Central Product Classification – some thoughts on future work Ralf Becker, UNSD

Introduction

The development and maintenance of (economic) classifications is an eternal struggle between two large forces: those who want to keep the classification as updated as possible to quickly respond to all kinds of changes in the economy, and those who want to keep the classification as stable as possible over a long period of time to ensure comparability of data and consistency of time series. Each one of these approaches has undeniably its merits and shortcomings, but a common solution has so far been elusive. The work of the classifications expert, trusted with updating and revising a classification becomes therefore a walk on the fine line between those two, trying to create a system that satisfies the needs of both groups as far as possible, while still maintaining a defendable conceptual basis.

The classifications maintained by the United Nations Statistics Division (UNSD) have been revised in irregular intervals in the past. In the past few years, agreements have been reached to revise these classifications according to a fixed schedule, which has also been accepted for related classifications, such as those maintained by Eurostat and is related to the foreseen schedule of other linked classifications. Accordingly, the next revisions for the International Standard Industrial Classification (ISIC) and the Central Product Classification (CPC) are scheduled for 2002 and 2007. Recommendations call for minor updates in 5-year intervals, with room for larger revisions in 10-year intervals. However, the scope of each revision will need to be determined.

The United Nations Statistical Commission at its thirty-first and thirty-second session in 2000 and 2001 has supported the proposals by the Expert Group on International Economic and Social Classifications and the Technical Subgroup on Classifications for an update of ISIC and CPC in 2002, followed by a revision in 2007. The purpose of the updates was to allow for necessary adjustments to the classification to reflect changes in the economic reality, to account for new activities and products, while keeping the impact on the classification structure to a minimum. The planned revisions in 2007 may have a greater impact also on the structure of the classifications. Annex 2 includes the report of the Technical Subgroup to the Expert Group, outlining the scope of changes for the 2002 updates.

What steps have been taken for 2007?

ISIC

While the work for the 2002 update is in its final stages, preparations for the 2007 revisions have already begun. The United Nations Statistical Commission has requested that the convergence of existing activity classifications should play a major role in the revision process for ISIC. An existing convergence effort between NACE and NAICS is providing major input into the revision process and raises a number of conceptual and

detail questions. Representatives of ISIC and ANZSIC are, or will be, participating in the discussions between NACE and NAICS.

At its meeting in June 2001, the Expert Group on International Economic and Social Classifications has discussed a questionnaire that will be used to solicit input from all interested countries into the ISIC revision process. UNSD has already sent this questionnaire to all national statistical offices and to a number of international agencies (see Annex 1). It lists a number of conceptual and structural issues, cross-cutting issues and boundary definition and detail issues. This list of questions is based on problems that have either been reported to UNSD through the Classifications Hotline or have been identified as major differences in the ongoing ISIC-NACE-NAICS comparison. This list is by far not a comprehensive list of all issues raised so far, especially at the detail level, but reactions to this questionnaire should help to describe the general direction an ISIC revision should take. Due to the fact that ISIC Rev.3 or ISIC Rev.3-based classifications have been used by more than 100 countries worldwide for a number of years, with ISIC itself being in use for more than 50 years, a sufficient basis for feedback on implementation and application problems and experiences exists.

CPC

A similar questionnaire would be extremely useful for the CPC revision. However, at this point, input solicitation for the CPC is restricted to the last paragraph of the existing questionnaire.

The feedback received at this point has been incorporated into the 2002 update of the CPC (CPC Ver.1.1). Although it had an impact on some high-level categories of the CPC (Divisions 51-53 and 86-87) it was felt this type of corrections and improvements should be done at this earlier stage, while the CPC is still being implemented.

The CPC is still a fairly new classification, which has not been implemented on a level similar to that of ISIC. Although the CPC has a variety of uses for statistical and other purposes, its implementation is a very difficult process, as it has to prove its usefulness in comparison to the many other existing product classifications. Feedback on the application of the goods part of the CPC will be extremely important to evaluate the usefulness of the CPC in this area. For the services part of the CPC, the problem is not so much the existence of other classifications, but rather their absence, which puts the burden on the CPC to establish a useful level of detail and a useful classification structure for this area. It will be difficult to discuss improvements of the CPC without sufficient feedback on the CPC.

Use of the CPC

In order to get a clear assessment of the usefulness of the CPC we need to get a better overview over how the CPC is used in countries, what kinds of statistics are being collected, published or otherwise disseminated using the CPC. What other, possibly non-

statistical, purposes does the CPC serve? Is the CPC being used as a whole or are just certain parts of it implemented?

Information on this would allow to identify areas that need more attention in further development and would also indicate where country experience exists that could be drawn upon.

The UNSD Trade Statistics Branch has undertaken a trial using the goods part of the CPC for the dissemination of trade statistics data. A CD has been prepared and sent to a number of statistical offices for evaluation. The response did not indicate an overwhelming success. Some have questioned the usefulness of this approach, but more follow-up work is necessary to determine what factors are in play here. Detail, aggregation structure or simply the resistance to change from a long used standard, such as the Standard International Trade Classification (SITC), need to be looked at and evaluated.

For the services part of the CPC, some feedback exists through the Voorburg group, but clearer mechanisms should be put in place to monitor the use of the CPC in this area. UNSD is currently updating its register of national classifications, which includes some basic questions on each classification. However, a more detailed survey may be necessary to determine the use and future direction of work for the CPC.

What considerations should go into the revision process?

At this time, the Technical Subgroup has not yet established a list of priorities for the CPC revision in 2007. The following is a (probably incomplete) list of topics that may influence the work to be undertaken for this revision.

1. Detail

One of the most raised questions about the CPC is whether the detail presented is at the right level to be useful for different statistical purposes. This question is usually raised for the goods part, when the CPC is compared to the Harmonized System (HS), the SITC, to product lists used for commodity production statistics and other product classifications.

Further evaluation of country uses and needs and commonalities between countries and regions are necessary here. The follow-up to the abovementioned trial by the UNSD Trade Statistics Branch should provide more information to determine how improvements to the detail presented in the goods part of the CPC can be made.

Information on the appropriate detail for the services part of the CPC has been used through the Voorburg group and the Classifications Subgroup of the Voorburg Group when the CPC was drafted. Some areas of the CPC have received more focus during the implementation of the CPC, so that more information on these areas is available now. In addition, general interest is often concentrated on a few service areas, which may need

more detail to provide the statistics requested by users. The Voorburg group should continue to be a major forum for feedback on these issues.

For both the goods and the services part of the CPC the question is not only what level of detail is practicable or useful for most users, but what is appropriate at the international level, thus requiring feedback from a sufficient number of countries to make that decision. Are there new commonalities between national versions/needs that should be reflected at the international level?

Does the use of the CPC for specific purposes, such as defining tourism specific products, warrant a greater detail in certain areas of the classification? What criteria should be used to decide?

