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**STATISTICS: INTERNATIONAL RECOMMENDATIONS FOR STATISTICS
ON ECONOMIC ACTIVITIES**

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**REVISION OF THE INTERNATIONAL RECOMMENDATIONS FOR
STATISTICS ON ECONOMIC ACTIVITIES**

Note by the secretariat

SUMMARY

International recommendations and classifications related to economic statistics need to be reviewed and updated periodically to enable statistical offices to obtain and convey to citizens a truthful and balanced picture of society. Developing countries have been struggling to implement some of the major frameworks, such as the System of National Accounts, in the recommended scale. As several interlinked frameworks are currently being revised for implementation in 2007 and 2008, it is timely for the Committee to review the key challenges involved in economic statistics in the region.

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I. THE NEED FOR STATISTICAL FRAMEWORKS TO REFLECT THE STRUCTURE OF NATIONAL AND GLOBAL ECONOMIES

1. The main frameworks for achieving the comparability of economic statistics across countries and over time are standard classifications and international recommendations approved by the Statistical Commission. Those norms need to be periodically revised as technologies, societies and markets develop, and new economic activities, objects of transaction, economic units, and even whole industries, emerge. The increasing globalization of economic activities is another major reason for revisions. Without periodic revisions of statistical frameworks it would not be possible to obtain and convey to citizens a truthful and balanced picture of society.

2. Statistical classifications group and organize information meaningfully and systematically into a standard format that is useful for determining the similarity of ideas, events, objects or persons. Since classifications are to be exhaustive and mutually exclusive, their revision is, by default, a major task. The annex to the present document lists the international family of economic and social classifications. Of the main economic classifications, a revision process has started for the International Standard Industrial Classification of all Economic Activities (ISIC) and the Central Product Classification (CPC), with targeted releases in 2007. The Standard International Trade Classification (SITC) will also be revised. Because there is significant correspondence between the various classifications, such as those on products and industries, their simultaneous revision is desirable.

3. The changes in the economy and in statistical classifications necessitate the revision of international recommendations that cover economic statistics. In 2003, the Statistical Commission called for an update of the 1993 System of National Accounts (SNA) to bring national accounts into line with the new economic environment, advances in methodological research and the needs of users. Consistency with related manuals, such as the IMF *Balance of Payments Manual*, is another important consideration in that revision.

4. While the revision process of any major statistical framework is a large undertaking, such revisions are made possible by the combined efforts and resources of national and international statistical agencies. A sustained series of expert group discussions, electronically and in meetings, is a typical modality, and United Nations and other international statistical agencies are facilitating the participation of developing countries in the process. Although the revision processes always consider the feasibility of each recommendation, their implementation at the national level has had mixed success. The success depends on many factors, such as the complexity of the framework, national priorities and resources, which in turn affect the resources available for related technical work. The continuity of time series, for instance, is a critical consideration when deciding the frequency and extent of adoption of revised frameworks.

II. RECENT ESCAP CONTRIBUTIONS TO THE GLOBAL REVISIONS

5. A comprehensive list of issues related to the global 1993 SNA update can be found at <http://unstats.un.org/unsd/sna1993/issues.asp> and information on how the revision work is organized and progressing at <http://unstats.un.org/unsd/nationalaccount/snarev1.asp>. The content and schedule of the revision of the fifth edition of the IMF *Balance of Payments Manual* are explained at <http://www.imf.org/external/np/sta/bop/bopman5.htm>. The final revised ISIC Rev.4 draft was released in August 2005; it will be submitted to the Statistical Commission for approval in 2006, and for formal release, together with version 2 of the Central Product Classification (CPC), in 2007.

6. ESCAP supported the revision of the 1993 SNA by hosting the Workshop on the 1993 System of National Accounts Update in Bangkok, from 19 to 22 April 2005. The Workshop provided another opportunity for the participating countries to ensure that their needs were reflected in the 1993 SNA update and to create a sense of ownership among developing countries for the revision. More specifically, the Workshop was expected to inform the United Nations Statistics Division in New York whether the recommendations made by the Advisory Expert Group on National Accounts could be implemented in the region and what their impact on the GDP estimates would be.

7. The Workshop was attended by national accountants from 22 countries and areas in the ESCAP region which are not members of the Organization for Economic Cooperation and Development (OECD) or the Economic Commission for Europe: Afghanistan; Bangladesh; Bhutan; Cambodia; China; Fiji; Hong Kong, China; India; Indonesia; Islamic Republic of Iran; Lao People's Democratic Republic; Macao, China; Malaysia; Maldives; Mongolia; Myanmar; Nepal; Philippines; Singapore; Sri Lanka; Thailand and Viet Nam. All presentations and other documents are on the website of the Workshop at <http://www.unescap.org/stat/meet/sna-april2005/>. The main conclusions were presented at the meeting of the Advisory Expert Group, held in July 2005, which was hosted by ESCAP.

