



**WORLD TRADE
ORGANIZATION**

MEASURING TRADE IN SERVICES

A training module produced by WTO / OMC

**Update includes changes in the Manual on Statistics
of International Trade in Services 2010**

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Following a request of the World Bank, the first version of the training module "Measuring trade in services" was produced in 2003 by the Economic Research and Statistics Division of the World Trade Organization.

Following continuous developments in trade in services, balance of payments and foreign affiliates statistics, this document was revised on a regular basis. The 2010 edition takes into account the recent adoption of various statistical manuals, in particular the 2010 edition of the Manual on Statistics of International Trade in Services.

The WTO Secretariat is very grateful to the participating agencies of the Inter-agency Task Force on Statistics of International Trade in Services who provided material and comments during the preparatory phase of the training module.

For further information on this training module or on statistics of international trade in services, please contact Statistics@wto.org.

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INTRODUCTORY NOTE

Statisticians often use complex concepts and methodologies to produce reliable numbers. Translating them into simple and readily understandable information for non-specialists can be quite a challenge. The communication gap between producers and users of statistics is particularly wide in the area of trade in services. The entry into force of the WTO General Agreement on Trade in Services (GATS) in 1995 has not only inflated demand for enhanced statistics, but it has also highlighted that the scope of international supply of services is far wider than what statistics conventionally measure.

Statistics are best interpreted with a sound understanding of the methodologies underpinning their production. This text provides an accurate while simple overview on the statistical framework for measuring trade in services.

Primarily intended as reference material, part of a broader course for government officials and trade negotiators, it should also be of benefit to other users such as business analysts, students, etc. Statisticians new to the domain may also find it useful to understand the more complex and accurate reference documents on the methodology for measuring trade in services.

The text starts with a general overview and contains six major Sections that can be read independently from each other. Each Section is introduced by a short paragraph describing what the reader will learn from it. References to further sources of information conclude each Section.

Readers will gain knowledge of:

- * the economic importance of services and the concept of trade in services as illustrated in the GATS' four modes of supply (Section I);
- * the relevant statistical framework developed on the basis of two major statistical domains (Section II focuses on key concepts related to trade between residents and non-residents as defined in international guidelines, while Section III deals with statistics on operations of services foreign affiliates), its usefulness and current limitations;
- * the current state of play with regard to statistics useful in assessing the supply of services through the presence of natural persons (Section IV);
- * the different methods statisticians use to collect statistics on trade in services (Section V);
- * statistics currently available and where they can be found at the international level (Section VI); and
- * the recent developments and prospects in the domain of statistics on trade in services (Section VII).

Please note that the statistical rules, guidelines, concepts and definitions described are simplified and should not be used as reference standards. These are covered in the appropriate manuals on which this text is based, namely the *Manual on Statistics of International Trade in Services 2010* (MSITS 2010) and the IMF's 6th Edition of the *Balance of Payments and International Investment Position Manual* (BPM6). Precise references to these documents and other sources used in preparing this text can be found in the bibliography.

ACRONYMS AND ABBREVIATIONS

INTERNATIONAL AND REGIONAL ORGANIZATIONS

Eurostat	Statistical Office of the European Communities
ILO	International Labour Organization
IMF	International Monetary Fund
OECD	Organisation for Economic Co-operation and Development
UN	United Nations
UNCTAD	United Nations Conference on Trade and Development
UNSD	United Nations Statistics Division
UNWTO	World Tourism Organization
WTO	World Trade Organization

OTHER ACRONYMS AND ABBREVIATIONS

BD4	4 th edition of the OECD Benchmark Definition of Foreign Direct Investment
BOP	Balance of Payments
BPM6	6 th edition of the Balance of Payments Manual
CPC	Central Product Classification
EBOPS	Extended Balance of Payments Services Classification
EU	European Union
FATS	Foreign affiliates statistics
FDI	Foreign Direct Investment
GATS	General Agreement on Trade in Services
GDSD	General Data Dissemination System (IMF)
GDP	Gross Domestic Product
W/120	Services Sectoral Classification List
ICFA	ISIC Categories for Foreign Affiliates in services
ICSE	International Classification of Status in Employment
ISCO	International Standard Classification of Occupations
ISIC	International Standard Industrial Classification of all Economic Activities
ITRS	international transactions reporting system
LDCs	Least Developed Countries
MSITS	Manual on Statistics of International Trade in Services
n.a.	not available
n.i.e.	not included elsewhere
SDDS	Special Data Dissemination Standards (IMF)
2008 SNA	System of National Accounts, 2008
UCI	ultimate controlling institutional unit
US	United States of America
USD	United States Dollar

I. OVERVIEW

This overview gives readers an insight into how important services are and the various ways in which services may be delivered internationally. It provides a brief presentation of the Manual on Statistics of International Trade in Services 2010.

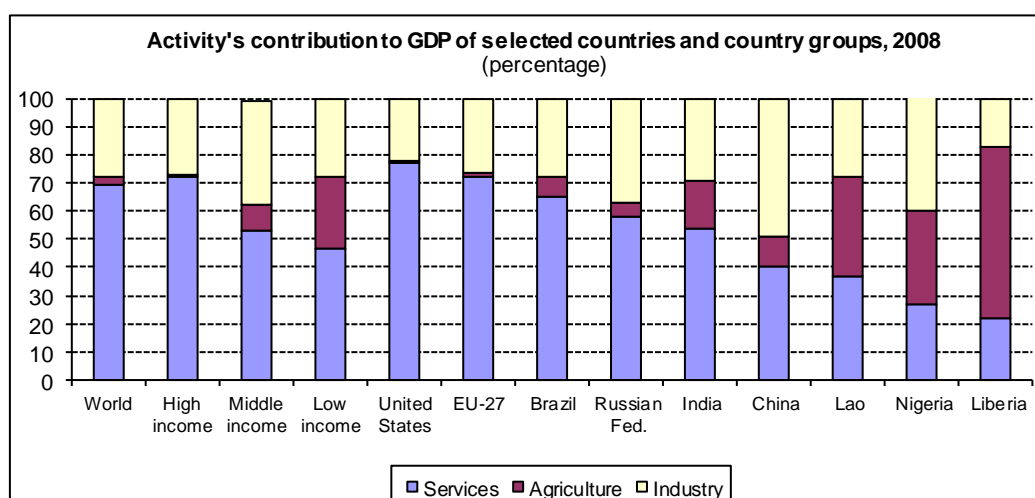
1. SERVICES AND TRADE IN SERVICES IN THE ECONOMY

a) Importance of services in the economy

The term *services* covers a wide range of intangible and heterogeneous products and activities that are difficult to encapsulate within a simple definition. Services are either the result of a production activity that changes the conditions of the consuming units (transformation services), or facilitate the exchange of products or financial assets (margin services). They can cover transport, telecommunication and computer services, construction, financial services, wholesale and retail distribution, hotel and catering, insurance, real estate, health and education, professional, marketing and other business support, government, community, audiovisual, recreational, and domestic services.