2. Structure

The structure of the CPC has been based on a number of criteria set out in the CPC introduction (paragraphs 15-21). Are these criteria still supported by all users of the CPC? Does the use of the CPC for analytical purposes require different principles? Have the principles been applied consistently throughout the classification? Should the criteria be changed so that the aggregation structure follows closer any other classification that is used in combined analysis? This could be HS or ISIC.

3. Alternate structures and aggregations

The use of alternate aggregations for ISIC has been promoted in the past and has led to the creation of alternate aggregations for energy and tourism products in ISIC Rev.3 and the Information Sector and ICT activities in the upcoming ISIC Rev.3.1. The CPC Ver.1.0 shows an alternate structure for financial services. Although this alternate structure (and the regular structure for finance services) has been maintained unchanged in the Version 1.1 of the CPC, they will certainly be discussed for the next revision, based on additional work that is being conducted right now for the North American Product Classification System (NAPCS).

Should the CPC make more use of alternate structures, i.e. alternate breakdowns of certain portions of the CPC or alternate aggregations for specific purposes, such as tourism? What criteria should be used for determining the kind of alternates that should be accepted?

4. Links to other classifications

One of the major goals of the CPC was to serve as a "central" product classification, thus providing the key to link statistics collected in other product classifications, for different purposes. Classifications to be considered include HS, SITC, ISIC, BOP, NAPCS, CPA and possibly others, each with a different set of questions, such as:

HS/SITC

The goods part of the CPC is strongly linked to the HS and the SITC. Both classifications are used to define CPC subclasses. It was attempted to define CPC subclasses only in terms of complete HS classes. This has been followed to a large extent, with only a few exceptions necessary. The new revision of the HS in 2002 has slightly increased this number of exceptions, in order to account for the importance of certain products outside of international trade statistics. A similar approach has been attempted for the SITC, but with a much larger number of exceptions. Can we establish general rules for deviations from these classifications or is a "case-by-case" approach sufficient?

There are also requests for certain product data that exceed the level of detail of the HS and have to be carefully considered. In general, the question whether a product classification that is based on trade statistics detail can be used as a basis for statistics on domestic production and other uses has been raised before and need to be re-examined. A closer relationship with WTO as the custodian of the HS may help to avoid some of the problems raised in the past.

Another problem that appears in the upcoming CPC Ver.1.1 is the apparent discrepancy between the official HS-SITC correspondence and the correspondence implied by the CPC-HS and CPC-SITC correspondence in the CPC publication. This is due to the fact that, unlike the HS, the SITC has not changed. The SITC is still defined in terms of the HS88. The correspondence from HS to SITC, published by the UNSD, provides a tool for a conversion of data from HS2002 to SITC (on a one-to-one basis). This does not constitute a definition of SITC in terms of HS2002. The CPC correspondences describe actual definitions (i.e. on a theoretical level) of the CPC in terms of HS2002 or SITC, which may lead to a different interpretation of the links. If this problem aggravates in future revisions of HS (there are no plans for SITC yet), a solution should be sought.

ISIC

The link between ISIC and CPC is probably the most important and most discussed link. The definition of this link through the "industry of origin" needs to be clarified. The problems often arise in the services area, such as for advertising. The introduction to the CPC describes the basis for this correspondence, but the applications listed need further checking. However, the number of actual problems in this area should be small.

BOP/EBOPS (Extended Balance of Payments for Services)

Since its approval by the Commission, considerable work has been completed on the potential use of CPC as a building block for the elaboration and description of international trade in services. The Provisional Central Product Classification was utilized as a source by the secretariat of the General Agreement on Tariffs and Trade in the preparation of the General Agreement on Trade in Services (GATS). Under the GATS agreements, texts with legal standing were drafted which embodied extensive references to CPC, referred to by GATS as the GNS/W/120 list. CPC has now been further elaborated for use in the preparation of statistics on international trade in services through its use to define the categories of the Balance of Payments extended list of services and to provide a structure for those who may wish to collect more detail. A

correspondence between EBOPS, CPC and GNS/W/120 is part of the upcoming Manual on Statistics of International Trade in Services.

The further convergence of BOP/EBOPS and the CPC should be considered for future revisions.

CPA

While the CPA uses a different structure than the CPC, harmonization at the detailed level has been considered for the original CPC version and is still part of the revision process. This link should be maintained.

NAPCS

The work on the NAPCS has already provided input into the review process for CPC for selected areas that have been considered in NAPCS so far. The structure and detail of the telecommunications services portion of the CPC Ver.1.1 draws on results of the NAPCS work. The work on financial services has already led to a number of questions that will be considered for the CPC review.

Since the NAPCS work is done at a far more detailed level than what is useful for the CPC, it may always impact on the structure of the CPC but provide extended detail that can be used for the elaboration of the explanatory notes and the CPC index.

Others

A correspondence table between CPC and COICOP (Classification of Individual Consumption According to Purpose) has been developed. The work on this table has led to suggestions for changes in the CPC. Similar use of other classifications may provide input in the revision process, such as for government or environmental services.

5. Scope and theoretical foundation

Recent discussions on particular problems for Satellite Accounts have raised questions about the scope of the CPC. The definition of products in the CPC, given in the introduction, differs from the definition of products in the SNA. While this does not create a problem for mainstream applications of the CPC, its use in special circumstances, such as for Satellite Accounting Systems, may need a clearer description. Should the CPC with all included or implied definitions be strictly based on the SNA or does the CPC provide an "independent" dimension of products (whatever that definition may mean), which could be sliced for each practical application?

This would not be unprecedented, as even ISIC has gone beyond the boundaries of the SNA by adopting the new division 97 for undifferentiated service-producing activities of private households for own use. However, a clearer description of the boundaries may be preferable to a redefinition if the existing structure would be affected.

What mechanisms are in place for the revision process?

Under guidance of the Expert Group on International Economic and Social Classifications, most of the work in the revision process will be carried out by the Technical Subgroup in cooperation with the UN Statistics Division. Input is being collected by UNSD through the Classifications Hotline and supplemented by information received by Subgroup members. As mentioned above, no special questionnaire for conceptual or other issues has been prepared yet for the CPC, since more information on problem areas may be necessary. The Voorburg group should play an important role in this process as a forum of experienced users of the CPC. Voorburg group members are encouraged to submit any problem statement and proposals to UNSD for recording in the Classifications Registry and subsequent consideration in the revision process. Voorburg group meetings should also be used to provide information on the current state of the revision process to seek additional comments and reactions from the group.

Member States and international organizations are involved in setting international policy that requires monitoring of products worldwide. Under such conditions, mechanisms must be put in place to indicate how well CPC addresses each of the varying substantive needs of major users, such as those of production, consumption, national accounts, balance of payments and future statistics on globalization.

How can we support the implementation of the CPC?