8. Among some of the difficult issues before the Workshop, the participants deliberated on the treatment of military weapons, capital services and the inclusion in the output of the government sector capital services from government-owned assets, and the informal sector. With regard to the issues of "goods sent abroad for processing" and "merchanting", some participants were concerned that users of statistics might find the impact of the proposed changes (on the level of imports and exports) unacceptable.

9. In another regional event related to national accounts, the secretariat co-organized the Workshop to Implement the United Nations 2003 Handbook on Non-profit Institutions in the System of National Accounts in Asia, which was held in Bangkok in September 2005. The *Handbook* provides clarifications and extensions to the 1993 SNA. The substantive content of the Workshop was provided by the Johns Hopkins Center for Civil Society Studies, the main coordinator and author of the *Handbook*, and United Nations Volunteers (UNV). The *Handbook* suggests the building of a

“satellite account” on non-profit institutions. Some countries, including Australia and Japan, have implemented the *Handbook*. New Zealand is in the process of implementing the *Handbook* and a number of countries are considering implementing it. The UNV programme is assigning one UNV statistician to developing countries that need assistance in implementing the *Handbook*.

III. WHY THE IMPLEMENTATION OF ECONOMIC STATISTICS FRAMEWORKS IS SO DIFFICULT

10. When the Statistical Commission mandated the update of the 1993 SNA, it agreed not to recommend fundamental or comprehensive changes that would impede its implementation. This reflects the lessons learned from the past as a large number of developing countries have still not implemented the 1993 SNA. Several countries and areas in the ESCAP region do not compile national accounts annually, let alone quarterly national accounts. The reasons for the poor implementation were discussed in detail by the Statistical Commission in March 2005;¹ they include the following:

- (a) Data availability, in terms of coverage and frequency, is the main impediment to implementation of the 1993 SNA;
- (b) Low numbers of staff: non-implementers of the 1993 SNA have fewer staff than implementers;
- (c) High staff turnover, especially when combined with little training and low staff numbers;
- (d) Lack of domestic training capacity in national accounts in many developing countries.

11. In many developing countries a large proportion of the economy is in the informal sector and enterprises (economic units) in that sector are not covered in business registers. This makes the conduct of economic surveys and the interpretation of their results very difficult. In countries with a large informal sector, some of the challenges include capturing home-based production and street vendors without a fixed location. In the absence of up-to-date recommendations on economic statistics, many countries have developed unique designs for their economic censuses. India, for example, synchronizes its economic census with the house-listing operations of the population census. In developing the revised recommendations, it might be worthwhile to examine whether such methodologies could be applied in other developing countries.

12. A common constraint in nearly all countries is the lack of adequate resources to conduct economic censuses at regular intervals. The lack of continuity makes it difficult to preserve cross-sectoral and over time consistency of statistical information and to introduce new questions for detecting and measuring emerging issues.

¹ See <http://unstats.un.org/unsd/statcom/doc05/2005-4e.pdf>

IV. MEASURES THAT COULD MAKE A DIFFERENCE

13. This concluding section of the paper proposes measures that could make a difference in improving economic statistics in the region. While their implementation depends largely on the Governments, the United Nations system, including ESCAP, can facilitate the process. The Committee is invited to express its views about the ideas presented.

14. The existence of developed administrative data sources that are well integrated into the national statistical system is a precondition for having a viable programme of economic statistics. This might require changes in statistical acts in some countries, but much can be achieved by considering statistical needs at every opportunity when the government departments and authorities are planning and implementing new information systems. Matching economic census and administrative business registers would not necessarily require matching identifiers and linking databases, which in some countries is objectionable. Almost equally usable results for statistical purposes might be achieved by using computer algorithms to match the records.

15. It is not easy in any dynamic economy to keep business registers up to date, but certain policies and good practices measures have proved useful.² For instance, it is highly recommended that multiple administrative data sources be used, such as business lists for value added tax and payroll tax purposes as well as commercial data sources such as telephone and electricity corporations. The names of businesses obtained from different sources can be matched extremely fast using automated record linkage software and only doubtful links have to be examined manually; in this way, all duplicates are eliminated at reasonable cost. Statistical offices have to coordinate and maintain contacts with administrative agencies and commercial data sources so that they are consulted when changes are planned by these organizations, as otherwise some data may change suddenly or disappear altogether. Another important source of information for business register maintenance is the feedback from surveys for which the register provides frames. In certain countries where the majority of the output is produced by a few enterprises, they can be enumerated completely at a reasonable cost.