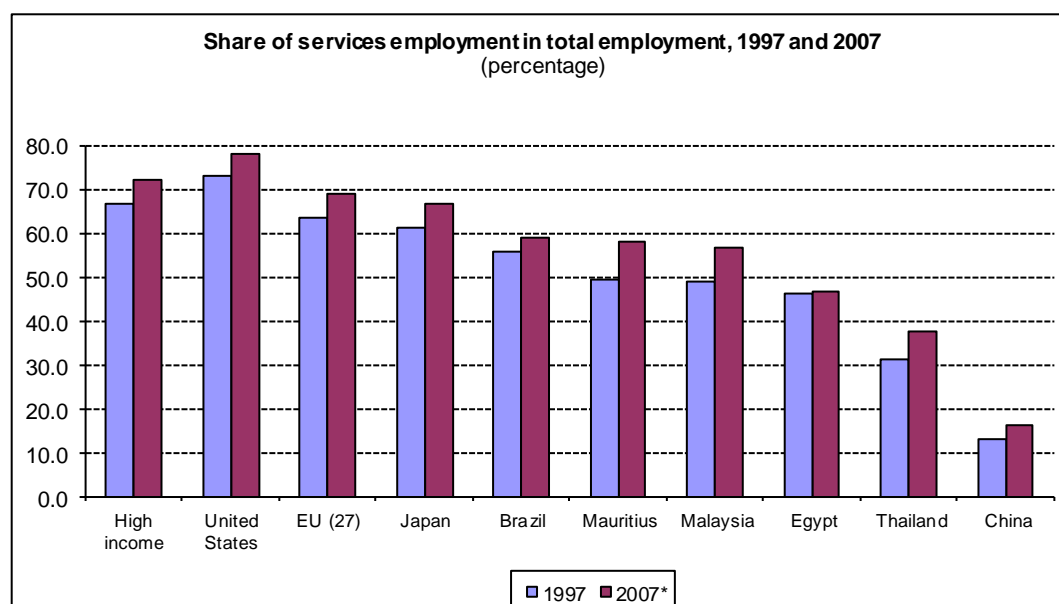
Services have a significant impact on growth and efficiency across a wide range of industries and overall economic performance. For instance, sectors such as transport, telecommunications and financial services are key determinants of the conditions in which persons, merchandise, services and capital flow. Another illustration of the services' major role is environmental services, which contribute to sustainable development by alleviating negative impacts of economic activities.

Services currently represent **more than two thirds of World Gross Domestic Product (GDP)**. The share of services value added in GDP tends to rise significantly with the countries' level of income, standing at 73% on average in high income countries (77% in the United States), against 54% and 47% respectively in middle- and low- income countries. Even in the latter group, the production of services is generally a **core economic activity**, whose contribution to GDP is above that of both industry and agriculture. Significant differences however exist between countries within the same income group, as for example for India and Nigeria – two middle income countries whose respective shares of services in GDP are 54% and 27%, or Kenya and Liberia – two low income countries whose shares are 54% and 22%.



Sources: World Bank, World Development Indicators (WDI) database online and Eurostat database (EU data) Theme 2 (Oct 2010) – note that “construction” is included in the industry sector.

The current importance of services' value added follows decades of sustained growth of contribution of the services sector to GDP, which is also mirrored in **employment statistics**. Looking at developments over the 1997-2007 period, a significant shift of employment from the agriculture and industry sectors to the services-producing sector can be observed. Services' contribution to total employment gained on average 5 percentage points in high income countries. Available information suggests that the increase was also sharp on average in most middle income countries. For instance Mauritius and Malaysia registered growths of about 8 percentage points, and for some of these middle income countries (e.g. Mongolia, Nicaragua, Turkey) the growth was over 10 percentage points. Employment data further confirm the importance of the services sector which is accounting for more than half of the employment in many countries (up to 78% in the United States).



* Except Brazil, 2006; Egypt, 2006; and China, 2002.

Sources: World Bank, World Development Indicators (WDI) database online and Eurostat New Cronos database (EU data) Theme 2 (Oct. 2010) – note that “construction” is included in the industry sector.

Box I.1 Measuring services production

(a) Statistics on domestic activity

National Accounts constitute the statistical framework out of which main macroeconomic aggregates are calculated (production, Gross Domestic Product, Gross National Income, consumption...). **Value added** broken down by industry permits the measurement of the contribution of the services sector and its sub-sectors to **GDP**.

Employment statistics provide the total number of people employed in various sectors of activity. They allow to identify the number of people employed in the services sector and their distribution among different sub-sectors (it should be noted that such statistics also form part of the central framework of National Accounts).

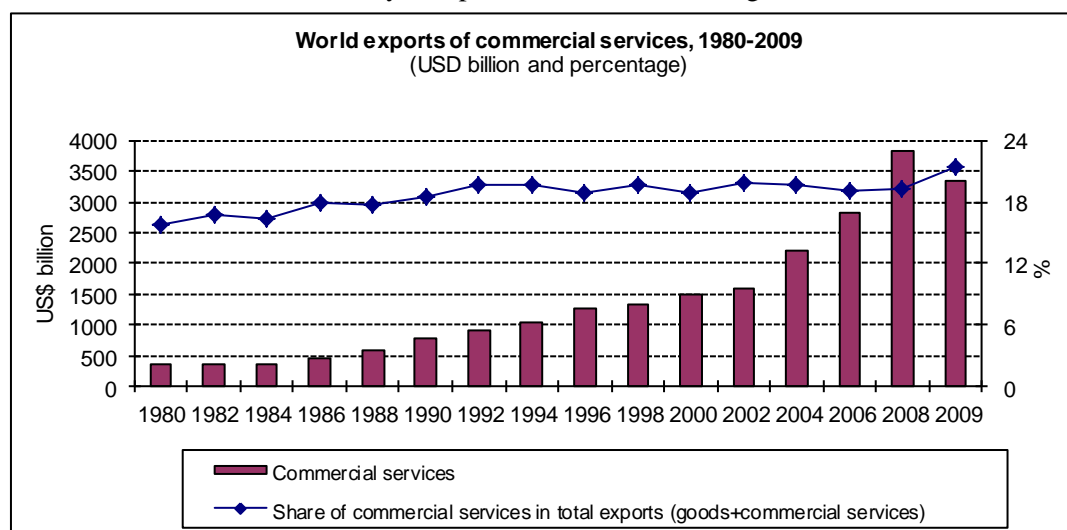
Other information such as **business statistics** (available from regional and international organizations) as well as data provided by business federations may also be useful for assessing the activity of specific services sectors.

(b) Quantitative indicators on specific sectors

Quantitative indicators on specific sectors (international number of students enrolled in basic education, arrivals of tourists, number of letters mailed, kilometres flown by planes, number of phone calls, etc.) also provide valuable information for assessing services production and performance, which enables more meaningful analysis of services sectors. However, quantitative indicators do not permit comparisons across sectors.

b) Trade in commercial services¹

World exports of commercial services amounted to US\$ 3,350 billion in 2009, after growing on average at around 7.9% per year in value terms since 1980. Trade in *commercial services* grew faster than trade in *goods* (6.6% on average) during this period, increasing its share in total world trade by 6 percentage points. In 2009, the share of *services* in world trade reached 21%, that is 2 percentage points up from the previous year, as the decline in global trade in services was considerably less pronounced than that of goods.

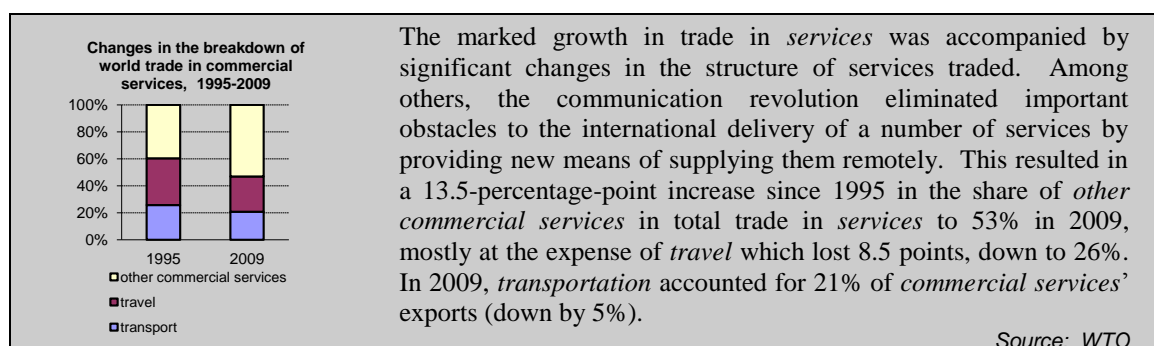


Source: WTO

The share of services in world trade contrasts with the central contribution of services production in domestic economies. Due to their **intangible nature**, trade in services is **inherently subject to more constraints** than trade in goods. While a (tangible) good may be produced, stored, moved and consumed at different places and times, the delivery of a (intangible) service is seldom dissociated from its production and its consumption, requiring the proximity of the supplier and the customer. For instance, hairdressers and their clients need to be physically close for a haircut.