All the questions above require a sufficiently broad use of the CPC worldwide to make an assessment of its qualities and shortcomings, to decide which areas need improvement and what specific uses of the CPC need to be supported. The implementation of the CPC should therefore have the highest priority in order to make a revision process meaningful and successful. To further and support implementation of the CPC, the following should be among the key items:

Support

With the UN Classifications Hotline, mechanisms are in place to provide answers to questions and interpretations of the CPC. Workshops conducted by UNSD also provide information on the CPC and its theoretical background. Detailed instructions on special uses of the CPC are still limited and should be improved. This could be an area where country-to-country relationships play the leading role, with the international agencies providing support and coordination of these activities.

Sample questionnaires

Sample questionnaires are frequently requested to help countries in applying the CPC for production of their national statistics. UNSD could create a depository of such materials for interested parties. However, due to its function as an international agency, UNSD does not have the experience of applying the CPC for national surveys and has to rely on country support. The Voorburg group members could be source of this information and are invited to share their experience and submit sample questionnaires that can be used by other countries for study.

Indexes

Indexes to classifications are probably the most helpful tools in classifications work. The CPC provides an index with about 12000 items. The index is available (in searchable form) on the UNSD Classifications website. Further work to improve this index should not only include the addition of new services in newly elaborated areas. While this is one of the most important aspects, a general review of the balance between existing items in the current index shows that a large number of areas are underrepresented and could be improved through the elaboration of index detail. In addition, work on an index for the goods part of the CPC would enhance CPC's status as a classification of goods AND services. Although CPC covers all products, there is still a strong difference between support materials for goods and services.

Conclusion

The questions raised above should certainly be considered during the next revision process. More input from users of the CPC is necessary to set up a complete list of problems, working areas and goals. This information should enable us to determine the scope of necessary changes and decide whether the current state of implementation warrants a larger revision in 2007 or later. In gathering this information, the Voorburg group should be one of our strongest partners.

Annex 1

Technical Subgroup of the UN Expert Group on Classifications June 21-22, 2001

Questionnaire on main issues for the revision of ISIC and CPC for 2007

Introduction

The United Nations Statistical Commission at its sessions in 1999 and 2000 agreed to a timetable and set goals for revising the International Standard Industrial Classification (ISIC) and the Central Product Classification (CPC). Considering the relationship and timetable of revisions for other classifications, it was recommended that updates or revisions of these classifications be carried out in 5 year intervals, specifically an update in 2002 and a revision in 2007. A goal for the ISIC revision for 2007 is to bring about convergence between major existing activity classifications. As this would likely have a major impact on the structure of ISIC, it was agreed to carry out only a limited update in 2002, to avoid two major revisions of the classification in a five year period. The update was intended to address some immediate needs of data users and producers, such as those relating to the newly evolved Information Sector.

The Expert Group on International Economic and Social Classifications has at its last meeting reviewed the final proposal for the update to the International Standard Industrial Classification (ISIC Rev.3.1) and will recommend that the United Nations Statistical Commission adopt this classification as the new international standard.

At the same time the preparation for the revision of ISIC in 2007 has begun. This questionnaire represents the first step in a world-wide evaluation process to define the scope of the revision to ISIC in 2007.

What is the purpose of this questionnaire?

The preparation of a strategy and a proposal for a future revision requires an assessment of the need for change to the classification. ISIC, CPC or national classifications based on these are used in a large number of countries for a variety of statistics. The changes in the economy since the last revision of ISIC have led to the desire to not only update these classifications, but also to consider whether and how they need to be revised.

To ensure that the classifications remain useful tools for compiling statistics at the national level and for international comparison, input from a variety of users of the classification into the revision process is necessary. This questionnaire is a first solicitation of proposals, description of problems and general comments on the current version of ISIC that countries and other users wish to be considered in the revision process.

The Technical Subgroup of the Expert Group on International Economic and Social Classifications has discussed an initial list of issues that are deemed important for the revision process and that will need investigation and discussion. At this point, **this list is only illustrative and does not attempt to be exclusive**. It can only serve as a guideline for input from countries into the revision process.

This questionnaire has been divided into three sections, dealing with:

- 1. Conceptual and structural issues;
- 2. Cross-cutting issues;
- 3. Boundary definition and detail issues.

This distinction has been made for practical reasons only and should not preclude other categories of problems or proposals. Problems may cut across these categories and can be listed in any of them or separately.

What should you do with this questionnaire?

The responses to this questionnaire will serve as the basis for the discussions on purpose and scope of the ISIC revision in 2007. Your input is therefore extremely important.

This questionnaire should be discussed with a wide range of users of the classification in your office or in your country, including analysts, classification experts and producers of statistics using ISIC.

The responses resulting from these discussions should address, wherever applicable:

- 1. opinions on the issues raised in the questionnaire;
- 2. additional issues in each of the three sections outlined below;
- 3. listings of new activities that are not covered in the current version of ISIC

Your response to this questionnaire should be sent to your United Nations Statistics Division, with attention to the Statistical Classifications Section, by **1 December 2001** to allow for inclusion in the list of working issues for the 2007 revision of ISIC. Submissions in machine-readable form to CHL@un.org will be most helpful.

While the main focus of the questionnaire is on ISIC, your feedback will also be useful in the revision of the CPC. Any additional comments that you might have regarding the revision of the CPC will also be welcomed.

Issues related to ISIC

A. Conceptual and structural issues

- 1. ISIC is a classification of economic activities, which are grouped together into categories from lower to higher levels of detail. Different criteria can be used to group activities, such as the inputs used, the nature of the production process and the type of outputs produced. Currently, the criteria used by ISIC differ in various parts of classification, depending on the sector. Should one or more of these criteria be applied more consistently in the revised ISIC?
- 2. There is a relationship between economic activities and products. The former lead to the production of the latter. The definition of products in existing or revised product classifications, such as the Harmonized System (HS) and CPC, can be used to define the boundaries of activity categories. The relationship between the two types of classifications can range from complete independence to strict linkage on a one-to-one basis. To what extent should the ISIC revision take into account relevant product classifications?
- 3. The application of the classification principles leads to the definition of categories at various levels of detail. Is the level of detail in ISIC adequate? Should more detailed categories be introduced and if so, in what sectors and for what purpose? Should more detail be added to better reflect the informal sector of the economy? Are there areas of ISIC in which there is too much detail? Which ones and why?
- 4. Currently ISIC has 17 tabulation categories, which are the highest level groupings in the classification structure. Are there too many high level categories? Why? Should any be combined? Alternatively, should any new categories be created at the highest level? Which ones?
- 5. The application of the classification requires that certain rules be followed to classify observed units correctly. Certain rules deal with the classification of units engaged in multiple economic activities. Should the rules regarding the classification of units engaged in vertically integrated activities and other types of combined activities be changed? What about the rules for top down coding? Or the use of value added to determine which activities will determine the code for a unit engaged in multiple activities?
- 6. Considering time series, what are the requirements for stability of the classification in the 2007 revision, whether in terms of codes, at certain levels of detail or the ability to link with the current version of ISIC?

For each of these issues, please provide your views concerning the importance and relevance of the issue. Please add any other structural and conceptual issues you would like to see addressed in the revision.

