 2012 or 2013. Major revisions are scheduled for every four years with a weight revision at the two year interval between the major revisions. Detailed documentation for all CPI revisions is available on the INEGI website.

#### 5. Accessibility

Data accessibility. Data are disseminated regularly in detail and in time series, according to a well established production and release schedule, through a fortnightly publication, a press release, and by electronic means. All INEGI publications on the CPI are professionally presented with tables and charts alongside the data to facilitate analysis. These publications are all available on INEGI's website.

Metadata accessibility. A detailed methodological document on the current CPI is available on INEGI website. INEGI has also published a less technical document covering the most frequently asked questions and answers for the CPI, and also has posted the questions and answers on its website.

Assistance to users. INEGI provides quick and reliable service to the index users who have questions regarding the CPI, or who need publications or further information on the index telephone, through its sales centers, and through its website, including an online chat facility. The INEGI website allows the user to create and download tables and graphs with virtually any format using the data available on the website.

Table 3a. Assessment of Data Quality—Dimensions 2 to 5—Consumer Price Index (CPI) (concluded)					
2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility		
Basis for recording. The prices used correspond to market prices paid by households (deducting discounts and rebates, and including all taxes levied on the products). For vehicles, purchases net of sales are used to derive the weights.	Statistical techniques. Missing prices are imputed using observed price changes of other varieties in the same group. Replacement items and or varieties are introduced as needed. Quality adjustments are made using internationally recommended techniques. Elementary aggregates are calculated using geometric means.  Assessment and validation of intermediate data and statistical outputs. Intermediate CPI price data are validated using corresponding data from the PPI. Revision studies. Significant research relating to major index updates (revisions) is carried out on a continuous basis. This research includes estimates of variance in expenditure data from the biannual ENIGH, the effects of changes in market basket weights, and possible index substitution bias.				

#### 2. Methodological soundness

Concepts and definitions. The overall structure of the PPI is based on the concepts and definitions contained in the 1993 SNA, updated to the 2008 SNA, as well as the 2004 PPI Manual.

Nonetheless, indices are compiled only by product classified by economic activity. They are not compiled by economic activity in a process that includes the secondary production of each activity.

**Scope.** The PPI coverage of 80 percent of domestic production is broad compared to the typical coverage in other countries. It encompasses most economic activities including agriculture, forestry, fishing, mining, manufacturing, electricity and energy, water resource exploitation, transport, communication, health services, and professional services. Also included are public and private final consumption services such as paid rent, imputed rent for homeowners, and outsourcing for businesses and equipment repair.

#### 3. Accuracy and reliability

Source data. Each month, approximately 110,000 price observations are collected, corresponding to around 32,400 specific items in 6,410 exclusive information sources for the PPI, and in 14,896 information sources shared with the CPI. Sampling frequency depends on the volatility of prices exhibited by the goods and services of each elementary concept. Farm products prices are processed every working day, while construction products prices are processed every two weeks. The weight structure of the new PPI was determined using the input output matrix updated to 2010.

# Assessment of source data. Monthly price data are audited according to procedures established using the quality management system ISO 9001. These include filters to identify atypical values, temporal and geographic inconsistencies, and periods of no price change.

#### 4. Serviceability

Periodicity and timeliness. The PPI is published on a monthly basis, meeting SDDS requirements on both, periodicity and timeliness. Consistency. Compilations for the PPI are identical regardless of the order of aggregation (by origin or by destination of production). Time series are consistent for elementary concepts since January 1980. Revision policy and practice. Published PPI data are subject to revision for up to four months after

Published PPI data are subject to revision for up to four months after publication. Virtually all revisions are due to revisions in oil prices. Major revisions of the PPI were carried out in 1980, 1994, 2003, and 2012. It is expected that the next major PPI revision will be carried out in 2016 based on the 2014 economic census covering data from calendar year 2013. INEGI has established a plan to carry out major revisions for the PPI every five years following the schedule for the economic census conducted every five years.

#### 5. Accessibility

Data accessibility. Data are disseminated regularly in considerable detail and in time series, according to a well established production and release schedule, through a monthly publication, a press release, and by electronic means. All INEGI publications on the PPI are professionally presented with tables and charts alongside the data to facilitate analysis. These publications are all available on INEGI's website.

Metadata accessibility. There are two detailed methodological documents available on the INEGI website for the PPI: Methodological Document of the National Producer Price Index; and Methodological Note on the Producer Price Index.

Assistance to users. INEGI provides quick and reliable service to index users who have questions regarding the PPI, or who need publications or further information on the index telephone, through its sales centers, and through its website, including an online chat

Table 3b. Assessment of Data Quality—Dimensions 2 to 5—Producer Price Index (PPI) (concluded)					
2. Methodological soundness	3. Accuracy and reliability	4. Serviceability	5. Accessibility		
Classification/sectorization. For the new PPI, economic activities and products are classified using the North American Industrial Classification System (NAICS).  Basis for recording. Factory gate prices are obtained from a monthly survey of producers, and do not include taxes, transportation costs, and insurance fees. Prices are determined for specific products and not for unit values. The specifications include all price determining characteristics including the terms of the transaction, brand, presentation, weight, and number of units sold. Due to the broad nature of the index and, in order to avoid double counting, the weights are based on net output.	Statistical techniques. Missing prices are imputed using observed price changes of other product specifications in the same establishment and/or elementary aggregate. Replacement specifications are introduced as needed. Quality adjustments are made using internationally recommended techniques. Elementary aggregates are calculated using geometric means. Assessment and validation of intermediate data and statistical outputs. PPI index data are validated by comparing these data with corresponding index data from the CPI.  Revision studies. Research relating to major index updates (revisions) is carried out on a continuous basis, including to assess the potential for long-term substitution bias. The results of these studies are presented to the quality committee, which meets monthly, and decisions are made to determine the actions to be taken to correct potential problems with the index. These index reviews, as well as the actions taken, are documented and audited as part of ISO 9001 procedures.		facility. The INEGI website allows the user to create and download tables and graphs with virtually any format using the data available on the website.		

#### STAFF'S RECOMMENDATIONS

11. Based on the review of Mexico's statistical practices, discussions with the data producing agencies, and responses from data users, the mission has developed a set of recommendations. They are designed to increase further Mexico's adherence to internationally accepted statistical practices and would, in the mission's view, enhance the analytical usefulness of Mexico's statistics.

#### **Consumer price index**

- The CPI weights should be based on survey data (among other sources) covering a full seasonal (annual) cycle; forthcoming continuous household expenditure survey data can be used to compile these weights.
- Research the impact of covering rural and small urban areas, with population less than 15,000, near urban clusters already in the area sample.

#### **Producer price index**

Compile a set of PPIs by economic activity including secondary products.

<b>Appendix Table. Practices Compared to the SDDS Coverage,</b>
Periodicity, and Timeliness of Data

	Coverage Periodicity		Timeliness			
SDDS Data Category	(meets SDDS requirement)	SDDS	Mexico	SDDS	Mexico	Comments
Real Sector						
National accounts	Yes	Q	Q	1Q	53D	
Production index/indices	Yes	М	М	6W (1M encouraged)	NLT 42D	
Forward-looking indicators	Yes (encouraged data category	M or Q	М	1M or1 Q	3W	
Employment	Yes	Q	М	1Q	NLT 25D	
Unemployment	Yes	Q	М	1Q	NLT 25D	
Wages/earnings	Yes	Q	М	1Q	2M	
Consumer price index	Yes	M	М	1M	10D	
Producer price index	Yes	М	М	1M	NLT 10D	
Fiscal Sector		•	-1			
General government operations	Yes	А	А	2Q	19M	Timeliness Flexibility
Central government operations	Yes	М	М	1M	30D	Timeliness Flexibility
Central government debt	Yes	Q	Q	1Q	30D	
Financial Sector						
Analytical accounts of the banking sector	Yes	М	М	1M	1M	
Analytical accounts of the central bank	Yes	M (1W recom- mended)	W	2W (1W encouraged)	2WD	
Interest rates	Yes	D	D		D	
Stock market: share price index	Yes	D	D		D	
External Sector						
Balance of Payments	Yes	Q	Q	1Q	10W	
Official reserve assets	Yes	M (W recom- mended)	W	1W	4D	
Reserves template		М		M		
Merchandise trade	Yes	М	М	8W (4–6W encouraged)	25D	
International investment position	Yes	A (Q recom- mended)	А	3Q (1Q encouraged)	6M	
External debt	Yes	Q	Q	Q	1Q	
Exchange rates	Yes	D	D		D	
Addendum: Population	Yes	Α	Α		10M	

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.

## INTERNATIONAL MONETARY FUND

## **MEXICO**

November 8, 2013

# REPORT ON THE OBSERVANCE OF STANDARDS AND CODES (ROSC)—DATA MODULE VOLUME II

#### **RESPONSE BY THE AUTHORITIES**

This document contains the authorities' response to the IMF's data quality assessment (Volumes I and III).

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#### **Glossary**

CPI Consumer Price Index

DQAF Data Quality Assessment Framework
DSBB Dissemination Standards Bulletin Board

ENIGH National Survey of Household Income and Expenditure

ENGASTO Continuous Household Expenditure Survey

GDDS General Data Dissemination System

INEGI National Institute of Statistics and Geography

LSNIEG National System of Statistical and Geographical Information Law

PPI Producer Price Index PPP Producer Price Parity

ROSC Report on the Observance of Standards and Codes

SDDS Special Data Dissemination Standard

SNIEG National System of Statistical and Geographical Information

TCSPS Technical Committee Specialized in Price Statistics

#### INTRODUCTION

- 1. The National Institute of Statistics and Geography (INEGI), in response to the IMF on recent Volume I and Volume III of the Report on the Observance of Standards and Codes (ROSC)—Data Module for Mexico, focused on the consumer price index (CPI) and the producer price index (PPI), found it useful to identify "opportunity areas" that allow improving data quality and procedures. The ROSC promotes statistical best practices and provides one way of assessing the quality and suitability of the program in applying the 2012 version of the IMF's Data Quality Assessment Framework (DQAF).
- 2. The ROSC recommendations were analyzed by INEGI and the conclusions are discussed in the next topics:
- INEGI is grateful for the allocation of IMF personnel to perform the evaluations; we recognize
  their quality and professionalism; we learned from their comments and recommendations in this
  mission.
- INEGI agrees with the observations of the ROSC, and as noted in the report, Mexico is in observance of the Special Data Dissemination Standard (SDDS), meeting the specifications for data coverage, periodicity, timeliness and the dissemination of an advance release calendar.
- As described in the report, INEGI understands the importance of staying at the forefront in the
  application of quality standards in the generation of price statistics, and appreciates the IMF
  recognition on the implementation of international best practices.

#### PREVIEWS OF PROGRESS AND SOUNDNESS

- 3. For INEGI, the transference of the price indexes calculation system from Mexico's Central Bank was successful, because both institutions developed a plan and strategy. The technology, methodology, processes, and procedures were assimilated for INEGI, and the historical information preserved and stored appropriately. After the transference, significant progress has been achieved to the processes and systems of calculation of price indexes, compilation of products and practical information for users.
- 4. The first progress for the price indexes began with a Quality Management System that has been implemented by INEGI. The purpose is the continuous users' satisfaction and the compliance of legal regulations applicable to National Price Indexes. The design and approach of the Quality Management System of National Price Indexes respond to the original processes of Quality Management Model ISO 9001:2008 "Quality Management Systems Requirements" and its national equivalent (NMX-CC IMC-9001-2008 Management Systems Quality-Requirements). In December 2011 the certificate of quality was extended, ISO 9001:2008, for processes Production of National Consumer Index and National Producer Index.

- 5. The second achievement was in transparency. A new Technical Committee Specialized in Price Statistics (TCSPS) was installed to obtain feedback from user and producer information groups. The TCSPS is integrated by representatives of the relevant ministries and public institutions. In addition, the committee members include representative firms, business associations, as well as academics.
- 6. The CPI and PPI are produced by INEGI under a strong legal and institutional environment in which the staff preserves their professional independence and provides adequate resources for statistical compilations. The National System of Statistical and Geographical Information Law places INEGI at the center of the statistical system. This law comes from paragraph B of Article 26 of the Mexican Constitution in which INEGI is defined as an autonomous entity.
- 7. Another achievement was the updating of the CPI weights on April 24, 2013 using National Survey of Household Income and Expenditure (ENIGH) 2010. In the future, the weights will be updated every two years using the ENIGH data, while Continuous Household Expenditure Survey (ENGASTO) data could be used to perform major index revisions every four or five years, to account for seasonal issues .
- 8. Furthermore, a new system for the analysis of the index series was developed and improvements for several CPI modules such as cellular phones, car purchases, electricity, gas, and computers were made.
- 9. Dissemination of information is a priority for INEGI. For that reason, several tools were developed for the users and specialists in prices indexes, for example, prices mapping, kaleidoscope, inflation simulator, inflation calculator, average prices by specific product, among others. The efforts in the dissemination and socialization of the price indexes information received an Honorific Mention in the award to the innovation in transparency for the progress of the institutional management on August 9, 2013.

#### RESPONSE TO THE IMF'S RECOMMENDATIONS

10. The ROSC Data Module Volume I report on the CPI and PPI recommended a number of improvements. Set out below is INEGI's response to the IMF's recommendations.

#### A. Consumer Price Index (CPI)

11. The CPI weights should be based on survey data (among other sources) covering a full seasonal (annual) cycle; forthcoming ENGASTO data can be used to compile these weights.

#### Response

12. Since 2012 INEGI is performing fieldwork for the ENGASTO designed for the CPI use, among others. With these data, INEGI will build weights for CPI, because it provides information on Mexican household expenditures in the country. The fieldwork and data collection provides information

throughout the year to avoid seasonal biases and covers a full seasonal (annual) cycle. In the actual plan the weights will be updated every two years using the ENIGH data, while ENGASTO data could be used to perform major index revisions every four or five years, to account for seasonal issues .

13. Research the impact of covering rural and small urban areas, with population under 15,000, near urban clusters already in the sample area.

#### Response

- 14. ENGASTO and the ENIGH provide information of household spending according to the size of the locality for urban and rural areas, so that it is possible to undertake studies to measure the impact of including calculation of the CPI weights to communities under 15,000 inhabitants.
- 15. Statistical analysis will be run to understand the impact of including rural areas in the weights of the CPI, if rural data improves data quality, reliability and accuracy of consumption and gain precision for CPI weights, before rural areas data is used.

#### **B.** Producer Price Index (PPI)

16. Compile a set of PPIs by economic activity including secondary products.

#### Response

17. INEGI will analyze information from the 2014 Economic Census when results are available, economic surveys, and other sources. The goal is to assess the viability of this recommendation on the compilation of a set of PPIs by economic activity and include secondary products. Before implementing any changes, Mexico will continue its usual practice of consulting users on the best way to improve its price indexes statistics.

# IMPROVEMENTS TO THE PRICE INDEXES SYSTEM IN 2013

- 18. Having a new national expenditure survey (ENGASTO). As mentioned before, ENGASTO will promote benefits on the information's accuracy and reliability. It also will avoid information bias on weights. This survey has rural areas coverage, useful to analyze the impact of including rural areas in the weights of CPI.
- 19. Changing CPI weights every two years (since 2013). Up to now, we have information from ENIGH, every two years. We could update the weights in the same period, and this will lead us toward improving the quality of those weight estimators. We will analyze seasonality issues with ENGASTO every four or five years. In 2013, a new sample design for the PPI was defined: it is now more robust and accurate because the size was calculated with greater reliability and the most representative companies of national economic activity by sector were selected.

- 20. New technology and new control systems for fieldwork, monitoring, sample management, as well as calculation of price indexes. A new calculation system and data collection is being developed to improve all the stages of the CPI and PPI calculation process, which should improve the quality of the information received at the same time in which the registration of prices throughout the country occurs. Another variant is to add data directly from the respondents who are requested to send their data by electronic media or internet, in a more timely and reliable way.
- 21. Another value is the integration of databases that can be shared among CPI and PPI. Both calculation indexes are independent and will have their own methodology and technology for obtaining elementary and aggregated indexes. The new system will make an improvement in the administration of the samples, since there is a control module that will allow managing: the distribution chain, products basket and informants sample.
- 22. Further improvement of the process for price indexes is the integration of the Purchasing Power Parities (PPP) program with the CPI. These two processes have enriched each other and provide quality advantages. The new calculation system for price indexes will support all: PPI, CPI, and PPP. In 2012 the PPP program was included in our quality management system.