The need for proximity for supplying many services has led producers to supply their products through a **commercial presence abroad**, i.e. the establishment of foreign affiliates. This form of international supply of services (which is not covered in the chart presented above) is considered at least as important in value terms as “conventional” international trade in services between residents and non-residents.

Box I.2: Patterns of trade in services’ expansion



The marked growth in trade in *services* was accompanied by significant changes in the structure of services traded. Among others, the communication revolution eliminated important obstacles to the international delivery of a number of services by providing new means of supplying them remotely. This resulted in a 13.5-percentage-point increase since 1995 in the share of *other commercial services* in total trade in *services* to 53% in 2009, mostly at the expense of *travel* which lost 8.5 points, down to 26%. In 2009, *transportation* accounted for 21% of *commercial services’* exports (down by 5%).

Source: WTO

¹ Commercial services do not include government services, n.i.e.

2. GATS AND MODES OF SUPPLY

One of the most important achievements of the Uruguay Round trade negotiations (1986-1993) is to have brought international trade in services under common multilateral rules. Entering into force on 1 January 1995, the WTO General Agreement on Trade in Services (GATS) is the first set of multilaterally negotiated and legally enforceable rules covering international trade in commercial services (i.e. excluding government services). As stressed in GATS, international trade in services can take place through **four modes of supply**:

- in Mode 1, *cross-border supply*, only the service crosses the border. The delivery of the service can take place, for example, through telecommunications (telephone, fax, television, Internet, etc.), or the sending of documents, disks, tapes, etc;
- Mode 2, *consumption abroad*, occurs when consumers consume services while outside their country. Visits to museums in a foreign country as well as medical treatment and language courses taken abroad are typical examples;
- in Mode 3, the service supplier establishes its *commercial presence* in another country through e.g. branches or subsidiaries. Examples are medical services provided by a foreign-owned hospital, and banking services supplied by a subsidiary of a foreign bank.
- Mode 4, *presence of natural persons*, occurs when an individual has moved temporarily into the territory of the consumer in the context of the service supply, whether self-employed or as an employee of a foreign supplier. For instance, architects moving abroad to supervise construction work are providing services under this mode of supply.

The pillars of GATS are a set of **general obligations**, applying to all WTO members and all services, such as the Most-Favoured-Nation treatment (MFN) ensuring non-discrimination between trading partners; countries' **schedules of specific commitments** resulting from negotiations for specific sectors and modes; and several sectoral **annexes** as well as an annex on the movement of natural persons.

3. THE MANUAL ON STATISTICS OF INTERNATIONAL TRADE IN SERVICES 2010

Following the entry into force of GATS, there has been an increasing demand for detailed, relevant and internationally comparable statistical information on the international supply of services. Trade negotiators require statistics, possibly by mode of supply, as a guide to negotiate specific commitments and to monitor their economic impact for each type of service. Among others, statistics are necessary to evaluate market access opportunities, compare liberalisation commitments, assess the extent of liberalisation reached in specific sectors/markets and provide statistical background for the settlement of disputes.

In 2002, the United Nations Statistical Commission adopted the first *Manual on Statistics of International Trade in Services* (MSITS). This manual was revised in 2010 (MSITS 2010). Building upon internationally agreed standards, it provides guidelines and recommendations on how to use and develop sources to measure the international supply of services. **Two building blocks** are identified:

- **balance of payments (BOP) statistics**, which conform to the 6th edition of the IMF *Balance of Payments Manual* (BPM6), summarise transactions of an economy with the rest of the world into the components of the *current account* and the *capital and financial account*. BOP statistics under BPM6 display data on **trade in services between residents and non-residents** (within the current account) into 12 items: *manufacturing services on physical inputs owned by others; maintenance and repair services n.i.e.; transport; travel; construction; insurance and pension services; financial services; charges for the use of intellectual property n.i.e.;*

telecommunications, computer, and information services; other business services; personal, cultural and recreational services; and government goods and services n.i.e. (see section II.3 for more information). MSITS 2010 proposes further breakdowns of these items to respond to needs for more detailed information. Furthermore, although BOP statistics do not allow a comprehensive measurement of services delivered through Mode 3, they support the measurement of supplementary indicators, for example, *Foreign Direct Investment (FDI)* statistics can be helpful concerning Mode 3.

- MSITS 2010 expands the statistical definition of international trade in services by recommending the measurement of services supplied by foreign affiliates, within the new framework of **Foreign Affiliates Statistics (FATS)**. This framework provides for the compilation of a number of indicators aimed at describing the operations of foreign affiliates (turnover/output, exports and imports, employment, number of enterprises, etc.) with a particular – but not exclusive – focus on services.

MSITS2010 also provides a statistical approach for measuring the value of the international supply of services by mode with a particular focus on the presence of natural persons. This simplified approach is based on the overall good correspondence between (i) FATS and Mode 3, and (ii) BOP services statistics and the three other modes of supply (as shown in Table I.1 and described further in Section II.5).

Once implemented these guidelines will provide statisticians, economists and trade negotiators with data that will enable more pertinent statistical and economic analyses.

Table I.1: Value of the international supply of services by mode: correspondence between modes of supply and statistical domains

Mode of supply	Relevant statistical domain simplified presentation	Inadequacies
<i>Mode 1:</i> Cross border supply	BOP: commercial services (excluding <i>travel, manufacturing services on physical inputs owned by others, maintenance and repair services, construction</i> and part of <i>transport</i>)	BOP does, at the time of writing, not allow a separation between modes of supply
<i>Mode 2:</i> Consumption abroad	BOP: <i>travel, manufacturing services on physical inputs owned by others, maintenance and repair services</i> and part of <i>transport</i>	<ul style="list-style-type: none"> • <i>Travel</i> also contains goods consumed by travellers and although an alternative breakdown by type of product is recommended, data generally available are not subdivided into the different categories of services consumed by travellers. • BOP does, at the time of writing, not allow a separation between modes of supply for the other listed BOP items when deemed necessary.
<i>Mode 3:</i> Commercial presence	FATS BOP: <i>construction</i>	<ul style="list-style-type: none"> • Incomplete coverage of FATS at the time of writing • Not distributed between <i>Modes 3</i> and <i>4</i>
<i>Mode 4:</i> Presence of natural persons	BOP: commercial service (excluding <i>travel</i>)	BOP does, at the time of writing, not allow a separation between modes of supply

For further information...

- * *statistics on services:*
 - employment and value added: the World Bank *World Development Indicators*, UNCTAD statistics (<http://data.worldbank.org/data-catalog> and <http://unctadstat.unctad.org/>)
 - trade: WTO *International Trade Statistics* (www.wto.org)
 - trade indicators: World Bank *World Trade Indicators*, WTO *Services Profiles and Trade Profiles*
- * *quantitative indicators on services:*
 - International Telecommunication Union (www.itu.int), Universal Postal Union (www.upu.int), World Tourism Organization (www.unwto.org) or other specialised organizations.
- * *GATS: The General Agreement on Trade in Services, WTO*

II. STATISTICS OF TRADE IN SERVICES BETWEEN RESIDENTS AND NON-RESIDENTS OF AN ECONOMY

This section describes how trade in services is measured within the balance of payments framework. It also introduces extensions made to this framework in terms of the breakdown of services into more detailed items. Finally, links of these statistics with GATS' modes of supply are highlighted.

1. INTRODUCTION

Balance of payments (BOP) statistics on service transactions between residents and non-residents provide a sound basis for the measurement of trade in services in the conventional sense. Recommendations made in the Manual on Statistics of International Trade in Services 2010 (MSITS 2010) for the development of such statistics are made with the underlying concern to build upon existing principles and classifications, without altering these.

Sub-section 2 provides an overview of the fundamental concepts of the 6th edition of the IMF *Balance of Payments Manual* (BPM6) that underpin the measurement of trade in services. While keeping full consistency with the BPM6 concepts and classification, MSITS 2010 provides a more detailed classification of trade in services statistics (the Extended Balance of Payments Services Classification 2010 – EBOPS 2010), which is presented in **Sub-section 3**. MSITS 2010 also makes recommendations for the production of a geographical breakdown of trade in services data (**Sub-section 4**) and proposes a simplified approach to allocate services transactions statistics to the four modes of supply (**Sub-section 5**).