B. Cross-cutting issues

Cross-cutting issues are issues that affect many parts of the classification. They concern economic activities that are spread throughout the economy.

- 1. How should ISIC reflect the growing importance of "information" in the economy and in society? Should a high level category be introduced to deal with this? What should the boundaries be? The OECD has defined Information and telecommunication technologies (ICTs) whereas NAICS has adopted the Information sector (division 51). To what extent should the ISIC revision be guided by these examples?
- 2. How should repair and maintenance activities be treated? They are currently mainly included in the manufacturing sector in ISIC but are in a separate subsector in NAICS.
- 3. How should installation activities be treated? Should they be part of the manufacturing of parts or of equipment, part of construction or in other areas of the classification?
- 4. How should support activities be treated? In ISIC Rev.3 there are some industries that include service activities specific to them, while in other cases service activities are separately accounted for. Should there be a more consistent treatment of service activities as a separate category, closer aligned with the industries they support or should the treatment be depending on the type of industry and service?

For each of these issues, please provide your views concerning the importance and relevance of the issue, as well as any reasons for the preferred solution. Please add any other cross-cutting issues you would like to see addressed in the revision.

C. Content and boundary issues

- 1. There are many gray areas at the boundary between primary industries and manufacturing. For example, in the case agriculture and manufacturing, should cotton ginning be classified as an agricultural activity or a manufacturing activity? How can such issues be dealt with? Are there any guiding principles that can be used?
- 2. In the area of distributive trades, changes in the organization of trade, including electronic commerce, have introduced many new complexities in terms of what is traded and the form the trading activities take place, and by

whom. What products are tradeable? What activities are included in distributive trade? What criteria should be used for disaggregation?

- 3. Should new detailed categories be introduced to facilitate the compilation of:
 - ? Environmental activities?
 - ? Tourism characteristic activities?
 - ? Others?
- 4. The following list includes areas in which there are significant economic changes that can be addressed in the revision:
 - ? Information and communications
 - ? Internet activities
 - ? Employment services
 - ? The provision of health care services
 - ? Government services and public administration

Are there other areas that should be addressed?

- 5. Globalization, deregulation and information technology have introduced many changes in the organization of production. Activities that were previously integrated are being organized separately and sub-contracted more frequently. This leads to the creation of specialized units as sub-contractors and can also change the nature of the activity of the contracting businesses. What changes need to be made to ISIC to reflect these changes?
- 6. In ISIC Rev.3, Division 50 was introduced for the various selling and repairing activities related to automobiles. Is there any value to this approach? Should it be retained for the next revision?
- 7. In ISIC Rev.3, Division 37 was introduced for recycling activities. This division was narrowly defined and creates boundary problems with Manufacturing and Wholesale trade, and does not reflect the general notion of recycling for many policy issues. Should recycling be redefined or grouped with other activities? Are there more appropriate definitions for recycling activities?

For each of these issues, please provide your views concerning the importance and relevance of the issue. Please add any other content or boundary issues you would like to see addressed in the revision.

Issues related to the CPC

There is no pre-drafted list of issues relating to the CPC at this time. However, you are requested to list any issues, in categories similar to those described

above or others. The issues received will then form the basis for the revision process of the CPC.

Annex 2



ESA/STAT/AC.78/7 6 June 2001

UNITED NATIONS DEPARTMENT OF ECONOMIC AND SOCIAL AFFAIRS STATISTICS DIVISION

Meeting of the Expert Group on International Economic and Social Classifications New York, 18-20 June 2001

Report of the Technical Subgroup to the Expert Group on International Economic and Social Classifications

Report of the Technical Subgroup to the Expert Group on International Economic and Social Classifications

Introduction

In response to the extended mandate given to the Expert Group on International Economic and Social Classifications by the UN Statistical Commission at its thirtieth session in March 1999, the Expert Group decided at its meeting in November 1999 to form a Technical Subgroup ¹. The Technical Subgroup was formed as a body to carry out research on classifications issues, review existing classifications, and bring problems and proposals to the attention of the Expert Group. As its first mandate, the Expert Group asked the Technical Subgroup review the existing versions of ISIC and the CPC and to prepare draft proposals for updated versions of these classifications for 2002. The general scope of these changes was determined by the Expert Group at said meeting and given as guidelines to the Technical Subgroup. The Technical Subgroup was also requested to elaborate practical proposals to bring about convergence of existing international and multinational classifications and prepare for further revisions for ISIC and CPC in 2007.

Since its inception, the Technical Subgroup has met four times, on 18-20 November 1999 in New York, on 20-24 May 2000 in Luxembourg, on 16-20 October 2000 in New York and on 26-30 March 2001 in New York.

At these meetings, the following organizations and countries have been represented and participated in the discussions: Argentina, Australia, Austria, Canada, Colombia, France, India, United States, International Labour Organization (ILO), International Monetary Fund (IMF), Organization for Economic Development and Co-operation (OECD) and the United Nations Statistics Division.

As a result of the work carried out, the Technical Subgroup presents the following recommendations for consideration to the Expert Group.

ISIC Revision in 2002

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¹ Proposal for the creation of a Technical Subgroup of the Expert Group on Economic and Social Classifications, ESA/STAT/AC.75/9.

The International Standard Industrial Classification of All Economic Activities (ISIC) has been last revised in 1989. Since then, technological changes have had a great impact on the economy, changing the way in which business is conducted and even creating new industries and new forms of economic activity. While these changes are obvious in day-to-day life, it had to be evaluated whether the use of new technologies requires changes in the existing classification, if and how existing time series can be conserved and how the burden on countries implementing the changes can be limited.

The latter was considered in connection with the long-term plan for a revision in 2007 carrying the goal of convergence between major activity classifications. Since the 2007 revision will undoubtedly require changes at a larger scale, it was felt two major revisions in a five year interval would exceed the resources of most countries and have a negative impact on the implementation of ISIC.

The creation of an Information Sector has been the most requested item brought to the attention of the Technical Subgroup. While there have been definitions ranging from very narrow definitions to broader notions of an Information Society, consensus was reached to model this sector after the Information Sector as defined in the North American Industry Classification System (NAICS). Since the introduction of this sector into the regular ISIC structure would have created numerous changes to other existing categories at higher levels of the classification, it was decided to introduce the Information Sector as an alternate aggregation. This will allow countries and users to compile and use data on the Information Sector, comparable to the one defined in NAICS, while leaving the existing ISIC structure intact. If the definition of this alternate aggregation finds acceptance by countries, it is then planned to be incorporated in the regular ISIC structure in the 2007 revision.