### INTERNATIONAL MONETARY FUND

## **MEXICO**

November 8, 2013

REPORT ON THE OBSERVANCE OF STANDARDS AND CODES (ROSC)—DATA MODULE VOLUME III

DETAILED ASSESSMENTS USING THE DATA QUALITY ASSESSMENT FRAMEWORK (DQAF)

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This document contains a detailed assessment by dataset of the elements and indicators that underlie the data quality dimensions discussed in Mexico's Report on the Observance of Standards and Codes (ROSC)—Data Module. It also includes as appendices the DQAF generic framework and the results of the users' survey.

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#### **Glossary**

1993 SNA System of National Accounts 19932008 SNA System of National Accounts 2008

BM Bank of Mexico

CPI Consumer price index

COICOP Classification of Individual Consumption by Purpose

DOF Official Gazette of the Federation

DGAIP Deputy Directorate General for Price Indexes
DSBB Dissemination Standards Bulletin Board
DQAF Data Quality Assessment Framework
ENGASTO Continuous Household Expenditure Survey

ENIGH National Survey of Household Income and Expenditure
ESPC Regulations (Statute) of the Professional Career Service

CFF Fiscal Code of the Federation IMF International Monetary Fund

INEGI National Institute of Statistics and Geography

ISSSTE Institute of Social Security and Services of State Workers

LSNIEG National System of Statistical and Geographical Information Law
OECD Organisation for Economic Co-operation and Development

PPI Producer price index

ROSC Report on the Observance of Standards and Codes

SCNM Mexican System of National Accounts
SDDS Special Data Dissemination Standard

SNIEG National System of Statistical and Geographical Information

STA IMF Statistics Department

## DETAILED ASSESSMENT USING THE DATA QUALITY ASSESSMENT FRAMEWORK (DQAF)

The following detailed information on indicators of statistical practices in the areas of prices statistics was gathered from publicly available documents and information provided by the Mexican officials. This information, which is organized along the lines of the generic DQAF (see Appendix II), was used to prepare the summary assessment of data quality elements, based on a four-part scale of observance, shown in Mexico's Report on the Observance of Standards and Codes (ROSC)—Data Module.

#### PRICE STATISTICS (CONSUMER PRICE INDEX)

#### 0. Prerequisites of Quality

#### 0.1 Legal and institutional environment

## 0.1.1 The responsibility for collecting, processing, and disseminating the statistics is clearly specified.

Mexico's price indexes are compiled and disseminated by the National Institute of Statistics and Geography (INEGI).

INEGI's activity is governed by the National System of Statistical and Geographical Information Law (LSNIEG), published in the Official Gazette of the Federation (DOF) on April 16, 2008. Article 52 of the Law indicates that INEGI is an agency with technical and management autonomy, its own legal status and its own assets and liabilities, and it is responsible for regulating and coordinating the National System of Statistical and Geographical Information (SNIEG).

The priority objective of the INEGI is to take steps to ensure that information in the national interest is subject to the guiding principles of the SNIEG which are: accessibility, transparency, objectivity, and independence. Likewise, the purpose of the SNIEG is to provide society and the State with information that is of good quality, relevant, truthful, and timely, in order to facilitate efforts to pursue national development (Article 3, LSNIEG).

Article 4 states that the SNIEG has the following objectives: produce information, ensure timely dissemination of information for consultation purposes, promote knowledge and use of information, and safeguard information. The composition of the SNIEG is defined in Article 5 and is as follows: the National Consultative Council, the National Information Subsystems, and the INEGI, which is the unit coordinating the system.

Article 59 states that the INEGI shall have as exclusive powers: carry out national censuses, establish the national accounts system. Finally, the Article states that the terms national census or national accounts may not be used in the names or advertising for records, surveys, or listings other than those carried out by the INEGI.

Article 78 of the LSNIEG gives the system of national accounts the status of information in the national interest.

The Law is available on the INEGI's website at <a href="https://sc.inegi.org.mx/Normateca2010/menuNormateca.jsp?codigo=0102">https://sc.inegi.org.mx/Normateca2010/menuNormateca.jsp?codigo=0102</a>. There are Bylaws (DOF of National Accounts March 31, 2009) to govern the INEGI's operations and regulate the form and basis on which the INEGI exercises the functions and powers conferred upon it by the Political Constitution of Mexico (Article 26), the LSNIEG, and other laws, regulations, decrees, and resolutions of the Governing Board.

Regarding the responsibility for collecting, processing and disseminating National Price Indices (NPI), the LSNIEG in Article 59, Fraction III, gives exclusive capacity to the INEGI to: "Elaborate the following national price indices:

- (a) Consumer Price Index
- (b) Producer Price Index."

The first and the eleventh transitory articles of the LSNIEG specify the establishment of a working group between the Bank of Mexico (BM), which was previously responsible for the NPI and the INEGI in order to ensure that the transfer of the NPI would be carried out in a manner that guaranteed the preservation of the quality of the NPI. As a result, there was an environment of cooperation as work meetings between the BM and INEGI were held with regularity during the period July 2008 through July 2011. The transfer was completed on July 15, 2011. From that date, In accordance with the provisions of the LSNIEG the responsibility for price collection, processing and disseminating the CPI was transferred from the BM to the INEGI.

The Chamber of Deputies approved the modification of the Fiscal Code of the Federation (CFF) that entered into effect on January 1, 2012. Some principal changes were made reflecting the transfer of responsibility for compiling the CPI from the BM to the INEGI. In the second paragraph of Article 20 the modified code states that:

"In the cases where tax laws so provide in order to determine the contributions and accessories, the Consumer Price Index calculated by National Institute of Statistics and Geography will be applied and it will be published within the first ten days of the month following the corresponding."

The legal requirements governing the compilation of the CPI are specified in the Article 20bis of the CFF. The legal requirements for the CPI are:

I. "Price quotations will be collected in at least 30 cities located in at least 20 federal states. The selected cities must have a population of 20,000 or more inhabitants, and the 10 most populated metropolitan areas or cities must be always included."

II. "Price quotations must be collected for at least 1000 products and services grouped in 250 consumption concepts, spanning at least 35 branches of agriculture, livestock, industry and services, according to the catalogue of economic activities elaborated by the National Institute of Statistics and Geography."

III. "For food, the price quotations will be made at least three times per month. The remaining quotations for other products and services will be obtained one or more times per month."

IV. "The price quotations to calculate the Consumer Price Index of each month must correspond to the month in question."

V. "The Consumer Price Index of each month will be calculated using the Laspeyres formula. Weights will be applied to each family consumption category considering the following concepts: Food, beverages and tobacco; clothing, footwear and accessories; housing; furniture and domestic appliances; health and personal care; transportation; education and recreation; other services."

"The National Institute of Statistics and Geography will publish in the Official Gazette of the Federation the states, metropolitan areas, cities, items, services, consumption concepts and branches referred in Fractions I and II, as well as the price quotations used to calculate the index."

#### 0.1.2 Data sharing and coordination among data-producing agencies are adequate.

All of the key data used for the compilation of the CPI are generated within INEGI. Expenditure data generated from the National Survey of Family Income and Expenditure (ENIGH) serve as the main input for determining the CPI basket weights and the selection of the sample of items used for monthly price collection. The monthly price survey is also carried out by INEGI. The relationship of INEGI with other institutions and public agencies is established within the framework of the SNIEG through the Executive Committees and the Specialized Technical Committees in which the appropriateness of the methodologies employed for the compilation of the price indices are evaluated. In the specific case of the national price indices a Specialized Technical Committee on Price Statistics has been created. This Committee has been functioning well since its creation. In addition, on the basis of the special relationship between the INEGI and the BM, detailed price data are provided to the BM on a regular basis for analysis.

## 0.1.3 Individual reporters' data are kept confidential and used for statistical purposes only.

Personnel involved in the CPI development are aware of the confidentiality of CPI data. This is stressed in personnel training sessions, and in requests for price information made to respondents. These requests include an explanation that confidentiality will be observed and that the data will be used exclusively for statistical purposes. Also, pricing information that is published in the Official Gazette of the Federation has a code that protects the identity of the informant.

In addition, as an autonomous agency, INEGI is also governed by the Federal Law of Administrative Responsibilities of Public Servants (LFRASP). Fraction V of Article 8 establishes that every public servant has the obligation of custody and care of the documentation and information under his/her responsibility, and to not impede or avoid its use, subtraction, destruction, concealment, or deactivation.

Article 13 of the LFRASP establishes mechanisms for imposing penalties on civil servants on grounds of administrative conduct deriving from their failure to fulfill their obligations pertaining to the custodianship of documentation and information, which mechanisms shall consist in: a private or public warning; suspension; removal from office; economic penalty; and temporary disqualification from engaging in the employment, post, or commission for a period of not less than 3 days, and not more than one year in public service.

Also, Title Two in Chapter V of the LSNIEG guarantees the confidentiality of statistical data supplied to INEGI, stipulating that such data may be used only for statistical purposes. Article 37 of the Law states that, "data provided for statistical purposes by system respondents to units under the law, shall be strictly confidential, and under no circumstances may they be used for any purpose other than a statistical purpose."

Article 38 of the Law declares that "data and reports provided by private parties for statistical purposes or derived from administrative or civil records shall be handled, for purposes of this law, with due regard to the principles of confidentiality and may not under any circumstances be disclosed in a personalized (nominative) or individualized manner, nor may they be used as evidence before an administrative or fiscal authority, in judicial or other proceedings. When it is necessary to disclose information, said information must be aggregated in such a way that it is not possible to identify system respondents or those individuals or legal entities that are the focus of the information in question."

Article 104 of the LSNIEG defines the violations imputable to civil servants at the INEGI or civil servants at the system units as follows: "the disclosure of confidential statistical data; violations of industrial or commercial secrets, or the provision by system respondents of data that is individualized or identified by name" (paragraphs I and II). Consequently, Article 108 of the Law provides administrative penalties for anyone who discloses confidential data: "A fine of 2,000 to

up to 30,000 times the minimum monthly wage valid for the federal district at the time the violation was committed."

By the same token, in the resolution establishing the Regulations (Statute) of the Professional Career Service (ESPC) for the INEGI (DOF of May 8, 2009), specific provision is made for disciplinary measures for personnel on grounds of noncompliance with current law, in particular Article 38, Fraction V, which establishes that one of the grounds for separation from the INEGI shall be failure to fulfill the obligations inherent in the employee's post or those established in the Statutes or in the regulations deriving from it.

The ESPC points out that government employees must abide by the principles of confidentiality and privacy with respect to respondent data provided for statistical purposes, as well as with respect to confidential information obtained from administrative records and the application (in the performance of their duties) of the SNIEG code of ethics.

## 0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response.

The legal powers of INEGI to compile information are clearly set out in Chapter V of the LSNIEG, referring to the rights and obligations of users and respondents of "National Statistics and Geographic Information Systems." Article 45 defines the obligations of respondents, while Article 40 requires respondents to provide the information requested in a truthful and timely manner.

#### Article 45 of LSNIEG states:

"System respondents will be obliged to provide with truth and timeliness, the data and reports requested by the competent authorities for statistical, census and geographic purposes, and will support them."

On confidentiality of information, Article 46 reads:

"Data provided to the system by the informants will be confidential in the terms of this Law and in terms of the general rules dictated by the Institute."

Chapters I and II of Title IV of the LSNIEG spell out the administrative misconduct perpetrated by system respondents and the sanctions to which they are subject. Article 48 states that "In the exercise of its powers under this Law, the INEGI may conduct inspections to verify the authenticity of information, when the data provided are incompatible, incomplete, or inconsistent."

Article 49 indicates that verification inspections must be done under a written order from the competent authority: Paragraph I (d) states that "the order must specify the statistical or

geographic information to be verified, as well as the documentation that must be exhibited for inspection by the system respondent."

The Law also provides penalties for refusing to provide, or falsifying, information. Article 106 imposes a fine of, "from 5 to 500 times the minimum daily wage valid for the federal district at the time the violation was committed."

Despite the existence of legal provisions for obtaining information, and penalties for noncompliance, they have rarely been enforced. The intent is to encourage voluntary reporting by explaining to respondents, in detail, the use that will be made of their information, its confidential nature, and its importance for the country in terms of quantifying the characteristics and economic behavior of its activity.

#### 0.2 Resources

## 0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs.

Staff resources for compiling the statistics are adequate to perform required tasks.

In general terms, there are sufficient staff to carry out current activities. Gaps in the skills required for the staff are continuously analyzed and identified, with the aim of reducing them through the training program. There are yearly training cycles to introduce new methodology and to refresh instructions for price collectors.

The CPI's compilation, processing and disseminating team is headed by an Assistant General Director in collaboration with four Area Directors.

Price collecting activities and analysis of information are carried out by the following staff attached to the Direction of Field Operations:

Price researchers (also collaborating with the PPI)	92
Price researchers (support)	5
Supervisors	9
Analysts	6
Operational chiefs	3
Logistic support chief	1

Additionally, there is an information technology and methodology team that collaborates in the information processing and conceptual design. The information technology team which services the price statistics systems is comprised of ten staff members attached to the Direction of Information Processing, and the methodology team with four staff members is attached to the

Direction of Conceptual Design. Finally, there is a team of nine quality auditors seconded to the Direction of Documentation and Certification.

Computing resources for compiling the statistics are adequate to perform the required tasks.

The prices program has sufficient computer equipment and administrative support for the efficient compilation of the CPI and the management of CPI databases. In particular, the workstations are up to date and have the necessary requirements for the compilation of the index.

Computing resources are adequately protected, inter alia, by providing emergency backup systems for the retrieval of statistical series and updates in the event of natural disasters, accidents or other extraordinary events. Contingency plans have been tested during drills, achieving the compilation of the CPI in remote locations.

The system for the computation of the CPI that allows for all processes associated with the compilation of the CPI to be carried out automatically (capture, transmission, review and processing of the information) in a safe, effective, and efficient manner.

Some of the advantages of this system are:

- (i) Reduction in processing times.
- (ii) Increase in security and information consistency.
- (iii) Increase in speed, security, and efficiency in data transmission from CPI cities to headquarters.
- (iv) Versatility to modify the structure and methodology of price indices.
- (v) Facilitation of the transmission and preservation of institutional knowledge.
- (vi) Simplification of the detection of outliers, an improvement in the quality of information, and a reduction in human errors.
- (vii) Reduction of maintenance needs and technical support.
- (viii) Facilitation of the transmission of price statistical to INEGI.

The CPI's computation system is a transactional system developed by BM's staff. This system was transferred to INEGI and amended by staff seconded to the Directorate of Information Processing. The system uses a client server architecture centered in data, having as a main repository relational database, a Sybase Adaptive Server for online transaction processing, using the Delphi development language for the creation of clients, and Java for the creation of the communication service between CPI cities and the headquarters in Mexico City.

Physical facilities and other resources are adequate to perform required tasks.

The headquarters building and regional office space are adequate to perform activities involved in the collection of data and the compilation of the CPI.

Price researchers commute among points of sale using public transportation, for which they receive a monthly stipend. Price researchers are affiliated to the Institute of Social Security and Services of State Workers (ISSSTE), which provides medical service if needed, in addition they have all the social benefits provided by law.

Funding for compiling the statistics is adequate to perform required tasks.

The ongoing activities for price collection and compilation of the CPI have adequate funding. The production of the basic statistics necessary for compiling the index is financed by INEGI, and in some cases, by other public entities.

When critical needs arise, there is sufficient flexibility in financing to cover them. In this regard, when INEGI saw the need for the ENIGH to cover the entire calendar year, rather than only the three-month period covered by the current ENIGH, the resources were obtained, and a new continuous monthly household expenditure survey was initiated. This new survey, referred to as ENGASTO, resolves the problem of possible seasonal biases in the expenditure data used to calculate weights for the CPI basket.

#### 0.2.2 Measures to ensure efficient use of resources are implemented.

Management ensures that resources are used efficiently.

The management system of ISO 9001:2008, which governs the development of the CPI, requires that audits are carried out twice a year. The audits evaluate use of resources and staff performance. These audits document the results and, if necessary, provide measures to remedy the problems encountered.

This process also seeks to improve the efficiency of procedures through continuous analysis. In particular, a Quality Committee to discuss and follow up proposals to improve the operation has been established.

Costing and budgeting practices are in place and provide sufficient information to management to make appropriate decisions.

INEGI continuously evaluates the cost and the use of budgeted resources to compile the CPI.

#### 0.3 Relevance

Statistics cover relevant information on the subject field.