2. PRINCIPLES OF RECORDING

The residence concept is essential for the measurement of services transactions between residents and non-residents. Other essential concepts relate to the valuation and the time of recording transactions. These main principles are in line with those of BPM6 and the System of National Accounts, 2008 (2008 SNA).

a) *Transactions and residence of transactors*

A country's BOP is a balanced statistical statement that summarises the economic **transactions** of its residents with the rest of the world. A transaction is an economic flow that involves change of ownership of goods and/or financial assets, the provision of services, or the provision of labour or capital. Services international transactions are in practice referred to as trade in services. These transactions are to be recorded **gross**, with each service item displaying a **credit** and a **debit** value, representing respectively exports and imports of that service.

The **residence** concept is not based on nationality or legal criteria but on a transactor's centre of predominant economic interest. Further, because territorial boundaries recognised for political purposes may not always be appropriate for economic purposes, the economic territory of a country or economy is used as the relevant geographical area to which the concept of residence is applied.

The **economic territory** consists of the geographic territory administered by a government. It also includes territorial enclaves such as embassies, consulates, and military bases located in foreign countries.

It is not always straightforward to determine precisely whether an institutional unit has a **centre of predominant economic interest** within a country, and thus is resident in this country. It is deemed that an enterprise has a centre of predominant economic interest in a country when it engages or intends to engage in economic activities on a significant scale, and

over a long time period, within its economic territory. A household has a centre of predominant economic interest where it maintains one or more dwellings within the country that members of the household use as their principal dwelling.²

A period of one year or more is suggested as a flexible guideline (the “one-year rule”) for determining residence (centre of predominant economic interest).

b) Other principles of recording

Market price (i.e. the price at which buyers and sellers trade the item in an open marketplace) should be used as the basis for **valuation** of international transactions in services. In certain circumstances, such as exchanges between affiliated enterprises, the pricing adopted for bookkeeping purposes (“transfer pricing”) may not always be based closely on market considerations. Because it may be very difficult to evaluate a market price for the recording of such transactions, BPM6 acknowledges that in most cases such an evaluation or imputation would not be applied. In practice, if certain transfer prices are so divorced from those of similar transactions that they significantly distort measurement, they should either be replaced by market price equivalents or be separately identified for analytical purposes.

The appropriate time to record transactions in services is the **time at which they are rendered** (that is, when they are delivered or received). This may differ from the time at which payment is made or received. Thus transactions should be recorded, whenever possible, on an accrual rather than a cash accounting basis.

Transactions may take place in a range of currencies, including the domestic currency of either the provider or the consumer of the service. To produce meaningful statistics, however, it is necessary for the compiler to convert all transaction values to a **common unit of account**. Most often, the common unit will be the national currency. However, in some cases such as a significant depreciation of the national currency or hyperinflation, it may analytically be more useful to express transactions in another, more stable currency. The most appropriate exchange rate to be used in converting transaction values from the currency of transaction to the currency of compilation is the market rate prevailing at the time the transaction takes place.

3. THE EXTENDED BALANCE OF PAYMENTS SERVICES CLASSIFICATION 2010

a) Main principles

EBOPS 2010 provides for the production of statistical information at a level of detail that, among others, meets needs for information in the framework of GATS. It builds upon the BPM6 classification of services. In BPM6, 12 main service categories are identified and broken down into a list of standard and supplementary components. EBOPS 2010 consists of a **further breakdown of these components** into more detailed sub-items. EBOPS 2010 also contains several supplementary items for the recording of useful additional information regarding services transactions in various sectors such as, travel/tourism or insurance services.

Like the BPM6 services classification, EBOPS 2010 is primarily a **product-based classification**. Items of these classifications may be described in terms of the Central Product Classification Version 2 (CPC Ver. 2), which is the standard international product classification.³ In order to facilitate the use of statistics based on EBOPS 2010 for GATS

² Civil servants and military personnel employed abroad in government enclaves, and their dependants, continue to have centres of predominant economic interest (i.e. they are residents) in their home countries.

³ However, correspondences cannot be established in the areas of *travel, construction, and government goods and services, n.i.e.*, which focus on the mode of consumption of goods and services or the status of the transactor, rather than on the type of product consumed.

purposes, MSITS 2010 provides, as on-line annexes, tables of correspondence between EBOPS 2010 and CPC Ver. 2 and W/120 (the list of service sectors which is generally used as a basis for GATS negotiations).

MSITS 2010 recognises that it will not be possible for all compilers to immediately develop statistics at the detailed component level specified in EBOPS 2010, and puts the highest priority on the development of statistics on international trade in services at the level described in BPM6. Where the breakdown of the main EBOPS 2010 components is developed, it should be carried out in stages. Compilers should commence with the disaggregation of services of major economic importance to their own economies and data on related supplementary items should also be produced if these are immediately available as a result of the data compilation process.

b) EBOPS 2010 components

EBOPS 2010, like BPM6, includes twelve main components which are listed below.⁴ The entire classification is provided in Annex II, and complete definitions of the components are given in MSITS 2010. "*" indicates items which were not classified as services in BPM5/MSITS 2002.

- **Manufacturing services on physical inputs owned by others** includes activities such as processing, assembly, labelling, packing, etc., undertaken by enterprises that do not own the goods (e.g. oil refining, assembly of clothing, cars, electronics). *
- **Maintenance and repair services not included elsewhere (n.i.e.)** includes those on transport equipment as well as other maintenance and repair of products, performed at the site of the repairer or elsewhere. *
- **Transport** covers all transport services performed by residents of one economy for those of another and that involve the carriage of passengers, the movement of goods (freight), rentals (charters) of carriers with crew, related supporting and auxiliary services. In addition, EBOPS 2010 distinguishes nine modes of transport – sea, air, space, rail, road, internal waterway, pipeline, electricity transmission and other supporting and auxiliary transportation services. Transport also covers post and courier services.
- **Travel** differs from most categories listed in that it is the consumer of these products that gives *travel* its distinctive characterisation. *Travel* does not refer to a particular product and covers expenses for goods and services (including accommodation, food, souvenirs, etc.) acquired by a person during his/her visit in a country other than his/her own. If the stay of persons is for more than one year, they are considered to be residents of the visited economy. This guideline does not apply to students studying abroad and patients receiving health care abroad, who remain residents of their economies of origin even if they stay longer than one year.
With respect to the purpose of the trip, travel is subdivided into *business travel*, and *personal travel*. The latter can be further divided into – *health-related* expenditure, *education-related* expenditure, and all *other* personal travel expenditure.⁵
- **Construction** covers work performed on construction projects and installation by employees of an enterprise in locations outside the territory of residence of an

⁴ The analysis presented in the rest of this document (except Annex I) refers to the services classification as defined in BPM5 and MSITS 2002, which did not cover the categories manufacturing services and repair and maintenance (previously in the goods account), and may also present a certain number of smaller differences such as reclassification or renaming of items.

⁵ An alternative disaggregation of travel by product is included in the BPM6 and EBOPS 2010 distinguishing between expenditure on *goods*, *local transport services*, *accommodation*, *food-serving services*, and all *other* travel expenditure (further broken down into *health services* and *education services*). It allows an improved allocation of expenditure on services to Mode 2.

enterprise. *Construction* is further disaggregated into *construction abroad* and *construction in the compiling economy*.