Following these recommendations, changes to the structure of ISIC were kept to a minimum and the Technical Subgroup approved the following major changes:

- a) Splitting of the existing class 0500 (Fishing, Fish farming and related service activities) into two new classes 0501 (Fishing) and 0502 (Aquaculture);
- b) Splitting of the existing class 5150 (Wholesale of machinery and equipment) into three new classes 5151 (Wholesale of computers, computer peripheral equipment and software), 5152 (Wholesale of electronic parts and equipment) and 5159 (Wholesale of other machinery, equipment and supplies);
- c) Splitting of the existing class 7220 (Software consultancy and supply) into two new classes 7221 (Software publishing) and 7229 (Other software consultancy and supply);
- d) Redefining the contents of class 7240 (Database activities and on-line distribution of electronic content). While previous interpretations have already placed a number of activities related to the on-line distribution of electronic content in this class, this situation has now been reflected in the title and explanatory notes of this class. At the same time, clearer guidance for the treatment of other publishing activities in group 221 (Publishing) has been provided;
- e) Changing the title of class 7493 (Building-cleaning and industrial-cleaning activities) to reflect the broader scope of this class;

- f) Redefining the contents of the categories in section M (Education) to reflect the changes made to ISCED in its 1997 revision, based on the close link of the two classifications in this area. The content of the classes in ISIC is now defined through the definition of the levels in ISCED. The most notable change in this area is the different treatment of adult education, which is now classified according to the level of education provided, while previously all adult education (irrespective of level) was classified in one ISIC class 8090;
- g) Adding of two new divisions 96 (Undifferentiated goods-producing activities of private households for own use) and 97 (Undifferentiated service-producing activities of private households for own use) to reflect the needs of ISIC users in areas outside of business statistics. The title of section P has been adjusted to account for the new scope of this section.

While the explanatory notes have been completely revised, the scope of individual classes has not been changed (with the exceptions described above). However, a small number of corrections were made. In general, the number of illustrative examples has increased, taking into account new activities, which should also facilitate the application of the classification. Detailed changes to ISIC are listed in Annex 1.

The Introduction to ISIC has been revised, updating information on underlying principles, application of the classification, statistical units and their classification, as well as relationships with other classifications.

The chapter on statistical units has been completely revised. Noting the fact that a complete and comprehensive description would far exceed a reasonable scope of the introduction, due to the multitude of implementations and models used in various countries, the Technical Subgroup agreed that the ISIC introduction should give guidelines based on the accepted international framework of the 1993 System of National Accounts. Therefore, the introduction focuses on the establishment and the enterprise as primary statistical units without discussing secondary options. This should also eliminate the confusion that the previous version of this chapter has sometimes created. Additional information on other kinds of statistical units is available in the 1993 SNA and will not be repeated in the ISIC introduction.

The ISIC publication of the 2002 update will also feature new alternate aggregations for the Information Sector, compatible to the Information Sector defined in the North American Industry Classification System (NAICS), and for the Information and Communications Technology (ICT), based on the definitions proposed by the OECD.

In addition, other alternate aggregations have been considered, but their inclusion in the publication needs further consideration. A number of other aggregations have been proposed which cannot be described in terms of complete ISIC classes, therefore limiting their applicability for data conversion based on existing data collections. These aggregations will only list affected ISIC categories, rather than provide a true means for aggregation. The initial recommendation by the Technical Subgroup was not to show these aggregations for the above reasons. The Expert Group may wish to discuss how the

Statistical Commissions request for increased use of alternate aggregations may be accommodated.

ISIC Revision in 2007

The Technical Subgroup has considered a number of requests for changes to the classification. As already mentioned above, the desire to avoid two major revisions to the classification within a five year period has led to the decision to postpone some of those changes until the next revision in 2007. This includes for example considering greater detail in the areas of Agriculture and Fishing, a review of the wholesale and retail trade concept in ISIC and the inclusion of an Information industry in the classification. The latter has been addressed through an alternate aggregation in the 2002 update, while the other two will be addressed in light of the convergence work.

The Statistical Commission has requested that efforts be undertaken to achieve greater convergence between the major existing activity classifications. The revision process for 2007 will therefore be largely driven by the work on convergence. A process has already started to evaluate the differences between the existing classifications.

All countries have to be able to provide additional input for the 2007 revision of ISIC. This includes problem statements as well as actual proposals for restructuring or detailing the classification, discussion of underlying principles and the purpose of the classification. The UN Statistics Division should be the contact point in this process and should develop appropriate procedures.

The Technical Subgroup recommends that a series of meetings of the Expert Group and the Technical Subgroup determine the milestones in the revision process. A Technical Subgroup meeting should be scheduled in Spring to react to the decisions and recommendations of the Statistical Commission, while another Subgroup meeting in the Fall will summarize the work progress and prepare status reports and recommendations for the Expert Group. The Expert Group should meet in the last quarter of the year to discuss the work progress and deliver progress reports or recommendations to the Statistical Commission.

In addition to these regular meetings, the Technical Subgroup recommends a major Conference or Workshop, preferably in the middle of 2003, to discuss options for the future classification. This Conference should include data producers and users, in the government and private sector, as well as classifications experts. The scope, size and organization and feasibility of the Conference still needs to be determined.

An outline of the recommended work programme is shown in Annex 3.

CPC Revision in 2002

The focus in this round of revision for 2002 was to incorporate all the necessary changes and updates to CPC V1.0 since its inception and official use in 1998. Updates to the CPC have concentrated on improving the structure and detail of selected sections of CPC Version 1.0 in order to ensure that it adequately reflects the changing economies and new technologies.

The set of updates for 2002 cover the following major areas: telecommunications, production services, real estate, licensing the right to use intangible assets, electricity transmission and distribution services, mixed mode transport and treatment of advertising. The main changes are listed below.

- a) Division 86 of the CPC V1.0 has been restructured with the objective of clarifying its content and creating more homogeneous categories. A proposal to split Division 86 in four ways has been devised, with services incidental to agriculture and other primary industries, as well as utilities, retained under Division 86. Installation services have been grouped with maintenance and repair in existing Division 87. Manufacturing services on physical inputs owned by others have been moved to new Division 88, and Other Manufacturing Services have been constituted as new Division 89. This includes publishing, printing, reproduction of media, metal casting, metal forging and recycling.
- b) In line with the rapid technological changes and evolving demands of statistics on goods and services in telecommunications, a restructuring and further elaboration of Groups 841 (Telecommunications and program distribution services) and 842 (Online access services)under Division 84 have been effected. Under CPC V1.0 group 841 the delineation of services by type of carrier (wired and wireless) has been eliminated. A more detailed structure by type of telecommunication service has been provided, namely, carrier services, fixed telephony, mobile, private network, data transmission, all other telecommunications and program distribution services. In addition, a more detailed breakdown and elaboration of Internet related services under Group 842 have been developed.
- c) A new category at the 3-digit level, Group 733 Licensing the right to use intangible assets, had been added to CPC Ver.1.0 and will be included in Ver.1.1. This group includes permitting, granting or otherwise authorizing the use of intangible non-produced assets and intangible fixed assets or conveying some economic benefit from their use to a third party by the owner of the asset in return for the payment of royalties or license fees. A prime objective of this change is to achieve better consistency with the terminology of the 1993 SNA, the SNA definitions of intangible assets and the SNA classification of assets. The implications for the treatment of CPC division 51 in accordance with SNA terminology is still under discussion.
- d) A new class 7224 for real estate appraisal services, formerly an integral part of classes 7222 and 7223 has been created under division 72. The existence of real

estate appraisals, as a significant stand-alone service product in many countries, has been recognized in creating this class.

