

Chapter II:

Overview of services classifications and the role of services classifications

The second chapter looks more closely into the various services classification regimes and their impact for policy makers and regulators. Evidently, the classifications developed by the WTO build the landmark for any classifications discussions, but it cannot be overlooked that due to their time of origin, the rapid and ongoing technological developments since the Uruguay Round (1986–1994) and the lack of any adequate adjustments in the WTO regime ever since, more modern classifications of other organizations increasingly enter and are made use of in international trade negotiations. Therefore, a thorough assessment of such classifications appears to be inevitable.

1. Available classification regimes

1.1 W/120

The services sectoral classification list (W/120)⁵⁷ is a comprehensive list of services sectors and sub-sectors covered under the GATS. It was compiled by the WTO in July 1991 and its purpose was to facilitate the Uruguay Round negotiations, ensuring cross-country comparability and consistency of the commitments undertaken. The 160 sub-sectors are described as aggregate of the more detailed categories contained in the United Nations provisional Central Product Classification (CPC)⁵⁸.

Based on the CPC the W/120 constitutes a reduced version of it, providing a less comprehensive description of sectors and sub-sectors. The W/120 should, therefore, be viewed as an optional classification system of services sectors for trade negotiating purposes, rather than as a statistical classification.

1.2 CPC

(i) *Term and meaning*: The Central Product Classification (CPC) is a classification based on the physical characteristics of goods or on the nature of the services

⁵⁷ The list is available at the WTO website at: http://tsdb.wto.org/Includes/docs/W120_E.doc.

⁵⁸ See <http://unstats.un.org/unsd/statcom/doc02/cpc.pdf>.

rendered. Each type of good or service distinguished in the CPC is defined in such a way that it is normally produced by only one activity as defined in International Standard Industry Classification of all Economic Activities (ISIC).⁵⁹ The CPC covers products that are an output of economic activities, including transportable goods, non-transportable goods and services.

The classification structure comprises:

- Sections – one-digit code;
- Divisions – two-digit code;
- Groups – three-digit code;
- Classes – four-digit code;
- Subclasses – five-digit code

(ii) *Functions*: The main purpose of the CPC is to provide a framework for the international comparison of statistics dealing with products. It also serves as a guide for developing or revising existing classification schemes of products in order to make them compatible with international standards. The CPC was developed primarily to enhance harmonization among various fields of economic and related statistics and to strengthen the role of national accounts as an instrument for the coordination of economic statistics. For this reason, the CPC provides a basis for recompiling basic statistics from their original classifications into a standard classification for analytical use.

The CPC constitutes a comprehensive classification framework of all goods and services. With regard to services, no international classification covering the whole spectrum of outputs of the various services industries and, therefore, serving the different analytical needs of statistical and other uses was available before the development of the CPC. As a general-purpose classification, CPC provides less detail than other specific classification systems in areas or applications for which such systems are available. The CPC presents categories for all products that can be the object of domestic or international transactions or that can be entered into stocks. It includes products that are an output of economic activity, including transportable goods, non-transportable goods and services.

(iii) *Historical development*: The need for the development of the Central Product Classification originated from initiatives in the early 1970s to harmonize international classifications. In the development of those initiatives, a standard classification of all products was perceived as a key element. Based on the recommendations of an Expert Group convened by the United Nations Secretariat, the Statistical Commission at its nineteenth session, in 1976, approved a program to harmonize the existing activity classifications of the United Nations, the Euro-

⁵⁹ See below chapter II.1.8.

pean Communities and the Council for Mutual Economic Assistance and to simultaneously develop a system of different, but interrelated, classifications of economic activities and goods and services. The development of a new CPC classification regime – covering both goods and services (products) – was intended to provide a basic tool in this program.

The following chart gives an overview of the different versions of CPC which are discussed in more detail hereinafter:

Figure 1: CPC versions



The first complete draft of the CPC was reviewed by the Statistical Commission at its twenty-fourth session, in 1987. The Provisional CPC (hereinafter “CPC prov.”) was published by the United Nations in 1991. The CPC prov. was revised, updated, finalized and presented for adoption to the United Nations Statistics Division as Central Product Classification Version 1.0 (hereinafter CPC 1.0). The CPC 1.0 was published in 1998. Particular attention was paid to the services part of the classification to ensure that the structure of CPC adequately reflects new technologies and growth in the services sector of the economy.⁶⁰

The Expert Group, at its meeting in November 1999, approved the establishment of a Technical Subgroup to the Expert Group. This Technical Subgroup was asked to take action to update CPC 1.0. The United Nations Statistics Division and the Technical Subgroup established close working relationship with the International Monetary Fund (IMF) and the WTO Secretariat, mainly due to the fact that CPC was used as a source in the context of the preparation of the GATS.⁶¹ The focus in this round of revisions for 2002 was to make all the necessary changes and updates to CPC 1.0 since its inception and official use in 1998. These included the recommended changes in selected parts of the classification regime relating to services.