- **Insurance and pension services** covers the provision of various types of insurance and pension services. They are further subdivided into four components – *direct insurance, reinsurance, auxiliary insurance services* and *pension and standardized guarantee services*. Information on *gross premiums* and *gross claims*, which may be the basis for estimating the service charge, is included in the supplementary items.
- **Financial services** covers financial intermediation and auxiliary services, provided by banks, stock exchanges, factoring enterprises, credit card enterprises etc. It also covers *financial intermediation service charges indirectly measured (FISIM)*.
- **Charges for the use of intellectual property, n.i.e.** is divided into *franchises and trademarks licensing fees* and licenses referring to *the use of outcomes of research and development*, or for the reproduction/distribution of *computer software* or *audiovisual and related products*. Given the complexity of certain arrangements, some of the payments for the use of these rights (other than licenses to reproduce and/or distribute) may be included with the services item (or goods) to which they relate.
- **Telecommunications, computer and information services** are subdivided into *telecommunications services, computer services* (of which computer software), *news agency services* (provision of news, photographs, and feature articles to the media), and *other information services* (database services and web search portals).
- The coverage of **other business services** is identical to that of BPM6 but it provides much more detail. This category includes; *research and development services, professional and management consulting services (legal services; accounting, auditing; business and management consulting and public relations services; advertising);* and *technical, trade-related and other business services (architectural, engineering, waste treatment and de-pollution, agriculture, mining; operational leasing services; and trade-related services)*.
- **Personal, cultural, and recreational services** comprises *audiovisual and related services* and *other personal, cultural, and recreational services*. The first component covers *audiovisual services* (production of motion pictures, radio and television programs, and musical recordings) and *artistic related services*. *Other personal, cultural, and recreational services* includes services such as those associated with *education services, health services, heritage and recreational services, and other personal services*.
- **Government goods and services, n.i.e.** covers all government and international organizations' transactions not contained in other EBOPS 2010 items. It can be subdivided into services transacted by *embassies and consulates, by military units and agencies, and all other transactors*. Note that GATS does not cover services supplied in the exercise of governmental authority.

For various analytical purposes, compilers may wish to aggregate service and non-service transactions to provide information on areas of particular interest or concern to users, such as all transactions relating to health care, educational, environmental or audiovisual activities. As an example, MSITS 2010 provides a suggested list of complementary groupings, such as *audiovisual transactions, computer software transactions, call centre services* or *total services transactions between related enterprises*. Compilation of such groupings is recommended for their analytical usefulness.

4. STATISTICS BY TRADING PARTNER

There is a need for detailed geographical allocations of the statistics on the various types of services supplied and consumed by each economy according to the country of residence of trading partners. Such statistics give a firm basis for the multilateral and bilateral trade in services negotiations, and are important for a variety of analytical purposes. For instance, bilateral comparisons of a country's data with those of a trading partner, through the use of "mirror statistics", are an important tool for investigating and improving data quality.

One of the core recommendations of MSITS 2010 is that countries should compile statistics on international trade in services on the basis of **individual partner countries and economies**, at least at the level of services trade as a whole and the **12 main components** of the BPM6 classification of services, and as a longer term goal at the more detailed EBOPS 2010 level. It is suggested that countries start compiling these statistics at least for **their main partners**. It is also recommended that, to the extent possible, compilers use an identical geographical basis for all related sets of statistics (including FATS and FDI).

5. ALLOCATION OF BOP ITEMS TO MODES OF SUPPLY⁶

A country's exports of *computer services* may be well measured overall. However how much of these sales relate to cross-border supply (Mode 1, e.g. electronic transmission of a specific software developed in the country of the provider), and how much relate to the presence of natural persons (Mode 4, e.g. a programmer developing a specific application in the premises of the foreign customer)? MSITS 2010 acknowledges that compilers will not be able to allocate each EBOPS type of service by GATS modes of supply in the near future. As a first step, it proposes a **simplified approach**, operational in the current statistical context, for producing **approximations**. Based on the determination of the location of the supplier at the time of the service transaction, it is assumed that a given service category in the BOP accounts corresponds to only one or two **dominant** mode(s) of supply.

According to this methodology, the following EBOPS services, when exchanged between residents and non-residents, are deemed to be predominantly delivered through Mode 1 (cross-border supply): *transport* (except *supporting and auxiliary services* to carriers in foreign ports, which should be allocated to Mode 2), *insurance and pension services*, *financial services*, and *charges for the use of intellectual property n.i.e.* Services recorded under *manufacturing services on physical inputs owned by others*, *maintenance and repair services n.i.e.* and *travel* (i.e. excluding goods) should be allocated to Mode 2 (consumption abroad). The remaining commercial services may involve significant elements of two modes: *telecommunications*, *computer and information services*; *other business services*; and *personal, cultural, and recreational services* may be delivered through Mode 1 and Mode 4; *construction services* recorded in BOP may be provided through Mode 3 and Mode 4. **Further work is necessary** to determine an allocation of these statistics to modes of supply. Annex V shows the recommended simplified allocation of statistics which can serve as a first guidance to estimate the value of the supply of services broken down by mode. These rules should be regarded as a guide, but much will depend on the situation in compiling economies.

For further information...

- * *general*: MSITS 2010 Chapter III
- * *on BOP concepts and definitions*: BPM6, in particular Chapter X and www.imf.org/bop
- * *on the allocation of services items to modes of supply*: MSITS, Chapter V

⁶ Please note that Mode 3 (commercial presence) is primarily concerned with FATS output (or sales if output is not available or relevant). These statistics are presented in Section III. Mode 4 (presence of natural persons) is further described in Section IV.

III. FOREIGN AFFILIATES STATISTICS

This section sheds light on methodological aspects of foreign affiliates statistics: firms covered, economic variables pertinent to study foreign affiliates activities and classification of data (by partner economy and by activity and/or services product).

1. INTRODUCTION

The international delivery of a number of services requires close and continuous contact between producers and consumers, which can often only be achieved through locally established affiliates (i.e. GATS Mode 3, commercial presence). However, because foreign-controlled affiliates are resident entities in their host countries, their sales in these countries are not recorded in the balance of payments, which is only concerned with transactions between residents and non-residents (see section II).

To allow the measurement of this particularly important channel of supply⁷, MSITS therefore recommends the compilation of **Foreign Affiliates Statistics (FATS)**. It provides guidelines for the production of indicators on the operations of foreign-controlled enterprises, including domestic enterprises controlled by foreign investors (**inward FATS**), and affiliates abroad controlled by residents (**outward FATS**). Apart from providing indicators on Mode 3 supply of services, FATS provide general indicators that help understand the phenomenon of globalisation.

Sub-section 2 presents FATS' basic principles, that is, the population of affiliates for consideration in FATS and how their operations are recorded by the various economies involved in the control relationship. **Sub-section 3** presents the variables of most interest for economic and policy analysis, while **sub-section 4** describes how to break down the variables in order to draw a complete picture of foreign affiliates' activities. FATS and statistics on foreign direct investment (FDI) are complementary; **sub-section 5** highlight the links between these statistical domains and suggests how they can be analysed together.

2. PRINCIPLES OF RECORDING⁸

a) *Enterprises covered in FATS*

FATS refer to a set of indicators relating to the operations of affiliates controlled by a foreign investor. To reflect this notion of foreign control, the relevant population is defined for statistical purposes as that of affiliates in which a single investor⁹ owns more than **50 % of voting power**.¹⁰ "Control" being the key element of FATS relationships, it should be noted that FATS reflect all operations of the affiliates concerned rather than being prorated according to the controlling share of the foreign parent firms.

Although one of FATS' main purpose relate to the production of indicators on GATS Mode 3, these statistics **cover producers of goods and services** alike. Some enterprises produce both

⁷ Fragmentary available data suggest that the value of services supplied through foreign affiliates is higher than the value of services traded on a BOP basis (See Section I.1.b).

⁸ Principles for recording FATS are in line with international statistical standards, especially those governing the measurement of FDI within BPM6 and the OECD Benchmark Definition of FDI 4th edition. Further guidance on FATS is also provided in the OECD *Handbook on Economic Globalisation Indicators* which is also fully consistent with MSITS 2010 guidelines.

⁹ In this respect, an associated group of investors acting in concert is considered as a single investor.

¹⁰ In some rare cases, enterprises other than those majority-controlled by a foreign investor are recognised to be of interest, either in the context of the GATS or in studies of globalisation. See MSITS 2010 for more information.

goods and services, and it is only by the coverage of all producers that the activities of those producing services as a secondary activity will be reflected in the statistics. In addition, coverage of all producers allows for the activities of service producers to be seen in the context of statistics covering all enterprises.