- e) A new CPC class 8363 for direct sale of advertising time and space (except on commission), implicitly included before under class 8369, has been created. Since the direct sale of advertising space and time, e.g. by newspapers, is a product of significant value and since this product is different from services provided by advertising agencies, it was necessary to place them in a new, separate category of the CPC. A more detailed structure on sale of advertising time and space, not on commission, by media type (print, broadcast, internet, electronic and other modes of advertisement) has been provided.
- f) Electricity transmission and distribution services, formerly under CPC subclass 69110, have been divided into two new subclasses, namely, 69111 Transmission of electricity and 69112 Distribution of electricity. The creation of these two subclasses recognizes the growing trend of industry deregulation in this area, requiring a differentiation of service products that can be provided by separate units. In addition, the reading of meters, which was previously classified with the transmission and distribution services, has been separated and is now classified under other support services in CPC subclass 85990.
- g) A new group for classifying mixed mode land transport services (group 641) has been created. This has been done to reflect the situation that a growing portion of expenses on transport cannot be allocated to a single mode of transport. While the existing categories of the CPC may be sufficient to produce statistics on producers of these services, the new group is necessary to be able to collect meaningful data from users of transportation services.

All the above changes to CPC will be reflected in the revised structure and set of explanatory notes, including an updated set of correspondence tables between revisions, i.e., the Provisional CPC, CPC Version 1.0 and CPC Version 1.1. Also included are other changes and errata as compiled in the UN Classifications Registry, and posted on the UN International Economic and Social Classifications Website. Detailed changes to the CPC are also listed in Annex 2.

In addition, updates to selected parts of the classification to bring the goods part of CPC up to date with the 2002 edition of the Harmonized Commodity Description and Coding System (HS) and the Standard International Trade Classification (SITC Rev.3) are also necessary. This work is still ongoing. Apart from adjustments due to changes in the HS, no changes to the goods part of the CPC will be undertaken. At this time, twelve CPC subclasses have been identified that are considerably impacted by the HS changes. This involves cases of splits and cross-sections of individual subclasses. The Technical Subgroup will discuss these items at its next meeting how to react to the HS changes in these cases.

CPC Revision in 2007

The scope of the CPC revision for 2007 will be determined by the feedback received in the following years from users of the classification. An important input in the revision process will be the development of the North American Product Classification System (NAPCS). Areas for future work need to be identified in this process.

Although financial services have been discussed for the 2002 update of the CPC, no agreement on structural changes or alternate structure was reached. Therefore, financial services will need to be further reviewed for 2007.

The time table for the 2007 revision of the CPC should follow the one proposed for ISIC in Annex 3. However, there is no large conference planned for the CPC revision.

Annex 1. Detailed changes between ISIC Rev.3 and ISIC Rev.3.1

ISIC Rev.3	ISIC Rev.3.1	Detail	Reason for change
9309	6420	Pay telephone services	Correction, should be considered as telecommunication
0112	0113	Growing of olives	Correction, should be classified with tree nuts etc.
9249	9241	Recreational fishing and related service activities	Fishing (if non-commercial) is considered a sport; treatment is now similar to that of hunting
1549	1513	Roasting of nuts	Roasting is similar to preserving of fruit and vegetables
8090	8010	Adult education, primary level	ISCED97 treats education purely by level
8090	8021	Adult education, secondary level, general	ISCED97 treats education purely by level
8090	8022	Adult education, secondary level, technical and vocational	ISCED97 treats education purely by level
7494	9309	Coin operated photo machines	Coin operated services are grouped in personal services (except telephones)
2211	2213	Publishing of sheet music	Reorganization of publishing, place all music publishing in one category, first step for comparable Information sector
2929	2926	Manufacture of machines for extruding, drawing, texturing, manufacturing or cutting man-made texile fibres, materials or yarns	Correction
7220	7221	Software publishing	To separately identify this activity, necessary for definition of Information sector
7220	7229	Software consultancy and supply, except software publishing	To separately identify software publishing, necessary for definition of Information sector
5150	5151	Wholesale of computers, computer peripheral equipment and software	To separately identify this activity, necessary for definition of ICT sector
5150	5152	Wholesale of electronic parts	To separately identify this

ISIC Rev.3	ISIC Rev.3.1	Detail	Reason for change
		and	activity, necessary for definition of ICT sector
5150	5159	Wholesale of other machinery, equipment and supplies	Necessary split for definition of ICT sector
0500	0501	Fishing	To separate fishing and aquaculture
0500	0502	Fish farming	To separate fishing and aquaculture
n/a	9600	(These activities had to be partially allocated to other ISIC sections, such as Agriculture, Fishing, Construction etc., with estimated split ratios)	Requested for use in Labour Force Surveys etc.
n/a	9700	(These activities are not covered in ISIC Rev.3)	Requested for use in Labour Force Surveys etc.
0140	9309	Pet boarding	Correction: This activity is not incidental to agriculture.
5240	6592	Pawn shops	Correction: The income generated by pawn shops comes from financial transactions (loans), not retail sale.
0200	0113	Gathering of berries or nuts	Clarification
	5260	"While-you-wait" services	To account for the general nature of units providing this service.
8532	5520	"Meals on wheels"	Clarification; (was sometimes considered in 8532 before)
7499	7494	Microfilming	This should be classified as a photgraphic service, not miscellaneous.
9249	9211	Sound recording studios	This better reflects the units' activity and purpose; necessary for defining the Information Sector.

Annex 2. Detailed changes between CPC Ver.1.0 and CPC Ver.1.1

CPC Ver.1.0	CPC Ver.1.1	Detailed changes	Type of change	Basis for change
51210	73310	Licensing the right to use patented entities	moved to new class	new CPC group 733, to separate payments for use from assets itself
51220	73320	Licensing the right to use trademarks	moved to new class	new CPC group 733, to separate payments for use from assets itself
51230	73340	Licensing the right to use copyrighted works	moved to new class	new CPC group 733, to separate payments for use from assets itself
51290	73330	Licensing the right to use franchises	moved to new class	new CPC group 733, to separate payments for use from assets itself
51290	73390	Licensing the right to use other intangible assets	moved to new class	new CPC group 733, to separate payments for use from assets itself
54330	54320	Overburden removal and other development and preparation services of mineral properties and sites, including tunneling, except for oil and gas extraction	moved to new class	correction
612	61297	Wholesale for traders and brokers of electricity	added inclusion	refine/add to explanatory notes
612	61298	Wholesale for traders and brokers of natural gas thru mains	added inclusion	refine/add to explanatory notes
641	642	Mixed mode land	Introduced new group	to accommodate

