

Statistics Netherlands

Division of Macro-economic statistics and dissemination Prices, short term indicators and programming

P.O.Box 4000 2270 JM Voorburg The Netherlands

The revision of the Central Product Classification

Albert Jacques

Remarks:

The views expressed in this paper are those of the author and do not necessarily reflect the policies of Statistics Netherlands.

Project number: MPP-BPA number: -MPP Date: 25 June 2003

THE REVISION OF THE CENTRAL PRODUCT CLASSIFICATION

Summary: In this contribution to the discussion in the 18th Voorburg group meeting to be held in Tokyo, October 6-10, 2003 a contribution is given containing the results of the discussions of the Expert Group on International Classifications and the Technical Subgroup of the Expert Group. This paper is restricted to issues concerning CPC only, although there exist links with other classifications such as ISIC, NACE, CPA and HS.

Keywords: CPC, Revision

1. Introduction

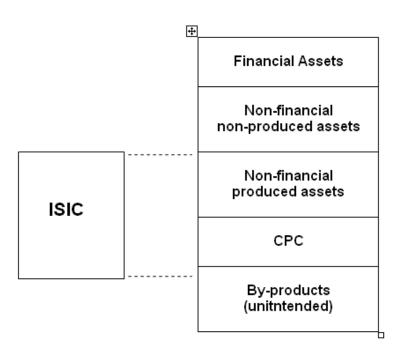
- 1. An general agreement on the need to improve harmonization among the various classifications in the economic field laid down by the Statistical Commission in 1972 and the Conference of European Statisticians in 1973 resulted in a first step of this harmonization, the development of the Harmonized System (HS) taking in account as much as possible continuity with the Standard International Trade Classification (SITC), Revision 2. The HS was approved by the Customs Cooperation Council (CCC) in 1983 and entered into force in January 1988.
- 2. In 1974 the Statistical Commission of the United Nations requested to convene an Exert group to make recommendations and to frame the recommendations in the form of a work programme. In order to provide a basic tool in this programme the Central Product Classification, a classification of goods and services, interrelated to the classification economic activities. The detailed subheadings of the HS were used as building blocks for the part dealing with transportable goods and to take into account the basic categories of economic intermediate consumption, final consumption, capital formation and imports and exports.
- 3. In 1977 the Statistical Office of the United Nations Secretariat and the statistical Office of the European Communities (EUROSTAT) convened a Joint Working Group on World Level Classifications. This group would develop an Integrated System of Classifications of Activities and Products (SINAP) which would serve as building blocks for the revision of the International Standard Industrial Classification of all Economic Activities (ISIC).
- 4. In 1987 the Joint Working Group on World Level Classifications and a United Nations Expert Group meeting reviewed drafts of the CPC. After improving the draft was published in 1991 as provisional CPC.

Recommending the member states make use of the classification the Statistical Commission gave a sound basis for any needed revision in the CPC.

2. Use of the CPC

- 5. The member states of the European Union initiated by the of the Statistical Office of the European Communities (EUROSTAT), in order to be harmonized with the international standards ISIC and CPC, revised the General Industrial Classification of Economic Activities within the European Communities (NACE 1970) to the NACE Rev.1, that was based on the ISIC, Rev. 3 structure.
- 6. Europe adopted CPC as basis for the development of the European Classification of Products by Activity (CPA), being more detailed but compatible with CPC. Because of the needs to use CPA in surveys, the majority in Europe wanted the CPA to be based on the structure of NACE Rev.1. All products, transportable or not and services are placed in one and not more than one economic activity of NACE, Rev.1. This assures the CPA has a structure that is parallel to the one of NACE Rev.1. However a detailed link between products and activities only can be established to a certain degree. Cases exist in CPA 1996 where products only can be linked to a higher category than a class in activities (Textiles). Also in certain areas agreement are used as basis for classifying (Waste).
- 7. In the end of the nineties last century, an agreement was reached that revisions of classification of the United Nations and Europe would be harmonized in time. Also the revision of recent developed North American Industry Classification System (NAICS) was entered into this agreement. At this time three similar but linked processes of revision of activity and product classification are running, resulting in revised ISIC, CPC, NACE, CPA and NAICS in 2007. The Expert Group on International Classifications and the Technical Subgroup of the Expert Group asked by the Statistical Commission to implement revision of the classifications ISIC and CPC. In this Expert Group custodians of (inter)national activity and product classifications are giving direction and organising feedback from users to come to revision.
- 8. Concerning the Central Product Classification (CPC), being revised in 1998 the Technical Subgroup of the Expert Group (TSG) made some recommendations and discussion points for the future CPC. In "The 2007 Revision of ISIC and CPC, a Concepts Paper" a number of conceptual issues are mentioned:
- 9. The definition of the scope of the CPC