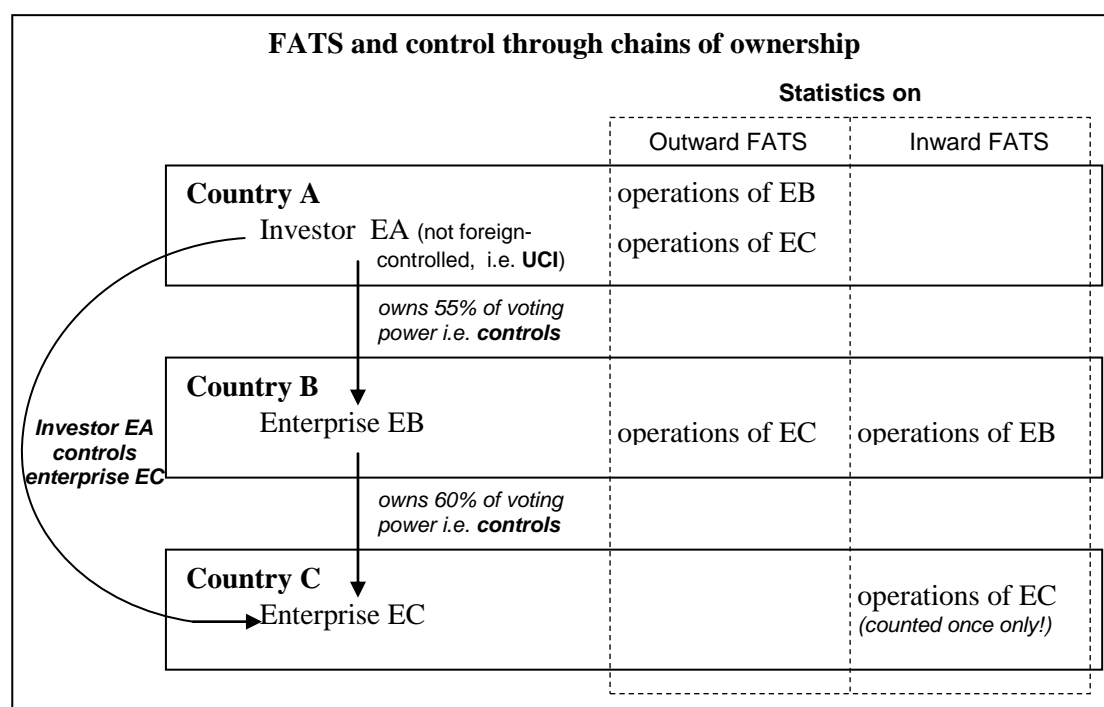
b) The notion of control and its implication on the recording of FATS

The chart below features two foreign-controlled enterprises whose operations are measured in FATS. Enterprise EB is directly controlled by an investor EA in country A, and controls directly an enterprise EC in country C. As a consequence EC is also indirectly controlled by EA.¹¹ EA is the **ultimate controlling institutional unit (UCI)**, controlling both enterprises EB and EC. The modalities of the control relationship ("who controls whom and in which way") determine how the operations of EB and EC will be measured in inward and outward FATS.

The example illustrates that EB, resident in country B, is foreign controlled: its operations are therefore included in country B's inward FATS. In country A, the country where the investor is resident, the operations of EB are described in outward FATS.

As enterprise EB controls EC, country B therefore includes the operations of enterprise EC in its outward FATS. Enterprise EB being itself controlled by EA, the operations of EC should also be described in country A's outward FATS. However this results in double counting (i.e. recording of operations of EC in outward FATS of both country A and country B), in particular when conducting comparisons at the international level. To facilitate analysis, MSITS 2010 therefore strongly encourages compilers to identify the share of (outward) FATS accounted for by resident enterprises which are UCIs.

Country C reports the operations of enterprise EC in its inwards FATS.



¹¹ Although arithmetically EA owns 33%, i.e. 55% times 60%, of the voting power, through the chain of control it is indirectly controlling EC.

3. ECONOMIC VARIABLES FOR FATS

A wide range of economic data or variables – operational or financial – regarding FATS may be pertinent for analytical and policy purposes. MSITS 2010 recommends that the FATS variables to be collected include at least the following basic measures of foreign affiliate activity: **sales** (turnover) and/or **output** (services output is used as the preferred measure of the international supply of services through Mode 3), **employment**, **value added**, **exports and imports of goods and services**, and **number of enterprises**. A description of these variables is given in Annex II.

Although these variables constitute a basic set that can provide answers to a variety of questions, additional measures of foreign affiliate activities may prove useful in addressing specific issues. MSITS 2010 suggests that the following **additional variables** be considered for collection in a second stage by economies able to compile them: **assets**, **compensation of employees**, **net worth**, **net operating surplus**, **gross fixed capital formation**, **taxes on income**, **research and development expenditures**, and **purchases of goods and services**. Most of both the “basic” and the “additional” variables are drawn from 2008 SNA.

4. ATTRIBUTION (CLASSIFICATION) OF FATS VARIABLES

FATS variables may be distributed following two main breakdowns: the **geographical breakdown** and the **primary industrial activity breakdown (or by product)**.

a) Geographical breakdown

As illustrated in the example of subsection 2.b, the geographical attribution of FATS can be particularly complex as it is often necessary to analyse chains of control. In breaking down variables by economy, the issues to be addressed depend on whether the statistics are on inward FATS or outward FATS.

MSITS 2010 recommends attributing **outward FATS** to the economy of the affiliate whose operations are described by the variables. For example, if a British company controls an affiliate in the United States through a holding company located in Bermuda, then in British outward FATS the affiliate should be attributed to the United States rather than to Bermuda.

MSITS 2010 recommends that **inward FATS** should be allocated primarily to the economy that ultimately controls - and that will be benefitting from controlling - the affiliate. The geographical breakdown should therefore be based primarily on the economy of the UCI of the affiliate. For example, if a Russian enterprise is indirectly controlled by a French enterprise through its controlled subsidiary in the Netherlands, then in inward FATS compiled by Russia, the data should be attributed to France. However, considering that information on immediate controllers (or “first foreign parents”) may be available as a by-product of FDI data, and to facilitate comparisons with these data, MSITS 2010 encourages economies to also compile some data classified to the country of the first foreign controller.

b) By activity (industry) and by service products

FATS variables should be broken down by **activity of the affiliates**. On this basis, all of the data for a given enterprise are classified to its primary activity, that is, the single activity for which its sales (or another key variable) are largest. MSITS 2010 provides an activity classification for FATS variables drawn from the International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC Rev.4). This classification, termed **ISIC Categories for Foreign Affiliates in services (ICFA Rev.1)** is shown in Annex IV. The categories provided in ICFA Rev.1 cover all economic activities with more detail for activities where the production/sales of services may be important.

When analysing FATS data broken down by activity, one needs to keep in mind that these statistics might give an approximation, but not a precise measure, of the activity itself. For example, the total output recorded in FATS under *legal activities* refers to the total output of law firms rather than the total supply of legal services. Some enterprises which are not classified as law firms also offer legal services as a secondary activity, however this production is not included in *legal activities*. Further, the output of *legal activities* might include some of law firms' output resulting from secondary activities, such as, for instance, providing financial advisory services.

The extent to which data on resident/non-resident trade classified by product can be aligned with data on FATS variables classified by activity is inherently limited. Nonetheless, a **correspondence between EBOPS 2010 and ICFA Rev.1** (provided on-line at unstats.un.org/unsd/tradeserv) may be useful for some purposes, especially in sectors where firms are specialised and do not tend to have significant secondary activities.

Although MSITS 2010 recommends as a first priority to breakdown FATS by activity, it encourages economies, as a longer term goal, to work towards breaking down a number of variables such as sales, output, and exports and imports, by type of services products.¹² Data on a product basis would allow the identification of specific types of services supplied through commercial presence. Product-based statistics are more likely to be free of problems of interpretation, are consistent with the basis on which GATS commitments are made and are consistent with data on trade in services between residents and non-residents. Any product detail for FATS that is available or can be developed should be broken down on a **basis compatible with EBOPS 2010**. If this level of specificity cannot be achieved, economies are encouraged to at least make the disaggregation in each industry as between total goods and total services, as a first step toward a product breakdown.