The update to CPC 1.1 has concentrated mainly on improving the structure and details of selected sections of CPC 1.0. The set of CPC updates for 2002 also covers telecommunications. In line with the rapid technological changes and evol-

⁶⁰ Report of the Secretary General, International Economic and Social Classifications (E/CN.3/2000/17), para 5.

⁶¹ WTO, Services Sectoral Classification List, Note by the Secretariat, MTN.GNS/W/120, July 10, 1991.

ing demands of goods and services in telecommunications, a restructuring and further elaboration of groups 841 and 842 under division 84 were introduced. Under CPC 1.1 group 841, the delineation of services by type of carrier (wired and wireless) has been eliminated. In addition, a more detailed structure by type of telecommunications service has been provided, namely, carrier services, fixed telephony services, mobile telecommunications services, private network services, data transmission services, other telecommunications and program distribution services. A more detailed breakdown and elaboration of Internet related services under group 842 has also been developed. Classifications of other organizations (for example OECD) refer now to this classification's numbering (group 84), not anymore to the old numbering (group 75).

CPC Version 2 (hereinafter CPC 2.0) as the latest revision (completed on 31 December 2008) of the international family of economic and social classifications constitutes a comprehensive classification of all goods and services and is the standard for all products that are an output of an economic activity, including transportable and non-transportable goods and services as well as originals. For the description of goods, CPC 2.0 is in line with the *Harmonized Commodity Description and Coding System 2007* (HS) of the World Customs Organization.⁶² CPC 2.0 covers the whole spectrum of outputs of the various industries and can serve the different analytical needs of statistical and other users. This classification is particularly useful for services. It also serves as a guideline for the elaboration of classifications for specific areas of the economy, including international trade in services.

The CPC prov. was used for the elaboration of the categories of services that were applied mostly for setting up the initial schedules of commitments at the end of the Uruguay Round and for the changes, including in the context of WTO accessions, which have been made since. The CPC 2.0 is designed to describe the balance of payments services components recommended in *Balance of Payment Manual* (BPM6) and further defined in *Extended Balance of Payments Services Classification* (EBOPS).⁶³

The Expert Group on International Statistical Classifications has now decided to proceed with an update of the Central Product Classification (CPC), working towards a CPC 2.1. The work has started and a Technical Subgroup is reviewing the detailed proposals and requirements to determine how to best address the different issues with minimal impact on continuity in the CPC.⁶⁴

⁶² See http://www.wcoomd.org/home_hsnomenclaturetable2012.htm.

⁶³ See below chapters II.1.5 and 1.6.

⁶⁴ See Classification Newsletter No 28, December 2011, http://unstats.un.org/unsd/class/intercop/newsletter/newsletter_28e.pdf.

Figure 2: Overview of the main elements of the different CPC classifications

Provisional CPC was used	CPC 1.0 was used	CPC 2.0 was used
<ul style="list-style-type: none"> to define the categories of services during the negotiations leading to GATS 1995 to describe the BOP services components of BPM5 	<ul style="list-style-type: none"> to define the more detailed EBOPS services categories (MSITS-2002) 	<ul style="list-style-type: none"> to define EBOPS categories in the Revised Manual on SITS (MSITS-2010)

As figure 2 shows the WTO trade negotiators increasingly include elements of more modern classifications of other organizations into the newer versions of CPC.

The reason why the WTO does not pay more attention to the classification issues related to electronic services must be seen in the fact that other issues have higher political priorities, in particular the continuation of the Doha Round negotiations and the related agricultural trade problems. Classifications are technical problems and not easy to present in the public, making them less attractive. Moreover, a revision of existing classifications should lead to a liberalization of trade in services and lower market access barriers which does not correspond to the general political trend since the financial crisis broke out in 2007. As discussed in Chapter III below, there is also the inherent fear that changing the classification system would lead to substantial uncertainty about the coverage of already existing commitments.

1.3 OECD

The *Joint OECD-Eurostat Trade in Services Classification*⁶⁵ is closely linked to the fifth version of BPM (BPM5). It can be characterized as a disaggregation of the BPM5 classification for balance of payments transactions related to trade in services. The main categories of this classification are identical to the 11 main service categories of the BPM5 standard components, and the two-, three- and four-digit items are compatible with these standard components and BPM5 services subcomponents, with one minor exception, the treatment of construction services, which also affects other business services.