## 0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored.

CPI users within INEGI maintain continuous communication with the staff team to express their needs or opinions. In particular, the President of the Institute is asked to evaluate the performance of the area through a quarterly survey. Moreover, the general public is able to make requests for information, as well as suggestions through the Information Request System provided by INEGI in the web link <a href="http://www.infomex.inegi.org.mx/infomex/">http://www.infomex.inegi.org.mx/infomex/</a>. In addition, INEGI is able to monitor user needs by studying requests for information received via the Sale Centers and e-mail.

INEGI recently established a Committee of Users of Information on Prices (CUIP) that meets regularly to discuss issues relating to the CPI and the PPI. When necessary, subcommittees are established to review detailed topics. The success of the CUIP became apparent during the meeting of index users that was held as part of the ROSC mission. A number of important topics with regard to the new CPI, including the treatment of mobile telephone service, were discussed, and references were made to the CUIP and its subcommittees. The CUIP membership includes chambers of commerce and business associations, as well as academics and researchers.

The INEGI's staff keeps abreast of progress and new developments in the compilation of price indices through its participation in various international seminars and courses, including those organized by the UN, IMF, the Organisation for Economic Co-operation and Development (OECD), and the Economic Commission for Latin America and the Caribbean (ECLAC). Participants at these meetings also are able to identify the informational needs of these international institutions.

#### 0.4 Other quality management

— Quality is a cornerstone of statistical work.

#### 0.4.1 Processes are in place to focus on quality.

Officials at INEGI are aware of all dimensions of data quality, and make an effort to spread this awareness among all staff members. In particular, this effort is reflected in the implementation of the system of total quality management ISO 9001:2008 which establishes a policy of quality management in order to achieve quality objectives. The staff is regularly examined on their knowledge of the policy and objectives. The quality policy of the staff considers the following:

"Provide consumer and producer price indices, as well as studies of the program price of purchasing power parities, that are reliable, representative and timely, using recognized

methodologies and continuous improvement of processes, in order to satisfy customer requirements for statistical information."

The quality objectives declared in the ISO system per Area Direction are:

- (a) Conceptual Design. Update the conceptual and methodological design of price indices by using, analysis and evaluation of international best practices to maintain the reliability and representativeness of the indices through continuous improvement in order to meet the needs of our customers.
- (b) Field Operations. Improve the quality and representativeness of price information through its compilation according to the methodology and criteria established and the review of nonconforming product.
- (c) Information Processing. Improve the processes of calculation and timely dissemination of price indices through the development of new tools and improvements to the systems of data capture and calculation.
- (d) Documentation and Certification. Improve the effectiveness and operation of the Quality Management System of the indexes of prices, in order to maintain the quality of the indexes and their certification ISO 9001:2008.
- (e) Purchasing power parities. Produce the pricing studies required by the Program of Purchasing Power Parities through the implementation of the conceptual and methodological criteria established by the Program, in order to meet the needs of our customers and ensure the participation of Mexico in the statistical projects relating to international comparisons.

In training programs, on-site monitoring visits, and audits the importance of quality is emphasized, and staff is advised of the contribution they must make in order to achieve it. INEGI has provided the necessary resources to keep the ISO 9001:2008 system in operation for governing the development of the CPI since December 2011.

The importance of the CPI's quality for INEGI is manifested through the publication of ISO certifications in the press releases of inflation. Also, in public talks concerning the CPI, that target mainly university students, the relevance of the ISO system in limiting possible errors in the various processes required for the development of the CPI is emphasized.

## 0.4.2 Processes are in place to monitor quality during the planning and implementation of the statistical program.

INEGI has established procedures to closely monitor the proper implementation of the various procedures required for compiling the CPI. There are monthly reports containing the results of

audits that reflect any mistakes of price collection errors. Moreover, on a bimonthly basis, the Quality Committee develops a follow-up of the preventive and corrective actions that have been established. These are reflected in the minutes of that meeting. In addition, each semester staff seconded to the Direction of Documentation and Certification produces a report that is delivered to the auditor of the ISO system which describes the actions that took place during the period.

Some team members have participated in specialized courses on price index compilation offered by the IMF and the U.S. Bureau of Labor Statistics (BLS), that have enabled them to become familiar with international best practices. This information is then disseminated to other staff members.

The CPI planning program considers quality improvements to procedures that are identified in audits, supervisions, and quality committee meetings. Also, the existing index compilation methodologies are compared to international best practices for price index compilation. Several of these improvements in index compilation methodology are being implemented in the update of CPI basket weights that is expected to be carried out in early 2013.

#### 1. Assurances of Integrity

The principle of objectivity in the collection, processing, and dissemination of statistics is firmly adhered to.

#### 1.1 Institutional Integrity

— Statistical policies and practices are guided by professional principles.

#### 1.1.1 Statistics are produced on an impartial basis.

The autonomy conferred by law to INEGI supports the professional independence of its staff. This protects the CPI compilation from interference from other public entities. An additional factor contributing to professional independence are the rules of the ESPC of the INEGI; these set forth the rules enabling the INEGI to have a career professional staff that is agile, efficient, and transparent, that promotes and fosters staff development, and is able to hire the best people available.

The guiding principles are: lawfulness, efficiency, objectivity, quality, impartiality, equity, independence, and competence based on merit (Article 3). Issues regulated by the Statutes are: income, training, performance assessment, incentives, separation, rights and obligations of government employees, and appeals (Article 4).

Inside INEGI the independence of those responsible of the CPI is safeguarded by a culture of professionalism that is considered essential for the credibility of the statistical results.

# 1.1.2 Choice of data sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations.

i. The choices of data sources and statistical techniques are informed solely by statistical considerations.

The choice of sources and methods is governed solely by statistical considerations and by the guidelines and recommendations made by international organizations in the form of documents and manuals.

The selection of outlets for price collection, and their continued use over time, is carried out by analysis of the points of sale using information generated by the Institute itself, as well as by retail outlet surveys and consumption criteria, which are validated by data collectors, supervisors and auditors involved in compiling the CPI. The selection criteria are documented in a catalog of elementary concepts of consumption. The choice of goods and services that are incorporated is made by an analysis of elementary concepts, considering the production structure, specialized studies and consumption. In defining the sample size for each elementary concept, the weight and volatility are taken into account.

ii. Decisions about dissemination are informed solely by statistical considerations.

INEGI releases the CPI on a fortnightly basis. The publication deadline for the indicator is nine days after the reference date at 8:00 a.m., unless that day, or the following day, is a holiday, in which case it is released earlier. The publication lag considers both the opportunity and the need to review and validate the information. The fortnightly publication of the CPI began in February 1988 in an environment of high inflation (in that month the annual change in the CPI reached 179.73 percent), in order to record the progress that would be made with the stabilization plan. It is worth mentioning that by law the obligation stipulated in the CFF is that the publication is made on a monthly basis and during the first ten days of the month, so INEGI meets this obligation with ease.

# 1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.

INEGI seeks to avoid misinterpretation of the CPI by a careful review of press releases. There is a regular monitoring of press releases, and if any note needs to be clarified, the necessary clarifications are made by INEGI.

INEGI has a press clipping service and monitoring services of radio and television where the notes and comments on the CPI are usually included. Additionally, the staff attached to the Deputy Directorate General for Price Indexes (DGAIP) selects daily newspaper articles that address issues related to inflation and wage formation. This selection is available to DGAIP staff

in physical folders, which are then digitized and made available in electronic format by the DGAIP digital community.

#### 1.2 Transparency

— Statistical policies and practices are transparent.

# 1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public.

The terms and conditions under which the CPI is compiled and disseminated are established in Articles 20 and 20b is of the CFF. The fortnightly publication of CPI findings in the official gazette refers to these two Articles.

The INEGI website includes the text of the LSNIEG, which informs about the INEGI's standards of confidentiality and professionalism of its president and Governing Board. The law can also be obtained in print in Spanish. The INEGI Bylaws are available to staff.

The LSNIEG includes the code of conduct under which official statistics are compiled and disseminated, the approval process for data dissemination, and the procedures to hire and remove the head of the data producing agency.

The INEGI website (<a href="http://www.inegi.gob.mx">http://www.inegi.gob.mx</a>) contains e-mail addresses to direct additional requests, suggestions, and contact INEGI personnel. INEGI publications contain information on the INEGI website, its address, e-mail address, and phone number. In addition, the INEGI has a unit, Consultation Marketing Service, in charge of providing information to the public. Moreover, the general public has the possibility to make requests and suggestions through the Information Request System provided by INEGI in the web link: <a href="http://www.infomex.inegi.org.mx/infomex/">http://www.infomex.inegi.org.mx/infomex/</a>.

# 1.2.2 Internal governmental access to statistics prior to their release is publicly identified.

The autonomy that the INEGI enjoys guarantees that no government authority has access to its statistics before they are publicly released: thus, no government unit or civil servant has access to the data before they are published. In particular, in the case of market conditions reports, on the day they are published a note is sent to the President of the Republic and in accordance with the INEGI market data release timetable, the reports are released to the press and general public on the date specified therein, and posted on the INEGI website.

The press releases indicate that the data have been prepared under the responsibility of INEGI, although it is not explicitly stated that approval of the results lies exclusively with the INEGI (Article 23, 24, and 59).

### 1.2.3 Products of statistical agencies/units are clearly identified as such.

Because the INEGI is an agency with technical and management autonomy, and the Law gives it exclusive capacity to elaborate the CPI, data are published in a press bulletin bearing the INEGI's logo and indicating clearly that the information was prepared by the Institute. At the same time, the press bulletin is posted on INEGI website with the respective institutional identification. Additionally, the publication in the DOF is done in a space reserved especially for INEGI.

In the case of joint publications with other institutions, the contribution of each is clearly identified, indicating that data associated with the CPI are the exclusive responsibility of INEGI. Such publications bear the logos of the participating institutions, consistent with the INEGI's editorial standards. In addition, the Federal Copyright Law mandates citation of information sources when these are disclosed.

# 1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques.

INEGI gives advance notice of any major change in the methodology used to prepare the CPI. It does so at least 30 days prior to the adjustment, and in the case of major changes, such as the rebasing of the index, in accordance with Article 88 of the LSNIEG, must be submitted for public consultation under the guidelines established for this purpose, since the CPI is considered information of national interest. Additionally, meetings are held with principal informants, analysts and specialized users in order to comment on the proposed new base methodology and scope.

#### 1.3 Ethical standards

— Policies and practices are guided by ethical standards.

#### 1.3.1 Guidelines for staff behavior are in place and are well known to the staff.

Based on Article 7 of the LSNIEG, INEGI released the Code of Ethics, which governs the standards of conduct to which every employee of the Institute must conform in performing activities relating to the compilation of price and other types of statistics including geographical statistics. This Code is consistent with the provisions of Articles 7 and 8 of the Federal Law of Administrative Responsibilities of Public Servants, in order to safeguard the principles of legality, honesty, loyalty, fairness and efficiency governing the public service, and, moreover, outlines correct behavior when the staff is confronted with potential conflict of interest situations.

All levels of management are aware of the pressing need to ensure irreproachable conduct within and beyond the institution, and for officials and workers of INEGI to fulfill their obligations to maintain the public credibility of the information they process.

Newly hired personnel of the INEGI receive an explanation of the Code of Ethics that govern the personal behavior, professional independence, conflicts of interests, maintenance of INEGI's reputation, and the compilation of statistics. Daily practice and the quality process within DGAIP, provide constant reminders of the obligation to meet existing standards.

### 2. Methodological Soundness

The methodological basis for the statistics follows internationally accepted standards, guidelines, or good practices.

The methodological soundness dimension is assessed against the guidelines outlined in the *System of National Accounts 2008 (2008 SNA)* or the *European System of Accounts 1995 (1995 ESA)*, and the *Consumer Price Index Manual (CPI Manual)*. The concepts and definitions from the *2008 SNA* are used as guidelines with regard to coverage and valuation, and the methods and procedures from the *CPI Manual* are used as guidelines for compiling the CPI. The *2008 SNA* and *1995 ESA* are viewed as interchangeable whenever reference is made in this document to the *2008 SNA*. *1993 SNA* concepts and definitions hold for countries still using these standards.

### 2.1 Concepts and definitions

— Concepts and definitions used are in accord with internationally accepted statistical frameworks.

# 2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices.

The determination and specification of CPI market basket items and the estimation of corresponding weights are based on concepts and definitions of household expenditures relating to consumption that are consistent with the *Consumer Price Index Manual: Theory and Practice, 2004,* which was prepared with the collaboration of the following international organizations: the International Labour Office (ILO), the IMF, the OECD, the Statistical Office of the European Communities (Eurostat), the United Nations Economic Commission for Europe, and the World Bank.

In general, the concepts and definitions of the CPI are based on a conceptual framework that characterizes the index as a Laspeyres approximation to a conditional cost of living index covering monetary consumption directly. The market basket weights for the index are derived from the 2008 National Survey of Household Income and Expenditures—Encuesta Nacional de Ingresos y Gastos de Hogares (ENIGH) data on monetary expenditures. However, owner's estimates of imputed rent are used for rentals services of owner-occupied housing, and goods received as salary in kind are also included.

Expenditure data on both goods and services are tabulated in sufficient detail to permit analysis at the four-digit level of the Classification of Individual Consumption by Purpose (COICOP) and

at the item level for the CPI. The CPI market basket has 283 elementary items which is in compliance with the national legal requirement of at least 250 items established by the CFF.

#### 2.2 Scope

The scope is in accord with internationally accepted standards, quidelines, or good practices.

### 2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices.

The market basket weights for the CPI cover all types of households living in urban areas with a population of 15,000 or more inhabitants. This accounts for 78 percent of total household consumption expenditures from the 2008 ENIGH and 66 percent of all households covered by the 2008 ENIGH. The CFF requires that the CPI must represent all urban areas with a minimum population of 20,000.

The coverage of the CPI exceeds that required by the CFF. International best practice on coverage for the CPI is that the index has adequate coverage of total household expenditure, its target economic aggregate, with sufficient geographical coverage to represent the range of price trends for items such as housing that may vary significantly across geography and by size of locality. At almost 80 percent of total expenditure, Mexico's CPI has reasonably robust coverage of the target economic aggregate. As noted earlier, its coverage of the locality population size distribution stops at urban places of less than 15,000. In Mexico, a rural area is defined as an area with 2,500 inhabitants or less, so the CPI lacks coverage of urban places with population between 2,500 and 15,000 as well as rural areas. Since the ENIGH covers households from both urban and rural areas, it would not be difficult to include expenditure data from small urban and rural areas as part of the weights for neighboring CPI cities. Such a strategy would ensure that these areas would be represented in the CPI, but its cost effectiveness would depend on the degree to which smaller area price trends significantly differ from those of the included urban centers.

#### Recommendation:

INEGI could investigate the available evidence on trends in rent in small areas to see whether they differ materially from that measured in the included urban areas; if significant, consideration could be given to extending the definition of CPI urban areas to include smaller places around larger urban clusters.

#### 2.3 Classification/sectorization

— Classification and sectorization systems are in accord with internationally accepted standards, guidelines, or good practices.

# 2.3.1 Classification and sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices.

The CPI is classified in accordance with COICOP guidelines up to the four-digit level. Additional digits are added to accommodate the 283 market basket items that were selected for the new CPI. The CPI is also classified using an expanded two-digit national classification system in compliance with the domestic legal requirements of the CFF.

### 2.4 Basis for recording

— Flows and stocks are valued and recorded according to internationally accepted standards, quidelines, or good practices.

### 2.4.1 Market prices are used to value flows and stocks.

CPI basket weights are constructed using market prices including the seller's markup, transport costs, taxes, and subsidies.

The specifications for the goods and services for which prices are collected consist of price determining characteristics including the terms of transaction, the point of purchase, brand, presentation, weight, and unit of measurement. Prices that are conditional on the purchases of some other product or service, such as products that are bundled together, are not collected. However, sale prices and discount prices are reflected in the index. In general, the cash price is recorded rather than a price that depends on financing of one type or another, thus being in accordance with internationally recommended methodology.

### 2.4.2 Recording is done on an accrual basis.

Both the expenditure data from the ENIGH and the price data for the monthly price survey are recorded on an accrual basis. In general, prices of goods and services are registered during the period in which the acquisition is made. However, for some services such as air transport and tourist packages, prices are collected for services to be used in the near future.

# 2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices.

In constructing CPI weights for durable goods, the concept of net purchases is employed. In the case of household vehicles, the weight is obtained by deducting the total value of sales of

household vehicles from the total value of purchases of household vehicles. This methodology is consistent with international guidelines.