5. FATS AND FDI STATISTICS

There are important links between FATS and foreign direct investment (FDI). FDI is the category of international investment that reflects the objective of an investor to obtain a lasting interest in a foreign enterprise. For statistical purposes, FDI relationships are defined by the ownership of at least 10% of a foreign enterprise's voting power. Thus the universe of the FATS enterprises is a subset of the FDI universe. In addition, although not all FDI result in the establishment of a commercial presence as defined in GATS, it is nevertheless a precondition for it.

FDI statistics are concerned by international economic relations between direct investors and the enterprises which receive the investment (the direct investment enterprises). They measure financial transactions between them, and related income and investment position (stock).

Although FDI transactions and positions are not, strictly speaking, FATS variables, they should be considered an important adjunct. Countries that cannot implement the compilation of FATS immediately may find that FDI statistics (and more specifically FDI positions) can provide an indicator showing the interest of a country in using commercial presence to supply services internationally. In addition, FDI statistics can be used in conjunction with FATS to indicate the extent to which the operations of affiliates were financed with funds from direct investors, as well as the extent to which the income generated by affiliates accrues to direct investors.

In view of the strong link between FDI and FATS, MSITS 2010 recommends that FDI statistics be compiled as specified by BPM6 and the OECD Benchmark Definition of FDI, 4th Edition (BD4).

¹² Other variables such as value added and employment cannot be classified by product.

For further information

- * *General:*
 - MSITS 2010, Chapter IV;
 - OECD Handbook on Economic Globalisation Indicators, Chapter III;
 - Eurostat Foreign Affiliates Statistics (FATS) Recommendations Manual (2009);
- * *FDI and AMNEs definitions:* OECD Benchmark Definition of Foreign Direct Investment, 4th Edition and BPM6 (www.imf.org)

IV. THE PRESENCE OF NATURAL PERSONS

From this section, readers will gain knowledge of the major issues relating to the definition of Mode 4 supply of services (presence of natural persons) and how these relate to statistics. This section also sheds light on the extent to which existing statistical frameworks may be used to develop indicators on Mode 4.

1. INTRODUCTION

Progress has been made since the first version of MSITS was prepared, but in some instances it may be difficult to define the coverage of Mode 4 delivery of services (**Sub-section 2**). **Sub-section 3** examines statistical sources which could be used to help assess this mode of supply and also presents possible ways for improving its measurement.

2. THE PRESENCE OF NATURAL PERSONS IN GATS

GATS does not provide a precise definition of Mode 4 which could be immediately used for statistical purposes. Mode 4 is generally described in terms of purpose of stay and duration: the supplier gains temporary entry in the context of the supply of a service under GATS, whether he is directly involved in the production/delivery of the service or indirectly (e.g. working for a foreign affiliate, marketing, selling).

a) Natural persons covered by Mode 4

GATS qualifies Mode 4 trade in services as being “the supply of a service ... by a service supplier of one Member, through **presence** of natural persons of a Member in the territory of any other Member”. Mode 4 can in general be described as covering foreign natural persons entering the host economy to:

- (i) fulfil directly service contracts (contractual service suppliers): this covers **self-employed persons** (independent professionals) or **employees of a foreign service supplier**;¹³
- (ii) work in a foreign affiliate that delivers services (**intra-corporate transfer** or **directly recruited by the affiliate**); or
- (iii) negotiate a service contract (**services sellers**), negotiate the constitution/acquisition of an establishment supplying services (**persons responsible for setting up commercial presence**), market a service etc.

Mode 4 is therefore not limited to foreign persons directly involved in the rendering of services (which in general would be measured as trade in services in the balance of payments services account) but also concerns those whose presence abroad is instrumental to the provision of a service.

However it may be difficult to define the coverage with respect to the supply of services under Mode 4 as for instance:

- the difference between a service contract and an employment contract may be difficult to establish, in particular for independent service suppliers;
- it is not always easy to determine what constitutes a service: for example, fruit-pickers could be viewed as temporary agricultural labourers (outside the scope of Mode 4) or as suppliers of fruit-picking services; or

¹³ Some self-employed persons may also establish themselves in the host market and supply services from within this territory as per a Mode 3 commitment. It is considered in this case that the supply of the service is carried out through a commercial presence.

- although Mode 4 applies to service suppliers whatever their skills, at the time of writing many WTO members' commitments are generally focusing on highly-skilled workers.

b) “Temporary”: a key issue in the measurement of Mode 4

The GATS *Annex on Movement of Natural Persons Supplying Services Under the Agreement* (GATS Annex) specifies the **temporary** nature of the presence: measures regarding citizenship, migration, residence and employment on a permanent basis are excluded from the Agreement. In addition GATS does "not apply to measures affecting natural persons seeking access to the employment market of a Member". Under Mode 4, the natural person gains entry to perform a task with respect to the supply of a service; when the task has been performed, the natural person should leave the economy.

Although GATS does not define temporary presence in terms of a specific duration of stay, in practice this is done in Member's schedules of commitments. The maximum length of stay related to Mode 4 indicated in schedules varies between about three months for service sellers/persons responsible for setting up commercial presence, up to between two to five years for intra-corporate transferees.

Within international statistical standards (BPM6, 2008 SNA and UN *Recommendations on Statistics of International Migration, Revision 1*), the distinction between temporary and permanent presence is generally determined by a **one-year rule**, which distinguishes residents of an economy from non-residents. MSITS 2010 notes the divergence between the definition given to “temporary” by statistical standards and GATS and concludes that available statistical information on economic activities of residents (i.e. more than one year) may also contain elements related to the temporary presence in the GATS sense.

c) Mode 4 and relations to statistical classifications

MSITS 2010 stresses the relevance of a number of existing international classifications for GATS negotiations and for measuring Mode 4: **CPC Ver.2** (which is also relevant for other modes of supply); the ILO International Standard Classification of Occupations (**ISCO-08**) distinguishing between the different categories of employment; **ISIC Rev.4** which could be relevant in the context of lack of statistical information on the distribution of foreign employment according to occupation; the International Classification of Status in Employment (**ICSE**) relevant for instance to identify self-employed service suppliers which are often subject to GATS-specific commitments.

3. STATISTICS FOR MEASURING MODE 4

Various indicators are of interest for assessing Mode 4. Most of them relate to the different types of presence of natural persons identified in previous sections. These indicators concern the value of services traded or the number and types of persons moving across borders. Box IV.1 provides a picture of how different types of service supply through the presence of natural persons can be linked to existing statistical areas. As will be shown below, useful indicators to measure Mode 4 are often readily available, but for a much wider population. The **major difficulty** in the measurement of Mode 4 lies in the **identification of the subset** of services and workers that should be measured.

Box IV.1: Different types of Mode 4 presence, viewpoint of the recipient country

Categories	Statistical coverage: services value	Statistical coverage: number of natural persons
I. Service contracts, delivered in the host country by foreign supplier, or its employee(s) entering the host economy to supply a service	BOP service transactions between resident and non-residents, major BPM6 services components	Tourism and migration statistics (non-migrants) on <i>business travellers</i> ; adjustments for category of persons, duration (more than one year), type of service.
II. Employment contracts (non-permanent), for foreigners, in all domestic firms (not of interest for assessing Mode 4).	BOP: <i>compensation of employees and workers' remittances</i>; adjustments for sectoral breakdown and duration	Migration statistics for short- and long-term migrants; adjustments for category of persons, duration, sectoral breakdown
(a) of which in foreign-owned or controlled resident services companies (intra-corporate transferees and direct recruitments of foreigners by foreign affiliate)	irrelevant: services are supplied through Mode 3: commercial presence	A subset of the above; for instance could be derived using the FATS register; adjustments for duration, sectoral breakdown
III. Service selling (attempting to establish contractual relationships for a service contract) and setting up commercial presence	irrelevant: no service is traded at this stage	Tourism and migration statistics (non-migrants) on <i>business travellers</i> ; adjustments for category of persons, duration (more than one year), type of service.

a) Value of Mode 4 trade: included in BOP statistics on trade in services

Estimating the value of Mode 4 trade in services is only relevant for the category I identified in Box IV.1, i.e. self-employed service suppliers or employees of a foreign service supplier entering the host economy of the client to produce/provide directly a service. For intra-corporate transferees and foreign persons directly employed by the foreign affiliate (category II (a)), the supply of the service takes place through Mode 3 (the Mode 4 movement is instrumental to the supply of the service through commercial presence). There is no trade in economic terms (at least initially) for services sellers/persons responsible for the establishment of commercial presence (category III).