CPC Ver.1.0	CPC Ver.1.1	Detailed changes	Type of change	Basis for change
		transportatioin services	and renumbered existing groups 641, 642 to 642 and 643	new group created "Mixed mode land transportation services"
64111	64211	Interurban railway transport services of passengers	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64112	64212	Urban and suburban railway transport services of passengers	renumbered	to accommodate the new class on "Mixed mode land transportation services"
6412	6422	Railway transport services of freight	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64121	64221	Railway transport services of freight by refrigerator cars	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64122	64222	Railway transport services of freight by tanker cars	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64123	64223	Railway transport services of containerized freight by tanker cars	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64124	64224	Railway transport services of letters and parcels	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64129	64229	Other railway transport services of freight	renumbered	to accommodate the new class on "Mixed mode land

CPC Ver.1.0	CPC Ver.1.1	Detailed changes	Type of change	Basis for change
				transportation services"
6413	6423	Railway pushing or towing service	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64130	64230	Railway oushing or towing services	renumbered	to accommodate the new class on "Mixed mode land transportation services"
642	643	Mixed mode land transportatioin services	renumbered	to renumber group "Railway transport services" from 641 to 642 in order to accommodate new group in 641
6421	6431	Scheduled road transport services of passengers	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64211	64311	Urban and suburban scheduled road transport services of passengers	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64212	64312	Urban and suburban special purpose scheduled road transport services of passengers	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64213	64313	Interurban scheduled road transport services of passengers	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64214	64314	Interurban special purpose scheduled road transport	renumbered	to accommodate the new class on "Mixed mode land

CPC Ver.1.0	CPC Ver.1.1	Detailed changes	Type of change	Basis for change
		services of passengers		transportation services"
64219	64319	Other scheduled road transport services of passengers n.e.c.	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64221	64321	Taxi services	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64222	64322	Rental services of passenger cars with operator	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64223	64319	Sightseeing-bus services, including city tours	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64223	64323	Rental services of buses and coaches with operator	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64224	64324	Road transport services of passengers by man -or animal- drawn vehicles	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64229	64329	Other non- scheduled road transport services of passengers n.e.c.	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64231	64331	Road transport services of freight by refrigerator vehicles	renumbered	to accommodate the new class on "Mixed mode land transportation services"

CPC Ver.1.0	CPC Ver.1.1	Detailed changes	Type of change	Basis for change
64232	64332	Road transport services of freight by tank trucks or semi-trailers	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64233	64333	Road transport services of containerized freight by trucks equipped with a container chassis	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64234	64334	Road transport services of freight by man -or animal- drawn vehicles	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64235	64335	Moving services of household and office furniture and other goods	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64236	64336	Road transport services of letters and parcels	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64239	64339	Other road transport services of freight	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64240	64340	Miscellaneous local delivery services	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64250	64350	Rental services of trucks with operator	renumbered	to accommodate the new class on "Mixed mode land transportation services"
643	644	Transport services	renumbered	to renumber group

CPC Ver.1.0	CPC Ver.1.1	Detailed changes	Type of change	Basis for change
		via pipeline		"Railway transport services" from 641 to 642 in order to accommodate new group in 641
64310	64410	Transport services via pipeline of petroleum and natural gas	renumbered	to accommodate the new class on "Mixed mode land transportation services"
64390	64490	Transport services via pipeline of other goods	renumbered	to accommodate the new class on "Mixed mode land transportation services"
69110	69111	Transmission of electricity	split into 2 subclasses	to separate/deliniate "transmission of electricity" from distribution services of electricity
69110	69112	Distribution of electricity	split into 2 subclasses	to separate/deliniate "transmission of electricity" from distribution services of electricity
69110	85990	Reading of electric meters	moved to another subclass	correction
69120	85990	Reading of gas meters	moved to another subclass	correction
69210	85990	Reading of water meters	moved to another subclass	correction
71559	71553	Debit card merchant services	moved to another subclass	correction
72221	72240	Appraisal of residential buildings and land, on a fee or contract basis	moved to a new class	to restructure and create a separate subclass on "real estate appraisal services"
72222	72240	Appraisal of non- residential	moved to a new class	to restructure and create a separate

CPC	CPC	Detailed shanges	Type of change	Pagia for change
Ver.1.0		Detailed changes	Type of change	Basis for change
		buildings and land, on a fee or contract basis		subclass on "real estate appraisal services"
72230	72240	Appraisal of residential and non-residential vacant lots for sale on a fee or contract basis	moved to a new class	to restructure and create a separate subclass on "real estate appraisal services"
83142	83141	Providing technical expertise for the integration of hardware and software	moved to another subclass	correction
83149	83141	Systems integration services	moved to another subclass	correction
83690	83631	Sale of advertising space in print media (except on commission)	introduced new subclasses and further breakdown on "sale of advertising, except on commission" (implicitely considered before under CPCV1.0 83690)	to define and elaborate services associated with "sale of advertising space or time (except on commission)"
83690	83632	Sale of TV/radio advertising time (except on commission)	introduced new subclasses and further breakdown on "sale of advertising, except on commission" (implicitely considered before under CPCV1.0 83690)	to define and elaborate services associated with "sale of advertising space or time (except on commission)"
83690	83633	Sale of internet advertising space (except on commission)	introduced new subclasses and further breakdown on "sale of advertising, except on commission" (implicitely considered before under CPCV1.0 83690)	to define and elaborate services associated with "sale of advertising space or time (except on commission)"
83690	83639	Sale of advertsing space or time	introduced new subclasses and further	to define and elaborate services

CPC Ver.1.0	CPC Ver.1.1	Detailed changes	Type of change	Basis for change
		(except on commission)	breakdown on "sale of advertising, except on commission" (implicitely considered before under CPCV1.0 83690)	associated with "sale of advertising space or time (except on commission)"
84110	84121	Fixed telephony services- access and use for wired telecommunication s	introduced new structure, breakdown of classes and subclasses on "telecommunications and program distribution services"	to restructure and further elaborate CPC Groups 841 and 842 deliniated by type of service and not by type of carrier (wired or wireless)
84110	84122	Fixed telephony services- calling features for wired telecommunication s	introduced new structure, breakdown of classes and subclasses on "telecommunications and program distribution services"	to restructure and further elaborate CPC Groups 841 and 842 deliniated by type of service and not by type of carrier (wired or wireless)
84110	84150	Provision of wired facilities and services fro transmission of data on a pay- asyou- use basis	introduced new structure, breakdown of classes and subclasses on "telecommunications and program distribution services"	to restructure and further elaborate CPC Groups 841 and 842 deliniated by type of service and not by type of carrier (wired or wireless)
84110	84160	Provision of telecommunication s services not elsewhere classified, such telegraph, telex, TWIX and audio conferencing bridging services	introduced new structure, breakdown of classes and subclasses on "telecommunications and program distribution services"	to restructure and further elaborate CPC Groups 841 and 842 deliniated by type of service and not by type of carrier (wired or wireless)
84110	84170	Program distribution services	introduced new structure, breakdown of classes and subclasses on	to restructure and further elaborate CPC Groups 841 and 842 deliniated