### 3. Accuracy and Reliability

Source data and statistical techniques are sound and statistical outputs sufficiently portray reality.

#### 3.1 Source data

Source data available provide an adequate basis to compile statistics.

# 3.1.1 Source data are obtained from comprehensive data collection programs that take into account country-specific conditions.

The source data employed for compiling the CPI are excellent with the exception of the biannual ENIGH from which the market basket weights are estimated. Up until recently the ENIGH was carried out only over a three month period of the survey year, rather than over the entire year. The price survey is conducted on a weekly basis for food items and on a fortnightly basis for other market basket items. The outlet sample from which prices are collected is revised continuously, this is done through frequent supervision and audits scheduled according to the system of quality management ISO 9001, in order to maintain representativity. Various source data are used to select the outlet sample and to keep the sample updated over time. These include the ENIGH, the national accounts, and separate market studies (See also 3.3.2).

The weighting structure for the current CPI basket was determined using tabulations on consumption expenditures from the 2008 ENIGH, which has national coverage of both the urban and the rural population of the country. The ENIGH has been carried out on a biannual basis since 1998. The survey was designed to be representative at the national level for rural areas, defined as those areas with a population of equal or less than 2,500 inhabitants, and urban areas which are defined as those areas with more than 2,500 residents. However, the CPI coverage only includes urban areas with a population of 15,000 or more, for which the INEGI provided specific expansion factors for the sample. Although the ENIGH is conducted on a biannual basis, the survey is conducted only during a three-month period falling between August and November of the survey year. This is a serious deficiency in the survey that could lead to potential seasonal bias in the CPI weight, resulting in weights that are too large for some items and too small for others.

As noted, the biannual ENIGH has been carried out during a three-month period between August and November. Because of the different recall periods for the survey, the expenditure data collected covers at least some expenditures that were made up to six months previous to the time the household was interviewed. The result is that some data are collected for every month of the year except December and January. It should be noted, however that the seasonal deficiencies in the data could still be significant.

Recognizing the magnitude of this problem of seasonality in the expenditure data used for estimating CPI basket weights, INEGI has taken significant steps to ensure that this problem is minimized in the short run, and eliminated in the long-run. For the current CPI basket weights, extensive analysis was carried out to determine if the expenditure data from the ENIGH were biased. Where bias was identified, adjustments were made to the weights. In order to eliminate the seasonal problem in the long run, a new continuous monthly expenditure survey was initiated. This survey, which was implemented in 2011, is referred to as ENGASTO. It is expected that the results of the ENGASTO survey will be used for estimating weights for the 2014 revision of the CPI.

For the current CPI, an extensive process was carried out to determine the final weights for the CPI basket. In general, the preliminary weights were compared to corresponding data from the System of National Accounts of Mexico (SCNM) and/or data from the appropriate government ministries or trade organizations. A number of adjustments were made to the preliminary weights including the weights for educational expenses and books and supplies, alcohol and tobacco, electricity, transport, gas, and water. However, the weights for fruit and vegetables obtained from the survey were consistent with those from National Accounts, so they were not adjusted.

#### **Recommendation:**

The CPI weights should be based on survey data (among other sources) covering a full seasonal (annual) cycle.

Every two weeks, just about 117,500 price observations, corresponding to averaging 85,500 specific articles and services, are collected in approximately 21,000 outlets, located in 46 cities, from 31 states and the Federal District. In addition, approximately 6,500 rental units are surveyed semi-annually with one-sixth of the units being interviewed each month using a panel survey methodology. Food, beverages, and tobacco prices are collected on a weekly basis, while the rest are collected on a fortnightly basis. Price and detailed specification data are collected from all types of outlets where household expenditures are typically made. These include supermarkets, public markets, convenience stores, price clubs, department stores, specialty shops, and flea markets. Prices of articles at informal markets are not covered due to the difficulty of maintaining a reliable source of data over time.

Specification data for the specific goods and services, for which prices are collected in the weekly and biweekly CPI surveys, are sufficiently detailed to ensure that the prices correspond to the same article in each period.

Additionally, supervisions and audits defined within the quality management system ISO 9001:2008 are directed toward the identification of new outlets and current CPI outlets that are losing or gaining market share. This provides the information needed to eliminate or add outlets to the CPI outlet sample. As part of this ongoing process, studies are made, and meetings

are held with representatives of businesses that produce the products, as well as index users, in order to identify and propose new aspects to be considered in the CPI compilation process.

The data collection program for the CPI is sufficiently open and flexible to allow for an adequate outlet sample turnover. Price collectors are provided with clear guidelines to identify new sources of information that could be included in the CPI outlet sample.

# 3.1.2 Source data reasonably approximate the definitions, scope, sectorization, classifications, valuation, and time of recording required.

Price and detailed specification data for the CPI are obtained from weekly and biweekly surveys that are consistent with the needs of the CPI in terms of concepts, time of recording, frequency of collection, product definitions, and the COICOP classification system as well as the national classifications required by law.

Up to the present time, source data for the estimation of CPI market basket weights has been obtained from the ENIGH. The concepts and definitions and classification systems used for the ENIGH match those of the CPI, although household expenditures do not cover a complete calendar year. The survey has been conducted biannually allowing for flexibility in scheduling major index revisions and studying expenditure patterns between revisions.

The new ENGASTO survey that will provide expenditure data for use in compiling the CPI in the futures is a continuous monthly survey. INEGI has established a schedule for future revisions. The current plan is to conduct major CPI revisions every four years and weight revisions in the intervening two year periods. The ENGASTO provides the data needed for this revision schedule.

#### 3.1.3 Source data are timely.

Price surveys are carried out according to a calendar determined by the staff which is rigorously followed in periodicity and timeliness. This process is supervised form the central office according to clearly established documented procedures.

#### 3.2 Assessment of source data

- Source data are regularly assessed.
- 3.2.1 Source data—including censuses, sample surveys, and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide statistical processes.

Accuracy of the data from surveys is routinely assessed.

Price and product specification data collected for the fortnightly CPI price survey are processed and audited according to procedures established using the total quality management system ISO 9001:2008. These well-established and documented procedures are designed to detect and track errors in data collection, data entry, and data transmission. The data processing system includes computer system filters to identify atypical values, temporal and geographic inconsistencies, and periods of no price change. Price behavior deemed to be suspicious—abnormal variations in prices, or periods with a complete lack of price variation—are validated by the central office supervisor usually by contacting the price collector directly. If an error is detected, the price data are corrected. If no error is detected, the information that is gathered, such as sales tickets and/or samples collected, is stored. These procedures are audited internally by the INEGI prices staff at least once a year and twice a year for selected areas by an external auditor. Additional audits are conducted by the INEGI auditing staff.

Since these audits include a review of the outlets from which prices are collected, the outlet sample is rotated on a flow basis. Over the last two years, approximately 25 percent of the sample per year has been rotated.

Expenditure data from the biannual ENIGH are also analyzed and compared with corresponding data from the national accounts in order to anticipate important changes in consumption expenditure patterns that should be considered for the index. Historically, this information has been used to determine when a major revision should be carried out.

Accuracy of administrative data and other secondary sources is routinely assessed.

CPI uses only direct observations; therefore, no information from secondary sources or administrative data is used.

### 3.3 Statistical techniques

— Statistical techniques employed conform to sound statistical procedures.

### 3.3.1 Data compilation employs sound statistical techniques to deal with data sources.

All CPI data are collected by direct observation by field agents. Central office supervisors employ statistical filters to detect possible errors and, information is validated. Price data are adjusted only if there is solid evidence to justify the adjustment such as when a quality adjustment is required. Outliers are not excluded or modified unless an error is detected.

Temporarily unavailable prices and missing price are imputed by using the average price change for the prices that are available in the sample of the given elementary aggregate within each city. When a product is unavailable, price collectors investigate whether it is temporarily unavailable or if it has been discontinued. In the second case, a product of similar characteristics is chosen to replace the discontinued product and a quality adjustment is made when necessary.

Although the index compilation system for the new CPI is equipped to handle seasonally unavailable items, there are very few products and services that are seasonally unavailable. Most fruits and vegetables are available throughout the year. In fact, an analysis of expenditure data from the ENIGH and corresponding data from the national accounts indicated that there were no fruits and vegetables with a significant percentage of expenditures that are seasonally unavailable. This is due to the relatively mild climate across the country and the diversity of agricultural growing conditions within the country.

Explicit quality adjustments are currently implemented for three items which have relatively large weights and exhibit consistent and significant price changes—Automobiles, Education Services and Supplies, and Tourism Vacation Packages. The method employed to make these quality adjustments is the direct cost of characteristics approach. At the present time, studies are being carried out to increase the number of products for which explicit quality adjustments could be applied on a regular basis. In particular, research is being conducted on durable goods with high technology components.

When new products are identified, they are usually introduced into the index as a new product specification within and elementary item. In some cases, the CPI weights are adjusted and linked into the index.

# 3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques.

Appropriate techniques are used to address specific issues of measurement for CPI weights.

The list of market basket items and corresponding weights used for compiling the new CPI were obtained primarily from information provided by the 2008 ENIGH collected by INEGI. Since the ENIGH serves purposes other than that of obtaining market basket weights for the CPI, the survey has been conducted on a biannual basis since 1992.

The biannual ENIGH is conducted during a three-month period that runs from August to November. The various reference periods used for the survey are daily for food and other frequently purchased items, monthly for utilities and less frequently purchased items, quarterly for clothing and footwear, and semi-annually for durable goods. Although the survey covers some expenditures that were made up to six months prior to the time of the interview, no expenditures made during the months of December and January are captured. Additionally, since the survey is conducted over a period of only three months, it is possible that estimates of expenditures based on the survey for some types of items may be over- or underestimated. In particular, these seasonal effects could be present for items such as educational expenses including tuition, monthly school fees, books, and supplies. This is due to the fact that the survey and the school year begin at about the same time.

In order to correct for this possible bias in the CPI market basket weights, the expenditure data from the ENIGH were augmented with information from the SCNM, and when deemed necessary, adjustments were made to the market basket weights derived from the ENIGH. In particular, the weights for educational books and supplies were adjusted. However, the weights for fruits and vegetables obtained from the ENIGH were found to be consistent with corresponding data from the SCNM and were not adjusted.

CPI market basket weights include purchases in both formal and informal markets; however, no pricing information is gathered in informal outlets that have no fixed location due to the difficulty of tracking comparable specifications over time.

The weight for owner-occupied housing services is estimated using ENIGH data on estimates of the rent that homeowners would pay for similar housing. Hence, rental equivalence is used for both measuring the weight and pricing owner-occupied housing services.

Generally accepted good practice statistical techniques are used to compile the CPI estimates.

Elementary indices are compiled using geometric means of short-term price relatives (the Jevons approach). Higher level aggregates are compiled using the short-term relative formulation of the Laspeyres index formula. This formulation of the Laspeyres index facilitates imputation of missing prices, quality adjustments and the introduction of new specifications and outlets.

Long-term relatives of price change were used to update the 2008 ENIGH market basket weights to the index link period, the 2<sup>nd</sup> fortnight of December 2010. At that time, the current index was linked to the new index and rebased to the reference base of the new index.

#### 3.4 Assessment and validation of intermediate data and statistical outputs.

— Intermediate results and statistical outputs are regularly assessed and validated.

### 3.4.1 Intermediate results are validated against other information where applicable.

Monthly CPI indices are compared, on an ongoing basis, with corresponding indices from the PPI. This is done to verify consistency across datasets and over time.

#### 3.4.2 Statistical discrepancies in intermediate data are assessed and investigated.

Price index data for the CPI are analyzed for consistency in price changes across geographic areas and over time. This work is handled by the regional CPI supervisors and the deputy manager in the Prices Division. When errors are detected and positively identified, the index is appropriately corrected.

# 3.4.3 Statistical discrepancies and other potential indicators of problems in statistical outputs are investigated.

Since imputations for missing prices are all made using the item aggregation tree within a specific geographic area, and since these imputations are self-correcting, there is little possibility of having aggregation errors that affect the index due to imputations. Nonetheless, the CPI price indices are verified continuously for any type of abnormality.

#### 3.5 Revision studies

— Revisions, as a gauge of reliability, are tracked and mined for the information they may provide.

# 3.5.1 Studies and analyses of revisions and/or updates are carried out and used internally to inform statistical processes (see also 4.3.3).

Revision studies are undertaken on a regular basis.

A significant number of revision studies have been carried out, documented, and made available on the INEGI website, particularly leading up to major index revisions. It should be noted that when any changes are anticipated for the index, as with major index revisions and/or weight revisions, INEGI is required by law to prepare a proposal listing the changes as well as the results of studies carried out to determine the effect of these changes on the index. This report on the

proposed changes is reviewed by key index users and meetings are conducted with these users in order to resolve any issues that are raised.

Other types of studies are also held. One type of these studies is the measurement of the effects of relative price changes on the consumption patterns of the index population based on tabulations of expenditure data from each bi-annual ENIGH. These studies allow for the assessment of the potential substitution bias that may be occurring for the CPI. Also, studies on the long-term trends of prices for elementary aggregates are carried out periodically in order to identify possible systematic biases in the index.

In addition, special studies are carried out for methodological issues that arise between major index revisions, such as proposed changes to the treatment mobile telephone service.

Measures are undertaken to incorporate the findings from revision studies in data compilation.

The results of all of these studies are presented to the quality committee, which meets monthly, and decisions are made to determine the actions to be taken to correct potential problems with the index. It should be noted that both, the results of these index reviews, as well as the actions taken, are documented and audited as a formal part of ISO 9001:2008 specified procedures.

### 4. Serviceability

Statistics, with adequate periodicity and timeliness, are consistent and follow a predictable revisions policy.

### 4.1 Periodicity and timeliness

—Periodicity and timeliness follow internationally accepted dissemination standards.

### 4.1.1 Periodicity follows dissemination standards.

The CPI is published fortnightly and therefore meets the SDDS standards.

#### 4.1.2 Timeliness follows dissemination standards.

The monthly statistics of the CPI are published on the Internet the ninth day after the end of each month at 8:00 a.m. (in case that day or the following are bank holidays or on the weekend, the statement is published on the previous banking working day). Moreover, the fortnightly publication of the indicator is performed under the same rule on the twenty-fourth of each month.

### 4.2 Consistency

Statistics are consistent within the dataset, over time, and with major datasets.

#### 4.2.1 Statistics are consistent within the dataset.

Compilations for the CPI are identical regardless of the classification system employed and the order of aggregation, whether by product or by geography.

#### 4.2.2 Statistics are consistent or reconcilable over a reasonable period of time.

CPI statistical series are consistent for elementary aggregates that have remained constant since January 1969 when the CPI was introduced.

# 4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks.

The consumer price statistics are generally consistent with information from the following statistics: Producer prices, national accounts, and in the case of tradable goods with the trends presented by these products internationally.

### 4.3 Revision policy and practice

— Data revisions follow a regular and publicized procedure.

### 4.3.1 Revisions and/or updates follow a regular and transparent schedule.

Major CPI revisions were carried out in 1968, 1980, 1994, 2002, and 2010. A weight revision is scheduled to be carried out in December 2012, or January 2013 using expenditure tabulations from the 2010 ENIGH. Future revision to the CPI will be carried out using the new ENGASTO survey that began in 2011. The next major revision is scheduled for 2014 using expenditure data from the ENGASTO for 2012 or 2013. Major revisions are scheduled for every four years with a weight revision at the two year interval between the major revisions. Detailed documentation for all CPI revisions is available on the INEGI website.

#### 4.3.2 Preliminary and/or revised/updated data are clearly identified.

The CPI is final when published.

# 4.3.3 Studies and analyses of revisions and/or updates are made public (see also 3.5.1).

INEGI is required by law to put to account through public consultation any methodological and/or weight changes that occur to the CPI. A formal proposal is posted on the INEGI website, and meetings are held with principal entities that provide CPI price data, important index users,

academic analysts, and other interested parties in order to obtain feedback on the proposed methodological changes and/or changes to the CPI basket weights.

The last public consultation was conducted in October 2012 regarding the upcoming weight revision that was scheduled for December 2012 or January 2013. Among other topics that were covered, an analysis was conducted regarding the effect of replacing the CPI basket weights derived from the 2008 ENIGH with new weights derived from the 2010 ENIGH. A CD was prepared of the material presented during the meetings and posted on the INEGI website. The following material was included on the CD:

- CPI presentation: Weight Revision 2010
- Consumer Price Index Manual: Theory and Practice, 2004
- CPI Methodological Document: Weight Revision 2010
- CPI Technical Note: Weight Revision 2010
- ENIGH: Comparison of weights for 2008 and 2010

A report was also prepared for the Board of Governors of INEGI. This report summarized the results of the meetings that were held on the proposed weight revision.