16. Where business registers are not kept up to date, which is not an uncommon situation in the region, economic censuses that enumerate all establishments can provide detailed information on the changing structure of the economy. They can also be used for the establishment and maintenance of business registers. A number of countries in the Asian and Pacific region, including India, Indonesia, the Islamic Republic of Iran, Thailand and Viet Nam, have conducted economic censuses over the past decade. They are typically conducting the censuses every five to seven years, and these are then used as frames for more detailed and sector-specific surveys. In this connection, it might be noted

² Michael Colledge, "Frames and Business Register: An Overview" in Brenda G. Cox and others, eds., *Business Survey Methods* (John Wiley & Sons, Inc., 1995).

that some advanced statistical systems, that of Australia, for instance, have moved away from conducting economic censuses to implementing an integrated system of business surveys.

17. ESCAP has been doing normative scoping work with partners, mainly OECD and the United Nations Statistics Division, related to measurement frameworks of the non-observed economy, including the informal sector. Since it is not realistic to expect administrative sources to provide reliable data on those sectors, it is in this context that ESCAP is to undertake technical cooperation activities to strengthen the capacity of countries to collect data on the informal sector, described in E/ESCAP/CPR(2)/7.

18. Economic censuses are the practical way to collect representative economic information in countries that have a large informal sector. Mixed and selective strategies in terms of sectoral and geographic coverage could be used to make the censuses affordable. International recommendations could be improved in that regard. Many developing countries currently cover large-scale commercial agriculture, forestry and fishing in their establishment surveys and economic censuses, and thus it may be pragmatic to cover these in the recommendations. However, participants in the Expert Group Meeting on Industrial Statistics,³ held in New York in September 2005, favoured including all economic activities except agriculture, forestry, fishing, hunting and public administration⁴ in the recommendations. In general, the feasibility of some recommendations would depend on the availability of business accounting information at the national level.

19. Another measure to consider is the efficient use of technology for improving data quality and timeliness: these include automatic coding of economic activity and other alphabetic replies to open questions and automatic data editing and imputation. In this regard, it has been observed that quite often there is little sharing of best practices between economic statisticians and statisticians working on population censuses, even in the same statistical office.

20. Finally, advances in communication technologies make it possible for statistical offices to adopt multimodal methods of data collection, such as web-based questionnaires, e-mail, personal interviews and postal questionnaires. One example of a best practice is that some statistical offices send the annual or economic census questionnaire by registered mail so that respondents cannot claim not to have received it.

³ <http://unstats.un.org/unsd/industry/meetings/eg2005/ac105-2.asp>, homepage of the meeting.

⁴ For some country responses, see <http://unstats.un.org/unsd/industry/meetings/eg2005/AC105-8.PDF>

Annex

INTERNATIONAL ECONOMIC AND SOCIAL CLASSIFICATIONS

Source: Modified from the list of international family of economic and social classifications, <http://unstats.un.org/unsd/cr/family1.asp>, by dropping multiple version numbers

Group	Reference	Derived	Related
Economic activities	International Standard Industrial Classification of All Economic Activities (ISIC)	General Industrial Classification of Economic Activities within the European Communities (NACE)	Australian and New Zealand Standard Industrial Classification (ANZSIC) North American Industry Classification System (NAICS)
Products	Central Product Classification (CPC) Harmonized Commodity Description and Coding System (HS)	Classification of Products by Activity (CPA) Standard International Trade Classification (SITC)	Trade in Services
Expenditures according to purpose	Classification of the Functions of Government (COFOG) Classification of Individual Consumption according to Purpose (COICOP) Classification of the Purposes of Non-profit Institutions Serving Households (COPNI) Classification of the Outlays of Producers according to Purpose (COPP)		
Employment, occupation and education	International Classification of Status in Employment (ICSE) International Standard Classification of Occupations (ISCO) International Standard Classification of Education (ISCED)		
Social and health	International Statistical Classification of Diseases and Related Health Problems (ICD) International Classification of Impairments, Disabilities, and Handicaps (ICIDH)		
Countries and areas	Standard Country or Area Codes for Statistical Use		
Other	Balance of Payments Manual (BPM5) Government Finance Statistics (GFS) Classification of Environmental Protection Activities and Expenditure (CEPA)		
In addition, the family includes is the Trial International Classification of Activities for Time-use Statistics (ICATUS).			

Reference classifications are products of international agreements approved by the Statistical Commission or another competent intergovernmental board, such as that of the International Labour Organization, the International Monetary Fund, the United Nations Educational, Scientific and Cultural Organization, the World Health Organization, or the World Customs Organization, depending upon the subject matter area.

Derived classifications are based upon reference classifications, providing additional detail for, or different structuring based on, a reference classification.

Related classifications are those that partially refer to reference classifications, or that are associated with the reference classification at specific levels of the structure only.

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