⁶⁵ See http://www.oecd.org/document/43/0,3746,en_2649_34235_1898539_1_1_1_1,00.html.

The *Joint OECD-Eurostat Trade in Services Classification* covers all service transactions between residents and non-residents. The database on “International Trade in Services” shows the value of each member country’s exports and imports of services by type of service. The database is the result of joint work by the OECD and Eurostat.

The Joint Classification is also partially linked to the Central Product Classification through its relationship with BPM5; since CPC 2.0 has taken up elements of other classifications, the differences to the OECD Classification have become smaller. As such, however, the OECD Classification does not offer an alternative classification regime for international trade, but it is partly used in practice (without specific consideration) as reference in the context of national legislation or of negotiations of bilateral and regional PTAs. Thereby, it should not be overlooked that the OECD Classification is worked out by approximately 40 industrial countries as Members of the OECD, i.e. less developed countries are not represented in its expert groups, in particular related to the further development of the standards, which can turn out to be disadvantageous.

The OECD is also involved in efforts to compare the different classifications. Special Working Papers can, for example, make assessments in respect of the OECD Classification and the W/120 List or the CPC, respectively.⁶⁶

1.4 MSITS

The *Manual on Statistics of International Trade in Services 2010* (MSITS 2010) addresses the needs of a variety of producers and users of such statistics.⁶⁷ While it is primarily a guide for statistical compilers, it is also a useful tool for governments and international organizations that use statistical information in connection with international negotiations on trade in services. Furthermore, it can support enterprises and others while monitoring developments in international services markets.

The revised manual provides a more detailed classification of services delivered through conventional trade between residents and non-residents than is contained in BPM6. This Extended Balance of Payments Services (EBOPS 2010)⁶⁸ classification has been revised in line with existing statistical frameworks. The most significant change was the introduction of *Manufacturing services on physical inputs owned by others* and *Maintenance and repair services, n.i.e.* (not included else-

⁶⁶ For further details see below chapter III.5.1.

⁶⁷ See <http://unstats.un.org/unsd/tradeserv/TFSITS/msits2010/M86%20rev1-white%20cover.pdf>.

⁶⁸ See <http://www.oecd.org/dataoecd/24/34/2507956.pdf>.

where) as two new components and the removal of *Merchanting* from *Other business services*. The manual includes a treatment of local delivery of services through foreign commercial presence and takes a further step towards linking these two systems. The manual provides clarifications on inward and outward Foreign Affiliates Trade in Services Statistics (FATS)⁶⁹, and also describes the links between FATS and the international supply of services. The manual includes a new chapter discussing “modes of supply”, as described in the GATS, through which services can be delivered, and elaborates recommendations for a statistical treatment of these modes.

The MSITS 2010 Classification follows the BPM6 approach, thereby distinguishing between telecommunications, computer and information services, further disaggregated as follows:⁷⁰

- “Telecommunications services” covers the broadcast or transmission of sound, images, data, or other information by telephone, telex, telegram, radio and television cable transmission, radio and television satellite, electronic mail, facsimile, etc., including business network services, teleconferencing, and support services. Not included are the value of the information transported, the mobile telecommunications services, the Internet backbone services and the online access services.
- “Computer services” consists of hardware- and software-related services and data processing services. A further distinction is done between computer software and other computer services (consultancy, installation, maintenance and repair, data recovery services).
- The “information services” is divided into news agency services and other information services (such as database services, database conception, data storage, and dissemination of data).

1.5 EBOPS

The Extended Balance of Payments Services Classification (EBOPS)⁷¹ is consistent with the IMF’s BPM5 classification of trade in services but it is more de-

⁶⁹ The term “foreign affiliates trade in services statistics” has been superseded by the more general term “foreign affiliates statistics”. For historical consistency, the acronym (FATS) has been retained.

⁷⁰ See MSITS 2010, 3.219–3.230.

⁷¹ See <http://www.oecd.org/dataoecd/24/34/2507956.pdf>. The first version of EBOPS was a disaggregation of the Joint Classification. Along the lines of its previous version, and as recommended in *MSITS 2010*, EBOPS 2010 is a disaggregated subsystem of the BPM6 services classification.

tailed. EBOPS was devised for the *MSITS 2002*, based on the experience gained with the implementation of the *Joint OECD-Eurostat Trade in Services Classification* at the end of the 1990s. EBOPS is a disaggregation of the joint OECD-Eurostat Trade in Services Classification.