### 5. Accessibility

Data and metadata are easily available and assistance to users is adequate.

#### 5.1 Data accessibility

—Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made available on an impartial basis.

# 5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts).

The CPI is published twice a month. Every two weeks, a brief note is published in the Official Gazette of the Federation, indicating the level of the CPI and the percentage change in the index over the two-week period. For the second two weeks of the month, a monthly percentage change in the index is included, along with a brief analysis of the components for which there were significant price changes during that month.

The monthly press release provides further details, a few tables and charts, and more analysis. This release is also published on the Internet with much more detail of information. In terms of layout, all the INEGI publications on the CPI are professionally presented with tables and charts alongside the data to facilitate analysis.

#### 5.1.2 Dissemination media and format are adequate.

Statistics are disseminated in formats to suit users' needs.

While the fortnightly/monthly press releases are very short, much more extensive information on the CPI can be found on the Institute's website. This information includes a list of all the monthly prices used to calculate the index and indices for 46 urban areas and seven geographical regions, broken down into eight large consumption expenditure categories. The Institute's web page also has links to detailed historical series from 1980.

The INEGI website was recently improved allowing the user to create and download tables and graphs with virtually any format using the data available on the website.

#### 5.1.3 Statistics are released on a preannounced schedule.

Statistics are released on the preannounced schedule.

The Institute's statistical series are released in accordance with a precise pre-announced schedule, which is published each quarter. Moreover, by law the CPI is required to be published within the first 10 days of the month following the month to which the data refer. Additionally, the INEGI provides an annual calendar with the specific publication dates. http://www.inegi.org.mx/sistemas/calendariodifusion/coyuntura/

#### 5.1.4 Statistics are made available to all users at the same time.

The statistics are made available to all users at the same time.

On the official publication date, the CPI is disseminated simultaneously to all users via a press release and on the Internet. Neither the press, nor any governmental agency, is given a preview of the CPI before its dissemination.

### 5.1.5 Statistics not routinely disseminated are made available upon request.

Statistics not routinely disseminated are made available to users upon request.

Non-confidential CPI data are published in the official gazette and on the Internet. Access to, detailed non-confidential CPI data and downloads are available to the public without charge.

### 5.2 Metadata accessibility

—Up-to-date and pertinent metadata are made available.

# 5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated.

i. The metadata give adequate information about the meaning of the data and about the methodology used to collect and process them.

A document entitled *Documento Metodológico del Índice Nacional de Precios al Consumidor* [Methodological Document of the National Consumer Price Index] describes the methodology used to construct the CPI and facilitates ample debate on key methodological aspects. Also a list of most frequent questions and answers on the CPI is published on INEGI web page.

With respect to the methodology employed to calculate the CPI, data sources, and statistical techniques, the INEGI basically conforms to internationally accepted standards, guidelines or good practices. For the most recent CPI revision with the reference base of the second fortnight of December 2010, several improvements were introduced, including the use of geometric means for compiling all the elementary aggregates, updating the 2008 ENIGH weights to the new link period (the second fortnight of December 2010) and updating the classification system to COICOP.

SDDS statistical methodologies and other related metadata are routinely updated and revised.

#### 5.2.2 Levels of detail are adapted to the needs of the intended audience.

i. Different levels of metadata detail are made available to meet users' requirements.

Metadata on the CPI are available on the INEGI website at various levels of detail in order to meet user needs. In addition to the detailed methodological document, there is a document on frequently asked question about the CPI. The website also includes a number of other methodological documents including the proposal for, and the report on, the 2010 weight update.

#### 5.3 Assistance to users

— Prompt and knowledgeable support service is available.

#### 5.3.1 Contact points are publicized.

i. Adequate assistance is given to users of statistics.

The INEGI website (<a href="http://www.inegi.gob.mx">http://www.inegi.gob.mx</a>) contains an e-mail address (<a href="atencion.usuarios@inegi.org.mx">atencion.usuarios@inegi.org.mx</a>) to direct additional requests, suggestions, and contact INEGI personnel. Another resource is available via telephone: National without cost: 01 800 111 46 34 International: (international code) + (52) + (449) 910 53 00 Ext. 5301, from Monday to Sunday from 8:00 to 23:00 hours. There is also the possibility of a one-to-one chat (<a href="http://chat.inegi.org.mx/#top">http://chat.inegi.org.mx/#top</a>), available Monday to Sunday from 8:00 to 23:00 hours. In addition, the user is able to perform queries through the social networks: Twitter (<a href="http://twitter.com/inegi\_informa">http://twitter.com/inegi\_informa</a>) and Facebook (<a href="http://www.facebook.com/pages/INEGI-Informa/180299958681029</a>).

INEGI can also be contacted by user through one of the 45 Information Centers (IC), distributed throughout the Mexican Republic, according to the following table:

Federal Entity	IC
Estados Unidos Mexicanos	45
Aguascalientes	2
Baja California	2
Baja California Sur	1
Campeche	1
Coahuila de Zaragoza	1
Colima	1
Chiapas	1
Chihuahua	2
Distrito Federal	3
Durango	2
Guanajuato	3
Guerrero	2
Hidalgo	1
Jalisco	1
Estado de México	2
Michoacan	1
Morelos	1
Nayarit	1
Nuevo León	1
Oaxaca	1
Puebla	1
Querétaro	1
Quintana Roo	2
San Luis Potosí	1
Sinaloa	1
Sonora	1
Tabasco	1
Tamaulipas	2
Tlaxcala	1
Veracruz de Ignacio de la Llave	2
Yucatán	1
Zacatecas	1

INEGI publications contain information on the INEGI website, its address, e-mail address, and phone number. In addition, the INEGI has a unit, Information Centers INEGI, in charge of providing information to the public. Moreover, the general public has the possibility to make requests and suggestions through the Information Request System provided by INEGI in the web link <a href="http://www.infomex.inegi.org.mx/infomex/">http://www.infomex.inegi.org.mx/infomex/</a>

### 5.3.2 Publications, documents, and other services, including information on any charges, are widely available.

Publications and other services are available to users of statistics.

Price indices information is available free of charge on the INEGI website: http://www.inegi.org.mx/est/contenidos/proyectos/inp/Default.aspx.

Catalogs, methodological papers, and all other services and tools are available on the same webpage.

### Table 1. Data Quality Assessment Framework (2012): Summary of Results for Price Statistics (Consumer Price Index)

(Compiling Agency: National Institute of Statistics and Geography—INEGI)

Key to symbols: NA = Not Applicable; O = Practice Observed; LO = Practice Largely Observed; LNO = Practice Largely Not Observed; NO = Practice Not Observed; SDDS = Complies with SDDS Criteria								
Element		NA	Assessment				Comments	
			0	LO	LNO	NO	Comments	
0.	Prerequisites of quality							
0.1	Legal and institutional environment		X					
0.2	Resources		X					
0.3	Relevance		X					
0.4	Other quality management		Χ					
1.	Assurances of integrity							
1.1	Institutional integrity		Х					
1.2	Transparency		Х					
1.3	Ethical standards		Х					
2.	Methodological soundness	•	•	•		*		
2.1	Concepts and definitions		Х					
2.2	Scope			X			Research the impact of covering rural and small urban areas with population less than 15,000 near included urban clusters	
2.3	Classification/sectorization		Х					
2.4	Basis for recording		Х					
3.	Accuracy and reliability	•	•	•		*	•	
3.1	Source data			Х			CPI weights should cover a full year (seasonal cycle)	
3.2	Assessment of source data		Х					
3.3	Statistical techniques		Х					
3.4	Assessment and validation of intermediate		Х					
data a	nd statistical outputs							
3.5	Revision studies		Х					
4.	Serviceability	•	•	•		*		
4.1	Periodicity and timeliness		Х					
4.2	Consistency		X					
4.3	Revision policy and practice		Х					
5.	Accessibility							
5.1	Data accessibility		Х					
5.2	Metadata accessibility		Х					
5.3	Assistance to users		Х					

### PRICE STATISTICS (PRODUCER PRICE INDEX)

### 0. Prerequisites of Quality

### 0.1 Legal and institutional environment

# 0.1.1 The responsibility for collecting, processing, and disseminating the statistics is clearly specified.

Mexico's price statistics are compiled and disseminated by the National Institute of Statistics and Geography (INEGI).

INEGI's activity is governed by the National System of Statistical and Geographical Information Law (LSNIEG), published in the Official Gazette of the Federation (DOF) on April 16, 2008. Article 52 of the Law indicates that INEGI is an agency with technical and management autonomy, its own legal status and its own assets and liabilities, and it is responsible for regulating and coordinating the National System of Statistical and Geographical Information (SNIEG).

The priority objective of the INEGI is to take steps to ensure that information in the national interest is subject to the guiding principles of the SNIEG which are: accessibility, transparency, objectivity, and independence. Likewise, the purpose of the SNIEG is to provide society and the State with information that is of good quality, relevant, truthful, and timely, in order to facilitate efforts to pursue national development (Article 3, LSNIEG).

Article 4 states that the SNIEG has the following objectives: produce information, ensure timely dissemination of information for consultation purposes, promote knowledge and use of information, and safeguard information. The composition of the SNIEG is defined in Article 5 and is as follows: the National Consultative Council, the National Information Subsystems, and the INEGI, which is the unit coordinating the system.

Article 59 states that the INEGI shall have as exclusive powers: carry out national censuses, establish the national accounts system. Finally, the Article states that the terms national census or national accounts may not be used in the names or advertising for records, surveys, or listings other than those carried out by the INEGI.

Article 78 of the LSNIEG gives the system of national accounts the status of information in the national interest.

The Law is available on the INEGI's website at <a href="https://sc.inegi.org.mx/Normateca2010/menuNormateca.jsp?codigo=0102">https://sc.inegi.org.mx/Normateca2010/menuNormateca.jsp?codigo=0102</a>. There are Bylaws (DOF of National Accounts March 31, 2009) to govern the INEGI's operations and regulate the form and basis on which the INEGI exercises the functions and powers conferred upon it by the

Political Constitution of Mexico (Article 26), the LSNIEG, and other laws, regulations, decrees, and resolutions of the Governing Board.

Regarding the responsibility for collecting, processing and disseminating National Price Indices (NPI), the LSNIEG in article 59, Fraction III, gives exclusive capacity to the INEGI to: "Elaborate the following national price indices:

- a. Consumer Price Index
- b. Producer Price Index."

The first and the eleventh transitory articles of the LSNIEG specify the establishment of a working group between the Bank of Mexico (BM), which was previously responsible for the NPI and the INEGI in order to ensure that the transfer of the NPI would be carried out in a manner that guaranteed the preservation of the quality of the NPI. As a result, there was an environment of cooperation as work meetings between the BM and INEGI were held with regularity during the period July 2008 through July 2011. The transfer was completed on July 15, 2011. From that date, in accordance with the provisions of the LSNIEG, the responsibility for price collection, processing and disseminating the PPI was transferred from the BM to the INEGI.

#### 0.1.2 Data sharing and coordination among data-producing agencies are adequate.

Most of the data used for the compilation of the PPI are generated within INEGI. Data relating to the value of production used to determine the weights of the PPI are obtained mainly from information provided by the Input Output Matrix 2010 (IOM), the System of Mexican National Accounts 2008–2010 (SCNM), and the 2009 Economic Census. In addition, some wholesale prices of farm products, livestock and carcass meat, are directly provided by the National System of Information and Integration of Markets (SNIIM) of the Ministry of Economy under an agreement of collaboration with absolute independence in the use of the data. This entity also has an ISO 9001 quality certificate.

The relationship of INEGI with other institutions and public agencies is established within the framework of the SNIEG through the Executive Committees and the Specialized Technical Committees in which the appropriateness of the methodologies employed for the compilation of the price indices are evaluated. In the specific case of the national price indices a Specialized Technical Committee on Price Statistics has been created. This Committee has been functioning well since its creation. In addition, on the basis of the special relationship between the INEGI and the BM, detailed price data are provided to the BM on a regular basis for analysis.

# 0.1.3 Individual reporters' data are kept confidential and used for statistical purposes only.

Personnel involved in the PPI development are aware of the confidentiality of PPI data. This is stressed in personnel training sessions, and in requests for price information made to

respondents. These requests include an explanation that confidentiality will be observed and that the data will be used exclusively for statistical purposes. Also, pricing information that is published in the DOF has a code that protects the identity of the informant.

In addition, as an autonomous agency, INEGI is also governed by the Federal Law of Administrative Responsibilities of Public Servants (LFRASP). Fraction V of Article 8 establishes that every public servant has the obligation of custody and care of the documentation and information under his/her responsibility, and to not impede or avoid its use, subtraction, destruction, concealment, or deactivation.

Article 13 of the LFRASP establishes mechanisms for imposing penalties on civil servants on grounds of administrative conduct deriving from their failure to fulfill their obligations pertaining to the custodianship of documentation and information, which mechanisms shall consist in: a private or public warning; suspension; removal from office; economic penalty; and temporary disqualification from engaging in the employment, post, or commission for a period of not less than three days, and not more than one year in public service.

Also, Title Two in Chapter V of the LSNIEG guarantees the confidentiality of statistical data supplied to INEGI, stipulating that such data may be used only for statistical purposes. Article 37 of the Law states that, "data provided for statistical purposes by system respondents to units under the law, shall be strictly confidential, and under no circumstances may they be used for any purpose other than a statistical purpose."

Article 38 of the Law declares that "data and reports provided by private parties for statistical purposes or derived from administrative or civil records shall be handled, for purposes of this law, with due regard to the principles of confidentiality and may not under any circumstances be disclosed in a personalized (nominative) or individualized manner, nor may they be used as evidence before an administrative or fiscal authority, in judicial or other proceedings. When it is necessary to disclose information, said information must be aggregated in such a way that it is not possible to identify system respondents or those individuals or legal entities that are the focus of the information in question."

Article 104 of the LSNIEG defines the violations imputable to civil servants at the INEGI or civil servants at the system units as follows: "the disclosure of confidential statistical data; violations of industrial or commercial secrets, or the provision by system respondents of data that is individualized or identified by name" (paragraphs I and II). Consequently, Article 108 of the Law provides administrative penalties for anyone who discloses confidential data: "A fine of 2,000 to up to 30,000 times the minimum monthly wage valid for the federal district at the time the violation was committed."

By the same token, in the resolution establishing the Regulations (Statute) of the Professional Career Service (ESPC) for the INEGI (DOF of May 8, 2009), specific provision is made for disciplinary measures for personnel on grounds of noncompliance with current law, in particular

Article 38, Fraction V, which establishes that one of the grounds for separation from the INEGI shall be failure to fulfill the obligations inherent in the employee's post or those established in the Statutes or in the regulations deriving from it.

The ESPC points out that government employees must abide by the principles of confidentiality and privacy with respect to respondent data provided for statistical purposes, as well as with respect to confidential information obtained from administrative records and the application (in the performance of their duties) of the SNIEG code of ethics.

# 0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response.

The legal powers of INEGI to compile information are clearly set out in Chapter V of the LSNIEG, referring to the rights and obligations of users and respondents of "National Statistics and Geographic Information Systems." Article 45 defines the obligations of respondents, while Article 40 requires respondents to provide the information requested in a truthful and timely manner.

#### Article 45 of LSNIEG states:

"System respondents will be obliged to provide with truth and timeliness, the data and reports requested by the competent authorities for statistical, census and geographic purposes, and will support them."

On confidentiality of information, Article 46 reads:

"Data provided to the system by the informants will be confidential in the terms of this Law and in terms of the general rules dictated by the Institute."

Chapters I and II of Title IV of the LSNIEG spell out the administrative misconduct perpetrated by system respondents and the sanctions to which they are subject. Article 48 states that "In the exercise of its powers under this Law, the INEGI may conduct inspections to verify the authenticity of information, when the data provided are incompatible, incomplete, or inconsistent."

Article 49 indicates that verification inspections must be done under a written order from the competent authority: Paragraph I (d) states that "the order must specify the statistical or geographic information to be verified, as well as the documentation that must be exhibited for inspection by the system respondent."

The Law also provides penalties for refusing to provide or falsifying information. Article 106 imposes a fine of, "from 5 to 500 times the minimum daily wage valid for the federal district at the time the violation was committed."