CPC Ver.1.0	CPC Ver.1.1	Detailed changes	Type of change	Basis for change
			"telecommunications and program distribution services"	by type of service and not by type of carrier (wired or wireless)
84120	84110	Provision of access to wireless telecommunication facilities	structure, breakdown	to restructure and further elaborate CPC Groups 841 and 842 deliniated by type of service and not by type of carrier (wired or wireless)
84120	84122	Fixed telephony services- calling features for wireless telecom	introduced new structure, breakdown of classes and subclasses on "telecommunications and program distribution services"	to restructure and further elaborate CPC Groups 841 and 842 deliniated by type of service and not by type of carrier (wired or wireless)
84120	84150	Provision of wireless facilities and services fro transmission of data on a pay- asyou- use basis	introduced new structure, breakdown of classes and subclasses on "telecommunications and program distribution services"	to restructure and further elaborate CPC Groups 841 and 842 deliniated by type of service and not by type of carrier (wired or wireless)
84200	84210	Internet backbone services	introduced new structure, breakdown of classes and subclasses on "telecommunications and program distribution services"	to restructure and further elaborate CPC Groups 841 and 842 deliniated by type of service and not by type of carrier (wired or wireless)
84200	84220	Providing direct connection to the internet	introduced new structure, breakdown of classes and subclasses on "telecommunications and program distribution services"	to restructure and further elaborate CPC Groups 841 and 842 deliniated by type of service and not by type of carrier (wired or

CPC Ver.1.0	CPC Ver.1.1	Detailed changes	Type of change	Basis for change
				wireless)
84200	84230	Providing telecommunication s services over the internet	introduced new structure, breakdown of classes and subclasses on "telecommunications and program distribution services"	to restructure and further elaborate CPC Groups 841 and 842 deliniated by type of service and not by type of carrier (wired or wireless)
85930	85931	Telephone call center services (taking orders for clients by telephone)	split into 2 subclasses	to separate/deliniate "telephone call center services" and "other telephone-based support services"
85930	85939	Telephone answering and wake up services	split into 2 subclasses	to separate/deliniate "telephone call center services" and "other telephone-based support services"
85990	85931	Telephone based support services	deleted inclusion	correction
85990	85939	Telephone based support services	deleted inclusion	correction
86111	86110	Services incidental to crop production	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86112	85990	Gardening and landscaping services	added inclusion	correction
86221	86311	Electricity transmission services (on a fee or contract basisi)	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86221	86312	Electricity distribution	introduced new structure, breakdown	to restructure and further elaborate

CPC Ver.1.0	CPC Ver.1.1	Detailed changes	Type of change	Basis for change
		services (on a fee or contract basisi)	of classes and subclasses for Divisions 86-89	CPC Divisions 86- 89
86222	86320	Gas distribution services through mains	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86223	86330	Water distribution services through mains	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86224	86340	Steam and hot water distribution services through mains	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86311	88111	Food and beverage manufacturing services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86312	88112	Tobacco manufacturing services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86321	88121	Textile manufacturing services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86322	88122	Wearing apparel manufacturing services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86323	88123	Leather product manufacturing services	introduced new structure, breakdown of classes and subclasses for	to restructure and further elaborate CPC Divisions 86- 89

CPC Ver.1.0	CPC Ver.1.1	Detailed changes	Type of change	Basis for change
			Divisions 86-89	
86330	88130	Wood and cork, except furniture, and straw and plaiting material manufacturing services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86340	88140	Paper and paper product manufacturing services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86350	88150	Coke, refined petroleum product and nuclear fuel manufacturing services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86360	88160	Chemical and chemical product manufacturing services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86370	88170	Rubber and plastic products manufacturing services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86380	88180	Non metallic mineral product manufacturing services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86390	88190	Other manufacturing services, except of of metal products, machinery and equipment	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86411	89210	Metal casting services	introduced new structure, breakdown of classes and subclasses for	to restructure and further elaborate CPC Divisions 86- 89

CPC Ver.1.0	CPC Ver.1.1	Detailed changes	Type of change	Basis for change
			Divisions 86-89	
86419	?			
86421	89220	Metal forging, pressing, stamping, roll forming services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86422	88211	Metal treatment and coating services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86423	88212	General machining services on metal and metal product owned by others	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86429	88219	Other fabricated metal prduct manufacturing services and meatl working services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86431	88221	Motor vehicle, trailer and semi- trailer manufacturing services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86439	88229	Other transport equipment manufacturing services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86441	88231	Office, accounting and computing machinery manufacturing services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86442	88232	Electrical machinery and apparatus manufacturing services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89

CPC	CPC	Detailed changes	Type of change	Basis for change
Ver.1.0	Ver.1.1	Detailed Changes	Type of change	Dasis for change
86443	88233	Radio, television and communcation equipment and apparatus manufacturing services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86-89
86444	88234	Medical precision and optical instrument, watch and clock manufacturing services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86449	88239	Other machinery and equipment manufacturing services	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86510		Installation services of turnkey projects	These services are now covered by the installation of individual types of machinery and equipment, in 87310-87390	to restructure and further elaborate CPC Divisions 86- 89
86520	87310	Installation services of fabricated metal products, except machinery and equipment	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86530	87320	Installation services of machinery and equipment	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86540	87330	Installation services of office and accounting machinery and computers	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86550	87360	Installation services of electrical	introduced new structure, breakdown of classes and	to restructure and further elaborate CPC Divisions 86-

CPC	СРС	Detailed changes	Type of change	Basis for change
Ver.1.0	Ver.1.1		J	
		machinery and equipment	subclasses for Divisions 86-89	89
86560	87340	Installation services of radio, television and communcation equipment and apparatus	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86570	87350	Installation services of professional medical machinery and equipment, and precision and optical instruments	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86590	87390	Installation services of other goods	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86910	89110	Publishing on a fee or contract basis	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86921	89121	Printing services and services related to printing, on a fee or contract basis	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86922	89122	Reproduction services of recorded media, on a fee or contract basis	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86931	89310	Metal waste and scrap recycling services, on a fee or contract basis	introduced new structure, breakdown of classes and subclasses for Divisions 86-89	to restructure and further elaborate CPC Divisions 86- 89
86932	89320		introduced new structure, breakdown	to restructure and further elaborate

CPC Ver.1.0	CPC Ver.1.1	Detailed changes	Type of change	Basis for change
		services, on a fee or contract basis	of classes and subclasses for Divisions 86-89	CPC Divisions 86- 89
94221	94222	Oil spill fighting services	moved to another subclass	correction
96149	85990		moved to another subclass	correction
96520	96990	Visiting services for ballrooms, dance halls and other recreational facilities	moved to another subclass	correction
97990	96620	Services related to training of sporting and entertainment animals	moved to another subclass	correction

Annex 3. Proposed timetable for the 2007 ISIC revision

Planning of ISIC and CPC Revision Process