- a. The decision whether the CPC should primarily be designed to (i) serve as a model for statistical classifications to e used in particular statistical programmes; or (ii) to serve as a central link to other existing product classifications, while also filling gaps in areas not covered by other product classifications.
- b. The first option considered was to define the CPC as only covering production. It needs to be determined if a definition of production can be used to identify products. It also needs to be decided, whether the scope of the CPC should be restricted to production boundary of the SNA.
- c. It was agreed that in addition to a classification of produced products, both goods and services, the CPC should be complemented by a classification of produced and non-produced assets, and unintended by-products such as waste. Both new and used goods can generate revenues. In addition, to preserve the link to important international product classifications, such as the HS, products that are not a direct output of production need to be covered.



d. If the CPC was to be based on production, while other aspects were to be covered in separate classifications (listed in the diagram), such as produced and non-produced assets and unintended by-products, it may be useful to combine these classifications as a family in one publication, under one common introduction, rather than separating them. This would better reflect the role of the CPC as 'central'

- classification as in (ii) above, not just a collection of smaller individual ones.
- e. The classification of financial and non-financial assets in this system would be derived from the updating process of the SNA and the BPM45, as well as the GFS
- f. While a system as outlined above is necessary, no decision has been taken yet on whether the term "Central Product Classification" would refer to the production-related part of this system or the system as a whole.

10. Aggregation structure

a. No clear consent on a proposal for restructuring the CPC has emerged yet. However, different uses of the CPC indicate requirements for different aggregation structures. In this context, two major approaches to a CPC aggregation could be considered: an industry of origin based structure and a demand based structure. Both structures are useful and should be recognized

11. Industry of origin – based structure

Grouping products by industry of origin is the current approach for the supply and use tables of the production accounts of the National accounts. A danger however, is that when aggregating from the level of products, the aggregates of products and activities look similar, which could lead to confusion. Also it was argued that a central product classification should serve more purposes than production statistics, and therefore the structure could be different from that of the activity classification. An example of the industry of origin structure can be found in the EU Classification of Products by Activity, which is linked to the activity classification NACE.

This approach would practically tie the CPC to the ISIC structure. However, some of the recommendations made for ISIC principles would result in a larger number of cases (as compared to previous ISIC versions), where the same product could be produced by different industries. This would create additional problems in creating such a structure. Reasonable redefinition of the product(s) will not be possible and the product would be linked to two different industries, as can e demonstrated by the example of the activity "Manufacture of metal wire products", in CPC 2899 if made from purchased steel and in CPC 2710 if made from own produced steel. The way to do this is through correspondence tables and not by building it into the structure

12. Demand based structure

There exists a growing attention for a demand based structure for the product classification, although it is not clear yet what form or focus a

demand-based structure would have. Two major directions are recognized (i) taking into account the structure of the classifications of expenditure according to purpose; Classification Of Individual Consumption by Purpose (COICOPO, Classification of total outlays of non-profit institutions serving households by purpose (COPNI) and Classification of selected outlays of producers by purpose (COPP) and (ii) taking into account the work currently being undertaken for the North American Product Classification System (NAPCS)

(i) the first approach would exploit similarities in the structures of COICOP, COPNI and COPP. This would provide closer links to other demand –based structures requiring product detail, such as household expenditure surveys etc.

SNA 1993 chapter XVIII Functional classifications: The three purposes of the functional classifications, as mentioned in SN, are (1) distinguishing between collective services and individual consumption goods and services, provided by the Government (COFOG), (2) providing statistics which experience has shown to be of a general interest for a wide variety of analytical uses and (3) providing users with the means to recast key aggregations of the SNA for particular kinds of analysis.