Despite the existence of legal provisions for obtaining information, and penalties for noncompliance, they have rarely been enforced. The intent is to encourage voluntary reporting by explaining to respondents, in detail, the use that will be made of their information, its confidential nature, and its importance for the country in terms of quantifying the characteristics and economic behavior of its activity.

#### 0.2 Resources

# 0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs.

Staff resources for compiling the statistics are adequate to perform required tasks.

In general terms, there are enough staff to carry out current activities. Gaps between the skills required for the staff are continuously analyzed and identified, with the aim of reducing them through the training program. In particular, there are annual training cycles to introduce new methodology and to refresh instructions for price collectors.

The team responsible for carrying out price collection and analysis for the PPI consists of 112 field surveyors (92 of whom are shared with the CPI), 11 regional supervisors at the head office (five of whom act as chief supervisors), and two assistant managers.

Additionally, there is an information technology and methodology team that collaborates in the information processing and conceptual design. The information technology team which services the price statistics systems is comprised of ten staff members attached to the Direction of Information Processing, and the methodology team with four staff members is attached to the Direction of Conceptual Design. Finally, there is a team of nine quality auditors seconded to the Direction of Documentation and Certification.

Computing resources for compiling the statistics are adequate to perform the required tasks.

The prices program has sufficient computer equipment and administrative support for the efficient compilation of the PPI and the management of PPI databases. The workstations are up to date and have the necessary requirements for the compilation of the index.

Computing resources are adequately protected, inter alia, by providing emergency backup systems for the retrieval of statistical series and updates in the event of natural disasters, accidents or other extraordinary events. Contingency plans have been tested during drills, achieving the compilation of the PPI in remote locations.

The System for the Computation of the PPI that allows for all processes associated with the compilation of the PPI to be carried out automatically (capture, transmission, review and processing of the information) in a safe, effective, and efficient manner.

Some of the advantages of this system are:

- Reduction in processing times.
- Increase in security and information consistency.
- Increase in speed, security, and efficiency in data transmission from PPI cities to headquarters.
- Versatility to modify the structure and methodology of price indices.
- Facilitation of the transmission and preservation of institutional knowledge.
- Simplification of the detection of outliers, an improvement in the quality of information, and a reduction in human errors.
- Reduction of maintenance needs and technical support.
- Facilitation of the transmission of price statistics data to INEGI.

The PPI's Computation System is a transactional system developed by BM's staff, transferred to INEGI and amended by staff seconded to the Direction of Information Processing. The system uses a client server architecture centered in data, having as a main repository relational database a Sybase Adaptive Server for online transaction processing, using Java as the development language for the creation of clients and for the creation of the communication service between PPI's cities and the headquarters in Mexico City.

Physical facilities and other resources are adequate to perform required tasks.

The headquarters building and regional office space are adequate to perform activities involved in the collection of data and the compilation of the PPI.

Price researchers commute among points of sale using public transportation, for which they receive a monthly stipend. Price researchers are affiliated to the Institute of Social Security and Services of State Workers (ISSSTE), which provides medical service if needed, in addition they have all the social benefits provided by law.

Funding for compelling the statistics is adequate to perform required tasks.

The ongoing activities for price collection and compilation of the PPI have adequate funding. The production of the basic statistics necessary for compiling the index is financed by INEGI, and in some cases, by other public entities.

### 0.2.2 Measures to ensure efficient use of resources are implemented.

Management to ensure that resources are used efficiently.

The management system of ISO 9001:2008, which governs the development of the PPI, requires that audits are carried out twice a year. The audits evaluate use of resources and staff performance. These audits document the results and, if necessary, provide measures to remedy the problems encountered.

This process also seeks to improve the efficiency of procedures through continuous analysis. In particular, a Quality Committee to discuss and follow up proposals to improve the operation has been established.

Costing and budgeting practices are in place and provide sufficient information to management to make appropriate decisions.

INEGI continuously evaluates the cost and the use of budgeted resources to compile the PPI.

#### 0.3 Relevance

### 0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored.

PPI users within INEGI maintain continuous communication with the staff team to express their needs or opinions. In particular, the President of the Institute is asked to evaluate the performance of the area through a quarterly survey. Moreover, the general public is able to make requests for information, as well as suggestions through the Information Request System provided by INEGI in the web link: <a href="http://www.infomex.inegi.org.mx/infomex/">http://www.infomex.inegi.org.mx/infomex/</a>. In addition, INEGI is able to monitor user needs by studying requests for information received via the Sale Centers and e-mail.

INEGI recently established a Committee of Users of Information on Prices (CUIP) that meets regularly to discuss issues relating to the CPI and the PPI. When necessary, subcommittees are established to review detailed topics. The CUIP membership includes chambers of commerce and business associations, as well as academics and researchers.

The INEGI's staff keeps abreast of progress and new developments in the compilation of price indices through its participation in various international seminars and courses, including those organized by the UN, IMF, the Organisation for Economic Co-operation and Development (OECD), and the Economic Commission for Latin America and the Caribbean (ECLAC). Participants at these meetings also are able to identify the informational needs of these international institutions.

#### 0.4 Other quality management

### 0.4.1 Processes are in place to focus on quality.

Officials at INEGI are aware of all dimensions of data quality, and make an effort to spread this awareness among all staff members. In particular, this effort is reflected in the implementation of the system of total quality management ISO 9001:2008 which establishes a policy of quality management in order to achieve quality objectives. The staff is regularly examined on their knowledge of the policy and objectives. The quality policy of the staff considers the following:

"Provide consumer and producer price indices, as well as studies of the program price of purchasing power parities, that are reliable, representative and timely, using recognized methodologies and continuous improvement of processes, in order to satisfy customer requirements for statistical information."

The quality objectives declared in the ISO system per Area Direction are:

- (i) Conceptual Design. Update the conceptual and methodological design of price indices by using, analysis and evaluation of international best practices to maintain the reliability and representativeness of the indices through continuous improvement in order to meet the needs of our customers.
- (ii) Field Operations. Improve the quality and representativeness of price information through its compilation according to the methodology and criteria established and the review of nonconforming product.
- (iii) Information Processing. Improve the processes of calculation and timely dissemination of price indices through the development of new tools and improvements to the systems of data capture and calculation.
- (iv) Documentation and Certification. Improve the effectiveness and operation of the Quality Management System of the indexes of prices, in order to maintain the quality of the indexes and their certification ISO 9001:2008.
- (v) Purchasing power parities. Produce the pricing studies required by the Program of Purchasing Power Parities through the implementation of the conceptual and methodological criteria established by the Program, in order to meet the needs of our customers and ensure the participation of Mexico in the statistical projects relating to international comparisons.

In training programs, on-site monitoring visits, and audits the importance of quality is emphasized, and staff is advised of the contribution they must make in order to achieve it. INEGI

has provided the necessary resources to keep the ISO 9001:2008 system in operation for governing the development of the PPI since December 2011.

The importance of the PPI's quality for INEGI is manifested through the publication of ISO certifications in the press releases of inflation. Also, in public talks concerning the PPI, that target mainly university students, the relevance of the ISO system in limiting possible errors in the various processes required for the development of the PPI is emphasized.

# 0.4.2 Processes are in place to monitor quality during the planning and implementation of the statistical program.

INEGI has established procedures to closely monitor the proper implementation of the various procedures required for compiling the PPI. There are monthly reports containing the results of audits that reflect any mistakes of price collection errors. Moreover, on a bimonthly basis, the Quality Committee develops a follow-up of the preventive and corrective actions that have been established. These are reflected in the minutes of that meeting. In addition, each semester staff seconded to the Direction of Documentation and Certification produces a report that is delivered to the auditor of the ISO system which describes the actions that took place during the period.

Some team members have participated in specialized courses on price index compilation offered by the IMF, ECLAC, the INE, and the U.S. Bureau of Labor Statistics (BLS), that have enabled them to become familiar with international best practices. This information is then disseminated to other staff members.

The PPI planning program considers quality improvements to procedures that are identified in audits, supervisions, and quality committee meetings. Also, the existing index compilation methodologies are compared to international best practices for price index compilation. Several of these improvements in index compilation methodology were implemented in the review of the current base.

### 1. Assurances of Integrity

#### 1.1 Institutional Integrity

#### 1.1.1 Statistics are produced on an impartial basis.

The autonomy conferred by law to INEGI supports the professional independence of its staff. This protects the PPI compilation from interference from other public entities. An additional factor contributing to professional independence are the rules of the ESPC of the INEGI; these set forth the rules enabling the INEGI to have a career professional staff that is agile, efficient, and transparent, that promotes and fosters staff development, and is able to hire the best people available.

The guiding principles are: lawfulness, efficiency, objectivity, quality, impartiality, equity, independence, and competence based on merit (Article 3). Issues regulated by the statutes are income, training, performance assessment, incentives, separation, rights and obligations of government employees, and appeals (Article 4).

Inside INEGI the independence of those responsible of the PPI is safeguarded by a culture of professionalism that is considered essential for the credibility of the statistical results.

# 1.1.2 Choice of data sources and statistical techniques as well as decisions about dissemination are informed solely by statistical considerations.

The public is made aware of internal government access to statistics prior to their release to the public.

There is no internal government access to the PPI outside of INEGI prior to its release to the public.

Decisions about dissemination are informed solely by statistical considerations.

INEGI releases the PPI on a monthly basis. The publication deadline for the release of the indicator is nine days after the reference month at 8:00 a.m., unless that day or the following day is a holiday, in which case the index is disseminated before the holiday. The timing and conditions of the release of the PPI are determined solely on the basis of statistical considerations taking into account the time required to review and validate the index.

# 1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.

INEGI seeks to avoid misinterpretation of the PPI by a careful review of press releases. There is a regular monitoring of press releases, and if any note needs to be clarified, the necessary clarifications are made by INEGI.

INEGI has a press clipping service and monitoring services of radio and television where the notes and comments on the PPI are usually included. Additionally, the staff attached to the Deputy Directorate General of Price Indexes (DGAIP) selects daily newspaper articles that address issues related to inflation and wage formation. This selection is available to DGAIP staff in physical folders, which are then digitized and made available in electronic format by the DGAIP digital community.

#### 1.2 Transparency

# 1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public.

PPI data are published on the ninth day of each month, unless that day or the following day is a holiday, in which case the index is disseminated before the holiday. The website also contains methodological notes explaining the manner in which PPI data are collected, processed and disseminated.

The laws stipulating ethical standards and confidentiality requirements with respect to the compilation and dissemination of the PPI are available on the INEGI website. INEGI website includes the text of the LSNIEG, which informs about the INEGI's standards of confidentiality and professionalism of its president and Governing Board. The law can also be obtained in print in Spanish. The INEGI Bylaws are available to staff.

LSNIEG includes the code of conduct under which official statistics are compiled and disseminated, the approval process for data dissemination, and the procedures to hire and remove the head of the data producing agency.

INEGI website (<a href="http://www.inegi.gob.mx">http://www.inegi.gob.mx</a>) contains an e-mail address to direct additional requests, suggestions, and contact INEGI personnel. INEGI publications contain information on the INEGI website, its address, e-mail address, and phone number. In addition, the INEGI has a unit, Consultation Marketing Service, in charge of providing information to the public. Moreover, the general public has the possibility to make requests and suggestions through the Information Request System provided by INEGI in the web link <a href="http://www.infomex.inegi.org.mx/infomex/">http://www.infomex.inegi.org.mx/infomex/</a>.

# 1.2.2 Internal governmental access to statistics prior to their release is publicly identified.

The autonomy that the INEGI enjoys guarantees that no government authority has access to its statistics before they are publicly released. Thus, no government unit or civil servant has access to the data before they are published. In particular, in the case of market conditions reports, on the day they are published a note is sent to the President of the Republic and in accordance with the INEGI market data release timetable, the reports are released to the press and general public on the date specified therein, and posted on the INEGI website.

The press releases indicate that the data have been prepared under the responsibility of INEGI, although it is not explicitly stated that approval of the results lies exclusively with the INEGI (Article 23, 24, and 59).

#### 1.2.3 Products of statistical agencies/units are clearly identified as such.

Because the INEGI is an agency with technical and management autonomy, and the Law gives it exclusive capacity to elaborate the PPI, data are published in a press bulletin bearing the INEGI's logo and indicating clearly that the information was prepared by the Institute. At the same time, the press bulletin is posted on INEGI website with the respective institutional identification. Additionally, the publication in the DOF is done in a space reserved especially for INEGI.

In the case of joint publications with other institutions, the contribution of each is clearly identified, indicating that data associated with the PPI are the exclusive responsibility of INEGI. Such publications bear the logos of the participating institutions, consistent with the INEGI's editorial standards. In addition, the Federal Copyright Law mandates citation of information sources when these are disclosed.

# 1.2.4 Advance notice is given of major changes in methodology, source data, and statistical techniques.

INEGI gives advance notice of any major change in the methodology used to prepare the PPI. It does so at least 30 days prior to the adjustment, and in the case of major changes, such as the rebasing of the index, in accordance with Article 88 of the LSNIEG, must be submitted for public consultation under the guidelines established for this purpose, since the PPI is considered information of national interest. Additionally, meetings are held with principal informants, analysts and specialized users in order to comment on the proposed new base methodology and scope.

#### 1.3 Ethical standards

#### 1.3.1 Guidelines for staff behavior are in place and are well known to the staff.

Based on Article 7 of the LSNIEG, INEGI released the Code of Ethics, which governs the standards of conduct to which every employee of the Institute must conform in performing activities relating to the compilation of price and other types of statistics including geographical statistics. This Code is consistent with the provisions of Articles 7 and 8 of the Federal Law of Administrative Responsibilities of Public Servants, in order to safeguard the principles of legality, honesty, loyalty, fairness and efficiency governing the public service, and, moreover, outlines correct behavior when the staff is confronted with potential conflict of interest situations.

All levels of management are aware of the pressing need to ensure irreproachable conduct within and beyond the institution, and for officials and workers of INEGI to fulfill their obligations to maintain the public credibility of the information they process.

Newly hired personnel of the INEGI receive an explanation of the Code of Ethics that govern the personal behavior, professional independence, conflicts of interests, maintenance of INEGI's

reputation, and the compilation of statistics. Daily practice and the quality process within DGAIP, provide constant reminders of the obligation to meet existing standard.

### 2. Methodological Soundness

The methodological basis for the statistics follows internationally accepted standards, guidelines, or good practices.

The methodological soundness dimension is assessed against the guidelines outlined in the *System of National Accounts 2008 (2008 SNA)* or the *European System of Accounts 1995 (1995 ESA)*, and the *Producer Price Index Manual (PPI Manual)*. The concepts and definitions from the *2008 SNA* are used as guidelines with regard to coverage and valuation, and the methods and procedures from the *PPI Manual* and are used as guidelines for compiling the PPI. The *2008 SNA* and *1995 ESA* are viewed as interchangeable whenever reference is made in this document to the *2008 SNA*.

1993 SNA concepts and definitions hold for countries still using these standards.

### 2.1 Concepts and definitions

# 2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices.

The basket and weights used in the PPI are primarily obtained from the information provided by the Input Output Matrix 2010 (IOM), the System of Mexican National Accounts 2008-2010 (SMNA), and the Economic Census 2009, all of which are collected and compiled by INEGI. The overall structure of the PPI is based on the internationally recommended concepts and definitions contained in the 1993 SNA with some concepts updated to the 2008 SNA, and in the PPI Manual. However, compilations are made only by product aggregations classified by economic activity. They are not compiled by economic activity in a process that includes secondary goods for each activity.

#### **Recommendation:**

Compile a set of producer price indices by economic activity including secondary products.

The PPI base June 2012 has 567 elementary concepts at the highest level of disaggregation. The new PPI will also be compiled at the most detailed level of The North American Industrial Classification System (NAICS).

#### 2.2 Scope

# 2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices.

The PPI base June 2012 is broad in scope, encompassing economic activities in farming, forestry and fishing, mining, manufacturing, electricity and energy, water resource exploitation, transport, communications, health services, and professional services. There are also included public and private final consumption services not mentioned in the aforementioned fields. These include services for business, such as publicity agencies, outsourcing, equipment repair, rent paid and rent imputed for owner-occupied dwellings. Neither households' production for own-consumption, nor illegal goods and services are included. Conceptually, the value of the construction sector is estimated by the cost of materials and salaries. Imports are no included within the PPI universe.

The differences between the global coverage concepts of the national accounts and the PPI coverage are explained in the document about the methodology of the PPI base June 2012.