The first version of EBOPS was a disaggregation of the Joint Classification. Along the lines of its previous version, and as recommended in *MSITS 2010*, EBOPS 2010 is a subsystem of the BPM6 services classification. The analysis of the relationship between EBOPS 2010 and CPC 2.0 provides greater detail and a necessary, although partial, statistical link between domestic production and trade in services.

As far as the electronic services are concerned, the EPOBS distinguishes as follows:

- 3. Communications services
 - 3.1 Postal and courier services
 - 3.2 Telecommunications services
- 7. Computer and information services
 - 7.1 Computer services
 - 7.2 Information services
 - 7.2.1 News agency services
 - 7.2.2 Other information provision services

1.6 BPM6

The IMF showed early interest in statistical methodology with its publication of the first edition of the *Balance of Payments Manual*⁷² in January 1948. The major objective of the *Manual* was to provide a basis for regular, internationally standardized reporting to the IMF. The *Manual* was a continuation of work started by the League of Nations to develop guidelines for balance of payments statistics. Economists and other specialists from many countries contributed to the *Manual*, and representatives of some 30 countries and international organizations met in Washington in September 1947 to finalize the draft of the *Manual*.

The balance of payments is a statistical statement that summarizes transactions between residents and non-residents during a period. It consists of the goods and services account, the primary income account, the secondary income account, the capital account, and the financial account. Under the double-entry accounting system that underlies the balance of payments, each transaction is recorded as

⁷² See <http://www.imf.org/external/pubs/ft/bop/2007/pdf/bpm6.pdf>.

consisting of two entries and the sum of the credit entries and the sum of the debit entries is the same.⁷³

The fifth edition of the *Balance of Payments Manual* (BPM5) has been used as reference by other classification organizations (for example by the OECD); in the meantime, however, BPM5 has been replaced by BPM6.

The sixth edition of the *Balance of Payments and International Investment Position Manual* serves as the standard framework for statistics on the transactions and positions between an economy and the rest of the world. BPM6 provides a framework that is applicable for a range of economies, from the smallest and least developed economies to the more advanced and complex economies. The *Manual* is harmonized with the *System of National Accounts 2008* (2008 SNA), which was updated in parallel.

1.7 SNA

The *System of National Accounts 1993* is an integrated system of accounts related to the economic activities and sectors of the economy of a country. To capture the transactions between that economy and all others, the 1993 SNA⁷⁴ provides an account called the “rest of the world”, also referred to as the “external transactions account”. Within this account is an “external account of goods and services”, in which trade in goods and trade in services is separately recorded. The broad objective of the System of National Accounts (SNA) is to provide a comprehensive conceptual and accounting framework for compiling and reporting macroeconomic statistics allowing to analyze and to evaluate the performance of an economy. The origins of the SNA trace back to the 1947 Report of the Sub-Committee on National Income Statistics of the League of Nations Committee of Statistical Experts under the leadership of Richard Stone.

The *System of National Accounts 2008* (2008 SNA)⁷⁵, as an integrated system of accounts related to the economic activities and sectors of the economy of a country, is the latest version of the international statistical standard for the national accounts, adopted by the United Nations Statistical Commission (UNSC). The 2008 SNA is an update of the *System of National Accounts, 1993* (1993 SNA). In 2003 the preparation of the update was entrusted to the Intersecretariat Working Group on National Accounts (ISWGNA) in order to address issues derived from

⁷³ For further details see below chapter II.3.4.

⁷⁴ See <http://unstats.un.org/unsd/nationalaccount/sna1993.asp>.

⁷⁵ See <http://unstats.un.org/unsd/nationalaccount/sna2008.asp>.

the changes in the economic environment, the advances in methodological research and the needs of users.

The 2008 SNA includes the following main accounts:

- the production account (components of gross output)
- the primary distribution of income account (incomes generated by production)
- the transfers (redistribution) account (including social spending)
- the household expenditure account
- the capital account
- the (domestic) financial transactions account
- the changes in asset values account
- the assets and liabilities account (balance sheet)
- the external transactions account

In addition to the accounts, various annexes, sub-accounts etc. are also provided for input-output tables showing the transactions between economic sectors.

1.8 ISIC

ISIC is the United Nations International Standard Industrial Classification of all Economic Activities.⁷⁶ This classification is the international standard for the classification of productive economic activities. The main purpose is to provide a standard set of economic activities so that entities can be classified according to the activity they carry out.

⁷⁶ International Standard Industrial Classification of All Economic Activities (ISIC), Rev. 4, Statistical Papers, Series M, No. 4, Rev.4 (United Nations publication, Sales No. E.08.XVII.25). ISIC Rev.4 has been officially released on August 11, 2008. See <http://unstats.un.org/unsd/cr/registry/isic-4.asp>.

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