See: Annex 1 for COICOP, COPNI and COPP

(ii) the second approach would take into account work done for the NAPCS. However, it should be noted at this pint of time no results are available yet

13. Next steps

- a. Both options for a CPC aggregation structure (industry of origin and demand-based) are useful. Before starting a process of developing both structures simultaneously must be investigated whether one common set of building blocks can serve both aggregations. Each aggregation, however may put (different) restrictions on the type of detail possible and the type of detail required in the CPC
- b. If there is a strong desire to follow the industry of origin-approach, the existing links between ISIC and CPC can be used as starting point for this work and 2007 could remain as the target date for he revised classification.

- c. If a demand-based structure is favoured, more time will be necessary to complete such a structure. The development of NAPCS should definitely be followed, even if a COICOP-COPNI-COPP approach is being used. However, as the NAPCS work is not yet completed, and no testing of this structure has been done, it seems not sensible to opt for a CPC revision along a demand based approach for 2007. In that case maintaining the status quo for the CPC structure for 2007 and focussing on a revision in the next cycle would be advisable.
- d. Irrespective of the decision on the CPC aggregation structure, work to evaluate the CPC detail will continue for 2007, Sources to take into consideration will include links to other classifications (and their revisions), such as HS and EBOPS, but also requirements for product detail in emerging and specific product lists, if feasible. In this regard, countries are invited to make proposals for additional CPC detail to be conspired for 2007
- e. Of course the outcome of the discussion on a high level structure for ISIC 2007 will influence the choice of the high level structure of CPC. In addition links with the Extended Balance of Payments Services classification (EBOPS) must be taken into account. He Balance of Payment Manual is currently being revised with a target date of 2008

14. Work done presently by the TSG

The TSG formulated at its March 2003 meeting a questionnaire, sent out to all countries, asking for the countries' position on questions relating to the concept paper. Concerning CPC the questions are:

- What is your position regarding the purpose and the scope of the revised CPC?
- What is your position on the proposed options for a CPC aggregation structure, reflecting industry of origin, demand based approach and strong links to the BOP?
- If you currently use the CPC:
 - how useful do you consider the current aggregation structure of the CPC?
 - O How do you use the current CPC aggregation structure or only the CPC detail with another aggregation structure?

3. The European points of view

15. The European points of view

As mentioned above the revision of the activity and product classifications both of UN and EU are harmonized in timing. EU is following a process that must result in revised NACE and CPA in 2007. Already some international input was seen, such as the Convergence project NAICS-NACE. Also internally EU already has set out a road to reach the targets in 2007. EU will speak with one voice which means some conformity already exists in Europe. Presently the EU has 15 member states but in the near future some 10 candidate countries will join the EU.

- On CPC aggregation there exists an EU conformity that the status quo has known problems, a demand based structure will not be ready in time (before 2007). Europe has experience with the industrial origin concept, and there is a good knowledge how it functions. There is consensus that EU would recommend the industrial origin concept.
- The current aggregation structure is not considered useful in Europe and therefore only the detail of the CPC is used in Europe (as basis for the CPA)

16. Experience with the industrial origin concept

The Classification of Products by Activity (CPA), primarily was set up as an European version of the provisional CPC, being based (among other principles) on the character of the products. But in Europe there existed a need for a product classification that could be used for surveys. Most member states of the EU, as well as the authors of the National Account and the input-output experts of Eurostat were interested in a classification of products of which the structure was based on the economic activities that are the basis of the products. The details needed in the surveys of production however were not integrated in the CPA but linked to it (Prodcom). In most areas of the classification the experiences are positive, but in the part classifying Textiles still some problems are existing. An example of the product-activity link is given in Annex 2.

17. References:

Provisional Central Product Classification, United Nations, New York, 1991 Central Product Classification, Version 1.0, United Nations, New York, 1998

NACE, Rev.1, Eurostat, Brussels, 1993

NACE, Rev. 1.1 Eurostat, "Ramon classifications server"

CPA 1993, Eurostat, Brussels, 1993

CPA 2002, Eurostat, "Ramon classifications server"

System of National Accounts 1993, United Nations, International Monetary Fund, European Union, Organisation for Economic cooperation and Development, World Bank, Brussels/Luxembourg, New York, Paris, Washington D.C. 1993

Documents from the Expert Group on International Classifications.