Mexico's PPI coverage is relatively broad compared with the typical coverage of other countries. The PPI coverage spans more than 80 percent of domestic production, according to the SCNA.

#### 2.3 Classification/sectorization

# 2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, quidelines, or good practices.

The PPI base June 2012 is classified according to The North American Industrial Classification System (NAICS) that was developed for adoption by the members of the North American Free Trade Association (NAFTA): Canada, Mexico, and the United States.

The NAICS system is based on a process-oriented principle. It attempts to group all establishments by type of production process, whether or not the majority of output is in the same detailed product category.

The purpose of the NAICS is to provide a unique and consistent framework for collecting and reporting economic statistics, reflecting the structure of the Mexican economy. The NAICS is the basis for the generation, presentation and dissemination of all production-related economic statistics in Mexico.

#### 2.4 Basis for recording

#### 2.4.1 Market prices are used to value flows and stocks.

Basket weights are constructed using output valued at basic prices, according to the definition of the SNA: "The basic price is the amount receivable by the producer from the purchaser for a unit of a good or service produced as output minus any tax payable, and plus any subsidy receivable, by the producer as a consequence of its production or sale. It excludes any transport charges invoiced separately by the producer". The main target of the PPI is to measure changes in what producers receive, excluding any changes in taxes collected on behalf of the government.

In the specifications of the sampled articles and services from where prices are collected, all the characteristics determining the price related to the terms of transaction are included (point of production or sale (mainly for farm products and services), brand, presentation, weight, measure unit and other general characteristics).

#### 2.4.2 Recording is done on an accrual basis.

In general, prices of goods and services are registered during the period in which the sale is made, except the export prices of oil products obtained with one month lag. For some services like air transportation for passengers (not for cargo) the price collected is for services to be used two weeks later, in an attempt to proxy the acquisition of these types of services.

### 2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, quidelines, or good practices.

The PPI is a set of indices, rather than a single index. This system is consistent with the *Producer Price Index Manual*, Chapter 4. Weights and their sources; section C.3: Net output weights; subsection 4.12: *The output of one activity is often used as input to another activity within the same industrial grouping. The use of gross value weights for both activities would result in double-counting because the value of output in the first activity (for example, raw materials) is an input to the second (assembled goods). The value of output of the second activity, therefore, includes that of the first. If the two activities are aggregated to produce a group index, the importance of the first activity is counted twice in the group index.<sup>2</sup> To eliminate the double-counting effect, a net weight structure is derived from the IOM.* 

<sup>&</sup>lt;sup>1</sup> System of National Accounts 2008, p. 151.

<sup>&</sup>lt;sup>2</sup> Producer Price Index Manual 2004, p. 91

#### 3. Accuracy and Reliability

Source data and statistical techniques are sound and statistical outputs sufficiently portray reality.

#### 3.1 Source data

### 3.1.1 Source data are obtained from comprehensive data collection programs that take into account country-specific conditions.

Data sources from which prices are collected are sufficient to compile statistics on producer prices. The sample of establishments from which prices are collected is reviewed continuously in order to ensure that the sample remains representative. This is done through constant supervision and frequent audits scheduled in accordance with the system of quality management system ISO 9001:2008. In addition, alternative sources of information are consulted for obtaining information on maintaining the PPI establishment sample up to date. These sources include the CPI outlet and product samples, special market studies, specialized magazines, yearbooks, etc.

Each month, approximately 110,000 price observations are collected, corresponding to around 32,400 specific items in 6,410 exclusive information sources for the PPI, and in 14,896 information sources shared with the CPI. Sampling frequency depends on the volatility of prices exhibited by the goods and services of each elementary concept. Farm products prices are processed every working day, while construction products prices are processed every two weeks.

The weight structure of the new PPI was determined using the IOM updated to 2010 with the SCNM, which has national coverage.

The price sample used for the PPI covers a large share of production. Prices of articles at informal markets are not covered due to the difficulties of keeping reliable sources. The scope of the PPI includes export goods and services.

The specifications of the goods and services for price collection are sufficiently detailed to ensure that the prices correspond to the same article each period.

The established procedures in the data collection are flexible enough to incorporate extraordinary surveys with the aim of obtaining additional information which can be useful to identify new products and market shares of different articles.

The data collection program for the PPI is sufficiently open and flexible to allow for adequate establishment sample turnover. Price collectors are provided with clear guidelines to identify new sources of information that could be included in the PPI establishment sample. Additionally, supervisions and audits defined within the quality management system ISO 9001:2008 are directed toward the identification of new establishments and current PPI establishments that are losing or gaining market share. This provides the information needed to eliminate or add

establishments to the PPI establishment sample. As part of this ongoing process, studies are made, and meetings are held with representatives of businesses that produce the products, as well as index users, in order to identify and propose new aspects to be considered in the PPI compilation process.

### 3.1.2 Source data reasonably approximate the definitions, scope, classifications, sectorization, valuation, and time of recording required.

Price and detailed specification data for the PPI are obtained from monthly surveys that are consistent with the needs of the PPI in terms of concepts, time or recording, frequency of collection, product definitions, and the NAICS classification system.

Source data for the estimation of PPI weights are obtained from the IOM and the national accounts. The concepts and definitions and classification systems used for the national accounts match those of the PPI.

#### 3.1.3 Source data are timely.

Price surveys are carried out according to a calendar determined by the staff which is rigorously followed in periodicity and timeliness. This process is supervised form the central office according to clearly established documented procedures.

#### 3.2 Assessment of source data

# 3.2.1 Source data—including censuses, sample surveys, and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to quide statistical processes.

Price and product specification data collected for the monthly PPI price survey are processed and audited according to procedures established using the total quality management system ISO 9001:2008. These well established and documented procedures are designed to detect and track errors in data collection, data entry, and data transmission. The data processing system includes computer system filters to identify atypical values, temporal inconsistencies, and periods of no price change. Price behavior deemed to be suspicious—abnormal variations in prices, or periods with a complete lack of price variation—are validated by the central office supervisor usually by contacting the price collector directly. If an error is detected, the price data are corrected. If no error is detected, the information that is gathered is stored.

These procedures are audited internally by the INEGI prices staff at least once a year for every price collection location within the system. Twice a year an external audit is carried out to the overall system and to random locations chosen by the external auditor. Additional random audits are conducted by the INEGI auditing staff.

Since these audits include a review of the establishments from which prices are collected, the establishment sample is rotated on a flow basis. Over the last three years, approximately 15 percent of the sample per year has been rotated.

INEGI uses a special system for tracking the prices of farm products, livestock and carcass meat under documented procedures established in the ISO 9001:2008 quality management system.

#### 3.3 Statistical techniques

### 3.3.1 Data compilation employs sound statistical techniques to deal with data sources.

Central office supervisors employ statistical filters to verify all source data and to detect possible errors. Price data are adjusted only if there is solid evidence to justify the adjustment such as when a quality adjustment is required. Outliers are not excluded or modified unless an error is detected.

Elementary aggregates for the updated PPI, with a reference base of June 2012, are compiled using the geometric mean formula which has better axiomatic properties than the arithmetic mean formula.

Temporarily unavailable prices and missing price are imputed by using the average price change for the prices that are available in the same elementary aggregate. When a product is unavailable, price collectors investigate whether it is temporarily unavailable or if it has been discontinued. In the second case, a product of similar characteristics is chosen to replace the discontinued product and a quality adjustment is made when necessary.

Seasonal products are not generally a problem in the PPI basket since none of the elementary items present strong seasonal behavior, all being available during the entire year. Nonetheless, the new PPI compilation system is equipped to handle seasonally unavailable products if the need should occur.

The direct comparison method is used when the change in the physical specification is so minor that it does not produces cost differences. When companies report their prices on the basis of new transaction terms such as discounts, the new selling terms are directly applied, thereby reflecting them as price change in the index.

Explicit quality adjustments are currently implemented for items that exhibit consistent and significant seasonal price changes—automobiles, education services and supplies, tourism vacation packages, and some types of machinery. The method employed to make these quality adjustments is the direct cost of characteristics approach. Studies are being carried out to increase the number of products for which explicit quality adjustments could be applied on a

regular basis. In particular, research is being conducted on durable goods with high technology components.

When new products and/or product specifications are identified during the regular audits of the PPI basket elementary items, these products and/or product specifications are linked into the index.

### 3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques.

Appropriate techniques are used to address specific issues of measurement for PPI weights.

The IOM and the SCNM are used in the construction of the weights, which are based on the recommendations of the 1993 and 2008 SNA.

Owner-occupant housing services are valued as the estimated rentals that tenants would pay for a similar housing. This is the same rental equivalence approach employed in the CPI and the national accounts.

The price recorded for goods and services represents only the value of the good or service in question, without considering other financial costs involved. Hence, the prices collected are the cash sales prices.

Generally accepted good practice statistical techniques are used to compile the PPI estimates.

Elementary indices for the new PPI are compiled using geometric means of short-term price relatives. Higher level aggregates are compiled using the short-term relative formulation of the Laspeyres index formula. This formulation of the Laspeyres index facilitates imputation of missing prices, quality adjustments, and the introduction of new product specifications and establishments.

Long-term relatives of price change were used to update the 2010 IOM to the index link period of June 2012. In addition, where possible, each price index series of the old PPI was then rebased to the reference base of the new index, and linked to the corresponding index series in the new PPI. A concordance between the classification system of the old PPI and the NAICS classification system used for the new PPI was used to guide this process.

#### 3.4 Assessment and validation of intermediate data and statistical outputs

#### 3.4.1 Intermediate results are validated against other information where applicable.

Monthly PPI indices are compared with corresponding CPI indices, and also with price information obtained on the internet for commodities in other countries.

#### 3.4.2 Statistical discrepancies in intermediate data are assessed and investigated.

Price index data for the PPI are analyzed for consistency in price changes across related products and industries and over time. When errors are detected and positively identified, the index is appropriately corrected.

### 3.4.3 Statistical discrepancies and other potential indicators or problems in statistical outputs are assessed and investigated.

The causes of atypical results in the PPI are investigated on a regular basis. An independent internal audit of price data collection has also been instituted on a regular basis. As a result, when it is necessary, INEGI implements changes in the methods used for collecting and processing data for the index, seeking to promote the continuous improvement of the system.

#### 3.5 Revision studies

### 3.5.1 Studies and analyses of revisions and/or updates are carried out and used internally to inform statistical processes (see also 4.3.3).

A number of revision studies have been carried out, documented, and made available on the INEGI website, particularly leading up to major index revisions. It should be noted that when any changes are anticipated for the index, as with major index revisions and/or weight revisions, INEGI is required by law to prepare a proposal listing the changes as well as the results of studies carried out to determine the effect of these changes on the index. This report on the proposed changes is reviewed by key index users and meetings are conducted with these users in order to resolve any issues that are raised.

The effects that changes in relative prices have on production are analyzed taking into account the results of the economic census, allowing the assessment of the potential substitution bias that the PPI may contain.

Also, studies on the long-term trends of the elementary concepts in the basket of the PPI are carried out periodically in order to identify possible systematic biases.

The results of these studies are presented to the quality committee, which meets monthly, and decisions are made to determine the actions to be taken to correct potential problems with the index. It should be noted that both, the results of these index reviews, as well as the actions taken, are documented and audited as a formal part of ISO 9001:2008 specified procedures.

#### 4. Serviceability

#### 4.1 Periodicity and timeliness

#### 4.1.1 Periodicity follows dissemination standards.

The PPI is published monthly meeting SDDS standards.

#### 4.1.2 Timeliness follows dissemination standards.

The monthly PPI is published on the INEGI website on the ninth day after the end of reference month at 8:00 a.m. In the event that the ninth day of the month falls on a holiday or the weekend, the index is published on the work day previous to the holiday or weekend.

#### 4.2 Consistency

#### 4.2.1 Statistics are consistent within the dataset.

All item compilations for the PPI are identical irrespective of the aggregation route and/or order in which they are made, whether by origin or by demand.

#### 4.2.2 Statistics are consistent or reconcilable over a reasonable period of time.

PPI series are available from January 1981 to the present for the elementary concepts that have remained consistent since the beginning of the PPI. During the last revision the NAICS classification system was introduced. The index is also compiled by the Mexican classification system. Historical data were reclassified using NAICS in order to have historically complete series for NAICS.

### 4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks.

Producer price statistics are compared on a regular basis with national consumer price statistics, implicit deflators from the national accounts, and, in the case of tradable goods, with the price trends presented by corresponding products on the international market. In general, the PPI index data have proven to be consistent with all of these comparable price data.

#### 4.3 Revision policy and practice

For the PPI there are two types of revisions that are evaluated: (i) revision of monthly published index series; and (ii) major revisions of the weights, item sample, establishment sample, and compilation methodology.

#### 4.3.1 Revisions and/or updates follow a regular and transparent schedule.

Revision of monthly published index series

All PPI series are subject to revision after the original publication of these series in order to reflect information from late reports and/or price corrections. Usually, oil aggregates are revised every month since these are compiled based on incomplete and/or preliminary price data. A note on the INEGI website indicates that PPI index series may be revised for up to four months.

#### Major revisions

Major revisions of the PPI were carried out in 1980, 1994, 2003, and 2012. It is expected that the next major PPI revision will be carried out in 2016 based on the 2014 economic census covering data from calendar year 2013. INEGI has established a plan to carry out major revisions for the PPI every five years following the schedule for the economic census that is conducted every five years.

#### 4.3.2 Preliminary and/or revised/updated data are clearly identified.

In general, the PPI data are not revised (with the exception of oil price indices). However, when data are revised, INEGI publishes a note about the specific data that were revised.

### 4.3.3 Studies and analyses of revisions and/or updates are made public (see also 3.5.1).

Any type of revision of the PPI on methodology as well as changes in the index basket, weights and/or base is subject to through public consultation. Additionally, when the index is rebased, meetings are held with principal data providers, analysts, and specialized users to elicit comment on proposed new base methodology and scope. The last public consultation was conducted in January 2012 to review proposed changes from the December 2003–based index to the June 2012–based index.

Documentation was delivered on a CD–ROM with the material presented during the meetings and on the website, as well as a report that was submitted to the board of governors of the Institute.

At the last rebasing, the material included in the CD–ROM was:

• Metodología en Consulta del Índice Nacional de Precios Productor: Cambio de Base (Methodology for Consultation on the Producer Price Index: Change of Base).

- Canasta y Ponderadores 2010 para Producción Total (2010 Basket and Weights for Total Production).
- Documento Metodológico del Índice Nacional de Precios al Productor (Methodology Document for the Producer Price Index).
- Formato para enviar observaciones y/o comentarios (Format for sending observations and comments).
- Presentación Cambio de Base del Índice Nacional de Precios Productor (Presentation on Change of Base of the Producer Price Index).
- Boletín de Prensa Núm. 006/12. Índice Nacional de Precios Productor, Diciembre de 2011 (Press Bulletin No. 006/12. National Producer Price Index, December 2011).
- Calendario de difusión de información de Coyuntura, 2012 (Release Calendar, 2012).
- Manual Internacional del Índice de Precios Productor (International Producer Price Index Manual).

#### 5. Accessibility

#### 5.1 Data accessibility

### 5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts).

The PPI is compiled and disseminated on a monthly basis. The index is disseminated in the monthly press release and on the INEGI website. The press release presents the monthly percentage change for the index along with a brief analysis of the components for which there were significant price changes during that month. The press release is also published on the Internet together with all the PPI statistical series. In addition to its monthly publications, the INEGI also produces quarterly and annual reports with more breakdown and analysis. In terms of layout, all the INEGI publications on the PPI are professionally presented with tables and charts alongside the data to facilitate analysis. .

#### 5.1.2 Dissemination media and format are adequate.

While the monthly press releases are quite short, much more extensive information on the PPI can be found in other, quarterly and annual, publications and on the Institute's website. The Institute's web page also has links to detailed historical series from 1981.

The INEGI website was recently improved allowing the user to create and download tables and graphs with virtually any format using the data available on the website.

#### 5.1.3 Statistics are released on a preannounced schedule.

The Institute's statistical series are released in accordance with a precise pre-announced schedule, which is published each quarter. Additionally, the INEGI provides an annual calendar with the specific publication dates for the PPI that is published within the first 10 days of the month after the month to which the data refer:

http://www.inegi.org.mx/sistemas/calendariodifusion/coyuntura/

#### 5.1.4 Statistics are made available to all users at the same time.

On the official publication date, the PPI is disseminated simultaneously to all users via a press release and on the Internet. Neither the press, nor any governmental agency, is given a preview of the PPI before its dissemination.

#### 5.1.5 Statistics not routinely disseminated are made available upon request.

Non-confidential PPI data are published in the official gazette and on the Internet. Access to detailed non-confidential PPI data and downloads are available to the public without charge.

#### 5.2 Metadata accessibility

# 5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated.

There are two detailed methodological documents available on the INEGI website for the PPI: (1) Documento Metodológico del Índice Nacional de Precios Productor junio 2012=100 (Methodological Document of the National Producer Price Index); and (2) Índice Nacional de Precios Productor Nota Metodológica (Methodological Note About the Producer Price Index). These documents describe the methodology used to compile the PPI.

INEGI asserts that the PPI conforms to internationally accepted standards, guidelines, and good practices on methodology, data sources, and statistical techniques. Thus no deviations from these practices are noted.

SDDS statistical methodologies and other related metadata are routinely updated and revised.

#### 5.2.2 Levels of detail are adapted to the needs of the intended audience.

Metadata on the PPI are available on the INEGI website at various levels of detail in order to meet user needs. In addition to the detailed methodological documents, there is a short document on frequently asked questions about the PPI with brief answers for less technically oriented index users.

#### 5.3 Assistance to users

#### 5.3.1 Contact points are publicized.

i. Adequate assistance is given to users of statistics.

The INEGI website (<a href="http://www.inegi.gob.mx">http://www.inegi.gob.mx</a>) contains an e-mail address (<a href="atencion.usuarios@inegi.org.mx">atencion.usuarios@inegi.org.mx</a>) for additional requests, suggestions, and to contact INEGI personnel. Telephone inquiries also are accepted: National without cost: 01 800 111 46 34; International: (international code) + (52) + (449) 910 53 00 Ext. 5301, from Monday to Sunday from 8:00 to 23:00 hours. There is also the possibility of a one-to-one chat (<a href="http://chat.inegi.org.mx/#top">http://chat.inegi.org.mx/#top</a>), available Monday to Sunday from 8:00 to 23:00 hours. In addition, the user is able to perform queries through the social networks: Twitter (<a href="http://twitter.com/inegi\_informa">http://twitter.com/inegi\_informa</a>) and Facebook (<a href="http://www.facebook.com/pages/INEGI-Informa/180299958681029</a>).

INEGI can also be contacted by user through one of the 45 Information Centers (IC), distributed throughout the Mexican Republic, according to the following table:

Federal Entity	IC
<b>Estados Unidos Mexicanos</b>	45
Aguascalientes	2
Baja California	2
Baja California Sur	1
Campeche	1
Coaĥuila de Zaragoza	1
Colima	1
Chiapas	1
Chihuahua	2
Distrito Federal	2 3 2 3
Durango	2
Guanajuato	3
Guerrero	2
Hidalgo	1
Jalisco	1
Estado de México	2
Michoacan	1
Morelos	1
Nayarit	1
Nuevo León	1
Oaxaca	1
Puebla	1
Querétaro	1
Quintana Roo	2
San Luis Potosí	1
Sinaloa	1
Sonora	1
Tabasco	1
Tamaulipas	2
Tlaxcala	1
Veracruz de Ignacio de la Llave	2
Yucatán	1
Zacatecas	1

INEGI publications contain information on the INEGI website, its address, e-mail address, and phone number. In addition, INEGI has a unit, Information Centers INEGI, in charge of providing information to the public. Moreover, the general public has the possibility to make requests and suggestions through the Information Request System provided by INEGI in the web link http://www.infomex.inegi.org.mx/infomex/

#### 5.3.2 Publications, documents, and other services, including information on any charges, are widely available.

Publications and other services are available to users of statistics.

Price index information is available free of charge on the INEGI website: http://www.inegi.org.mx/est/contenidos/proyectos/inp/Default.aspx

Catalogs, methodological papers, and all other services and tools are available on the same webpage.

Table 2. Data Quality Assessment Framework (2012): Summary of Results for Price Statistics (Producer Price Index)

(Compiling Agency: National Institute of Statistics and Geography—INEGI)

Elemen	NO = Practice Not Observed; SDDS = Complies with SD  Assessment				Comment		
Eiemen	τ	NA -	0	LO	LNO	NO	Comments
0.	Prerequisites of quality						
0.1	Legal and institutional environment		Χ				
0.2	Resources		Χ				
0.3	Relevance		Χ				
0.4	Other quality management		Χ				
1.	Assurances of integrity						
1.1	Institutional Integrity		Х				
1.2	Transparency		Х				
1.3	Ethical standards		Х				
2.	Methodological soundness						
2.1	Concepts and definitions			Х			PPI is not compiled by economic activity.
2.2	Scope		Χ				
2.3	Classification/sectorization		Χ				
2.4	Basis for recording		Χ				
3.	Accuracy and reliability						
3.1	Source data		Χ				
3.2	Assessment of source data		Χ				
3.3	Statistical techniques		Χ				
3.4	Assessment and validation of intermediate data and statistical outputs		Х				
3.5	Revision studies		Х				
4.	Serviceability						
4.1	Periodicity and timeliness		Х				
4.2	Consistency		Х				
4.3	Revision policy and practice		Χ				
5.	Accessibility			,			
5.1	Data accessibility		Х				
5.2	Metadata accessibility		Х				
5.3	Assistance to users		Χ				

## **Appendix I. Summary of the Special Data Dissemination Standard (SDDS)**

The SDDS prescribes the following practices under each of the identified dimensions:

Data dimension (coverage, periodicity, and timeliness)

 the dissemination of 18 data categories, including component detail, covering the four main sectors (real, fiscal, financial, and external) of the economy, with prescribed periodicity and timeliness.

#### **Access dimension**

- the dissemination of advance release calendars providing at least a one-quarter advance notice
  of approximate release dates, and at least a one-week advance notice of the precise release
  dates; and
- the simultaneous release of data to all users.

#### **Integrity dimension**

- the dissemination of the terms and conditions under which official statistics are produced and disseminated;
- the identification of internal government access to data before release;
- the identification of ministerial commentary on the occasion of statistical release; and
- the provision of information about revision and advance notice of major changes in methodology.

#### **Quality dimension**

- the dissemination of documentation on statistical methodology and sources used in preparing statistics; and
- the dissemination of component detail and/or additional data series that make possible cross-checks and checks of reasonableness.

#### SDDS subscribers are required to:

 post descriptions of their data dissemination practices (metadata) on the IMF's Dissemination Standards Bulletin Board (DSBB). Summary methodologies, which describe data compilation practices in some detail, are also disseminated on the DSBB; and maintain an Internet website, referred to as the National Summary Data Page (NSDP), which contains the actual data described in the metadata and to which the DSBB is electronically linked.

The IMF staff is monitoring observance of the standard through NSDPs maintained on the Internet. Monitoring is limited to the coverage, periodicity, and timeliness of the data and to the dissemination of advance release calendars.

Source: <a href="http://dsbb.imf.org">http://dsbb.imf.org</a>.

### **Appendix II. Data Quality Assessment Framework— Generic Framework**

(July 2012 Framework)

Quality Dimensions	Elements	Indicators
0. Prerequisites of quality	<b>0.1 Legal and institutional environment</b> —The environment is supportive of statistics.	<ul> <li>0.1.1 The responsibility for collecting, processing, and disseminating the statistics is clearly specified.</li> <li>0.1.2 Data sharing and coordination among data-producing agencies are adequate.</li> <li>0.1.3 Individual reporters' data are kept confidential and used for statistical purposes only.</li> <li>0.1.4 Statistical reporting is ensured through legal mandate and/or measures to encourage response.</li> </ul>
	<b>0.2 Resources</b> —Resources are commensurate with needs of statistical programs.	<ul><li>0.2.1 Staff, facilities, computing resources, and financing are commensurate with statistical programs.</li><li>0.2.2 Measures to ensure efficient use of resources are implemented.</li></ul>
	<b>0.3 Relevance</b> —Statistics cover relevant information on the subject field.	0.3.1 The relevance and practical utility of existing statistics in meeting users' needs are monitored.
	<b>0.4 Other quality management</b> —Quality is a cornerstone of statistical work.	0.4.1 Processes are in place to focus on quality. 0.4.2 Processes are in place to monitor quality during the planning and implementation of the statistical program.
1. Assurances of integrity The principle of objectivity in the collection, processing, and dissemination of statistics is firmly	<b>1.1 Institutional integrity</b> — Statistical policies and practices are guided by professional principles.	<ul> <li>1.1.1 Statistics are produced on an impartial basis.</li> <li>1.1.2 Choices of data sources and statistical techniques, as well as decisions about dissemination, are informed solely by statistical considerations.</li> <li>1.1.3 The appropriate statistical entity is entitled to comment on erroneous interpretation and misuse of statistics.</li> </ul>
adhered to.	<b>1.2 Transparency</b> —Statistical policies and practices are transparent.	<ul> <li>1.2.1 The terms and conditions under which statistics are collected, processed, and disseminated are available to the public.</li> <li>1.2.2 Internal governmental access to statistics prior to their release is publicly identified.</li> <li>1.2.3 Products of statistical agencies/units are clearly identified as such.</li> <li>1.2.4 Advance notice is given of major changes in methodology, source data, and statistical</li> </ul>
	<b>1.3 Ethical standards</b> — Policies and practices are guided by ethical standards.	techniques.  1.3.1 Guidelines for staff behavior are in place and are well known to the staff.

Quality Dimensions	Elements	Indicators
2. Methodological soundness The methodological basis for the statistics follows	<b>2.1 Concepts and definitions</b> —Concepts and definitions used are in accord with internationally accepted statistical frameworks.	2.1.1 The overall structure in terms of concepts and definitions follows internationally accepted standards, guidelines, or good practices.
internationally accepted standards, guidelines, or good practices.	<b>2.2 Scope</b> —The scope is in accord with internationally accepted standards, guidelines, or good practices.	2.2.1 The scope is broadly consistent with internationally accepted standards, guidelines, or good practices.
	2.3 Classification/ sectorization—Classification and sectorization systems are in accord with internationally accepted standards, guidelines, or good practices.	2.3.1 Classification/sectorization systems used are broadly consistent with internationally accepted standards, guidelines, or good practices.
	<b>2.4 Basis for recording</b> — Flows and stocks are valued	2.4.1 Market prices are used to value flows and stocks.
	and recorded according to internationally accepted	2.4.2 Recording is done on an accrual basis.
	standards, guidelines, or good practices	2.4.3 Grossing/netting procedures are broadly consistent with internationally accepted standards, guidelines, or good practices.
3. Accuracy and	3.1 Source data—Source	3.1.1 Source data are obtained from
reliability Source data and	data available provide an adequate basis to compile	comprehensive data collection programs that take into account country-specific conditions.
statistical techniques are sound and statistical	statistics.	3.1.2 Source data reasonably approximate the definitions, scope, sectorization, classifications, valuation, and time of recording required.
outputs sufficiently portray reality.		3.1.3 Source data are timely.
portion, roundy.	<b>3.2 Assessment of source data</b> —Source data are regularly assessed.	3.2.1 Source data—including censuses, sample surveys, and administrative records—are routinely assessed, e.g., for coverage, sample error, response error, and nonsampling error; the results of the assessments are monitored and made available to guide statistical processes.
	3.3 Statistical techniques— Statistical techniques employed conform to sound statistical procedures.  3.4 Assessment and validation of intermediate data and statistical outputs—Intermediate results	3.3.1 Data compilation employs sound statistical techniques to deal with data sources.
		3.3.2 Other statistical procedures (e.g., data adjustments and transformations, and statistical analysis) employ sound statistical techniques.
		3.4.1 Intermediate results are validated against other information, where applicable.
		3.4.2 Statistical discrepancies in intermediate data are assessed and investigated.
	and statistical outputs are regularly assessed and validated.	3.4.3 Statistical discrepancies and other potential indicators or problems in statistical outputs are investigated.

Quality Dimensions	Elements	Indicators
	3.5 Revision studies— Revisions, as a gauge of reliability, are tracked and mined for the information they may provide.	3.5.1 Studies and analyses of revisions and/or updates are carried out and used internally to inform statistical processes (see also 4.3.3).
4. Serviceability Statistics, with adequate periodicity and timeliness, are consistent and	4.1 Periodicity and timeliness—Periodicity and timeliness follow internationally accepted dissemination standards.	<ul><li>4.1.1 Periodicity follows dissemination standards.</li><li>4.1.2 Timeliness follows dissemination standards.</li></ul>
follow a predictable revisions policy.	<b>4.2 Consistency</b> —Statistics are consistent within the dataset, over time, and with major datasets.	<ul><li>4.2.1 Statistics are consistent within the dataset.</li><li>4.2.2 Statistics are consistent or reconcilable over a reasonable period of time.</li></ul>
		4.2.3 Statistics are consistent or reconcilable with those obtained through other data sources and/or statistical frameworks.
	4.3 Revision policy and practice—Data revisions	4.3.1 Revisions and/or updates follow a regular and transparent schedule.
	follow a regular and publicized procedure.	4.3.2 Preliminary and/or revised/updated data are clearly identified.
		4.3.3 Studies and analyses of revisions are made public (see also 3.5.1).
5. Accessibility Data and metadata are easily available and assistance to users is adequate.	5.1 Data accessibility— Statistics are presented in a clear and understandable manner, forms of dissemination are adequate, and statistics are made	5.1.1 Statistics are presented in a way that facilitates proper interpretation and meaningful comparisons (layout and clarity of text, tables, and charts).  5.1.2 Dissemination media and format are adequate.
	available on an impartial basis.	5.1.3 Statistics are released on a preannounced schedule.
		5.1.4 Statistics are made available to all users at the same time.
	5.2 Metadata accessibility— Up-to-date and pertinent metadata are made available.  5.3 Assistance to users—	5.1.5 Statistics not routinely disseminated are made available upon request.
		5.2.1 Documentation on concepts, scope, classifications, basis of recording, data sources, and statistical techniques is available, and differences from internationally accepted standards, guidelines, or good practices are annotated.
		5.2.2 Levels of detail are adapted to the needs of the intended audience.
		5.3.1 Contact points are publicized.
	Prompt and knowledgeable support service is available.	5.3.2 Publications, documents, and other services, including information on any charges, are widely available.

#### **Appendix III. Users' Survey**

#### Summary of results of survey of data users

On July 15, 2011, the responsibility for compiling both the CPI and the PPI was transferred from the Bank of Mexico (BM) to the National Institute of Statistics and Geography (INEGI). Since the transfer of the compilation of major statistical series such as the CPI and the PPI from one government entity to another is a major undertaking that requires a great deal of coordination and work, one of the main tasks of the mission was to evaluate the effectiveness of this transfer in terms of the maintenance of the quality of the index series.

Early on during the mission, it became apparent that the transfer was an outstanding success. This was due to a very well organized three-year process that integrated key personnel from both the BM and INEGI in all phases of the transfer. Although it might be expected that there would be some loss in the quality of the index series due to a transfer of this magnitude, the opposite occurred. During, and immediately after, the transfer both index series were significantly improved. A new total quality management system was implemented at INEGI, a new Technical Committee Specializing in Price Statistics (TCSPS) was organized to obtain feedback from user groups, a new system for analysis of the index series was developed, and improvements were made for several important CPI modules such as mobile telephone service, automobile purchase, electricity, gas, and computers.

In order to evaluate the effectiveness of the transfer of the CPI and PPI from the BM to INEGI it was decided that a user survey would be conducted and that a meeting of index users would be held during the mission. The mission was assisted in both of these efforts by INEGI. The overall rating by the index users on the standard IMF user survey were quite good as expected. However, there seemed to be a need for more detail to be provided by INEGI on both the CPI and the PPI. At first, the mission concluded that this response did not make sense since almost complete detail on both index series is provided on the INEGI Website. However, it became apparent that the type of detail the users were interested in was complete detail on the compilation procedures for certain specific index series such as the CPI component for mobile telephone service. It should be noted that this component of the CPI is compiled using a great deal of detailed information on the complex mobile telephone service plans available from each provider. In some cases, this information is proprietary and cannot be shared with the public. Nonetheless, the intense interest in these details by index users indicates an abundance of information rather than a lack of information on details concerning the compilation of official price indices such as the CPI and the PPI.

During the meeting, index users were asked to comment specifically on whether there had been a perceived deterioration in the quality and availability of information for the CPI and the PPI. Those who commented indicated that there was no perceived deterioration in the quality of the index series. In fact, some index users commented that with INEGI there was greater accessibility to the index data.