The value of Mode 4 trade in services is almost entirely captured (together with other modes) within the *services* components in BOP which covers transactions relating to international service contracts.¹⁴ The BOP main services items that are thought to include **significant elements** of Mode 4 are *telecommunications, computer and information services; other business services; personal, cultural and recreational services; and construction*. The allocation of BOP items to modes of supply (see Section II.5) will provide a satisfactory measurement of the value of Mode 4 trade in services, but is currently not a priority when compared to other possible improvements in the measurement of services trade.

BOP labour-related flows (i.e. *compensation of employees and workers' remittances*) provide interesting **information on the income flows originating from general (temporary or indefinite) movements** of persons or migration, of which labour mobility. However, unlike BOP services indicators, (i) labour-related flows do not measure trade flows (transactions) as specified in international service contracts between service suppliers and consumers (see above); and (ii) the universe of persons covered with respect to labour-related flows generally

¹⁴ These statistics will not cover self-employed service suppliers staying (or intending to stay) more than 12 months in the host economy, as they will in principle become residents of this economy and the transactions corresponding to the services contracts will no longer be international transactions. For those who establish themselves in the host market they can do so as per a Mode 3 commitment and it is considered in MSITS 2010 that the supply of the service is carried out through a commercial presence. However, compiling countries for which the category of self-employed persons established in an economy other than their own is believed an important share of the Mode 4 population, may wish to develop estimates of the value of services sales/output of these self-employed service suppliers.

largely differs from the universe of persons involved in Mode 4 service trade (i.e. most of the universe for the latter is not covered by BOP labour-related flows).

b) Number of persons moving in the context of Mode 4: Tourism and migration statistics

Tourism and migration/labour statistics partly respond to the needs identified for **measuring the number of persons moving under Mode 4**. Adjustments in related statistical concepts (e.g. duration of stay, categories of migrants and non-migrants) could be very helpful to respond to trade policy needs.¹⁵ Elements related to the presence of natural persons are identified in the *International Recommendations for Tourism Statistics 2008, Tourism Satellite Accounts: Recommended Methodological Framework 2008* and *Recommendations on Statistics of International Migration, Revision 1*, which provide definitions, for example, of persons travelling for business purposes.¹⁶ More specifically, these frameworks could be used as follows:

- within tourism and migration (non-migrants) statistics, separately identify business travellers/visitors travelling for business purposes, and further breakdown this information by category of persons, except for intra-corporate transferees and foreigners directly recruited by foreign affiliates which are generally not covered by these statistics; and
- In short- and long-term migrant categories, separately identify intra-corporate transferees and foreigners directly recruited by foreign affiliates. Indicators on Mode 4 movements related to Mode 3 trade could also be obtained from the FATS framework. A significant number of current commitments taken on Mode 4 concern directly intra-corporate transferees (their right to move facilitates the provision of services through Mode 3) and it could prove useful to identify separately foreign non-permanent employment in appropriate statistics.

For a more accurate measurement, extensions in terms of duration of stay should be envisaged. If possible information collected through these statistical frameworks should be broken down according to: the type of service supplied; the activity of the enterprise employing the person or the activity performed by the self-employed; the occupation/skills of the persons moving; the length of stay in the host economy; and the economy of origin/destination of trade and persons.

For further information...

- * *general*: MSITS 2010 Chapter V
- * *on existing labour and migration statistics and classifications*: ILO International Labour Migration Database, www.ilo.org

¹⁵ It is currently unlikely that trade policy needs be duly taken into account in migration statistics in the short-term.

¹⁶ In practice, the coverage of countries' migration statistics might differ to some extent from international recommendations, such as the use of longer periods (i.e. than the one year guideline) as the borderline between short-term and long-term migration.

V. DATA SOURCES, QUALITY AND DISSEMINATION PRACTICES

Throughout this section, readers will learn about main systems and sources used by statisticians to produce trade in services statistics. They will gain knowledge of comparability issues between countries' balance of payments statistics, and how data quality may be enhanced through effective co-operation. This section also introduces dissemination practices and metadata, which are a key element of data quality.

1. INTRODUCTION

BOP and FATS statistics may be collected using a wide range of sources. The ways the data are collected and compiled differ among BOP items or between inward and outward FATS, within and between countries. **Sub-section 2** below reviews the sources most commonly used for the collection of BOP services statistics and **Sub-section 3** describes the two major collection systems for FATS. Finally **Section 4** illustrates data quality issues through the example of statistical asymmetries, and explains the importance of implementing sound practices for the dissemination of statistical data and metadata.

2. MAIN DATA SOURCES FOR BOP STATISTICS

A number of sources exist for the collection of statistics on services transactions between residents and non-residents, of which two are generally used as a backbone of the BOP collection system: International Transactions Reporting System (ITRS) and enterprise surveys. Other existing sources are used to complement one (or a combination) of these two systems.

a) *International Transactions Reporting System*

An **ITRS** is a collection system in which **international payments channelled through domestic banks** are reported to the BOP compiler together with indications on the specific services for which the payments are made. Generally, domestic banks act as intermediaries in such a collection system, by reporting their customers' international settlements. This indirect reporting is often supplemented by a direct reporting of transactions settled outside the domestic banking system (e.g. via accounts held abroad by residents) or transactions for which only net payments are made, such as those taking place in clearing/netting schemes.¹⁷

An ITRS provides comprehensive and timely BOP statistics, involving a relatively small number of reporters. However, it somewhat deviates from the BPM6 recommendation that transactions should be measured when services are rendered rather than when payments are made (although both periods generally correspond in the case of services). It may also be difficult for the reporter to determine the exact type of service traded, which sometimes causes misclassification.

b) *Enterprise surveys*

Enterprise surveys may form the basis of the collection of service transactions between residents and non-residents. In such cases, statistics on international trade in services are often collected on the basis of a range of surveys addressed to representative samples of

¹⁷ In such systems, a clearing house enables participants to settle reciprocal claims/liabilities that arose during a specific period of time by making net payments in the end of the period (e.g. payments between air transport companies made through the International Air Transport Association (IATA)).

international transactors. Some surveys inquire on all the international transactions of the enterprises, and others address specific services items.

There is no theoretical limitation to the use of enterprise surveys in collecting statistics on international trade in services. The quality of statistics obtained from surveys depends on the appropriateness of the techniques used to design samples, to prepare questionnaires and to process the results, and also depends on the quality of the business register. The latter should be kept up to date and be sufficiently documented to enable an appropriate identification of each survey's target population.

c) Using ITRS or enterprise surveys?

Some countries, such as the United States or the United Kingdom, operate systems based only on enterprise surveys without making use of an ITRS at all. Some others such as Brazil use an ITRS as their main source of information. But in many cases, countries operate a **combination** of ITRS and enterprise surveys to collect BOP statistics. Such systems can take multiple forms, which **may range from a limited use of surveys complementing a system based primarily on ITRS, to the opposite**. For instance, the French BOP collection system currently makes an extensive use of an ITRS, but complements this information with a “direct reporting” of BOP by “big players”, that is, main enterprises involved in international transactions. India or the Russian Federation mainly focus on an ITRS, with a limited use of surveys. A different example is that of the Netherlands, where the BOP collection system was changed from an ITRS to a survey-based system. In the new system however, a remnant of ITRS based on a simplified bank reporting was maintained to permit the identification of enterprises carrying out international transactions.

While systems mainly based on ITRS are generally under the responsibility of the national central bank, those using surveys as a main source are often operated by national statistical institutes. Whichever organization is responsible, close co-operation between these two institutions is of particular relevance especially when both sources are to be combined.

d) Other sources of information

Other sources may complement the information collected from ITRS and/or enterprise surveys for a more accurate measurement of residents' international transactions. A typical area of services within BOP that uses supplementary sources is the *travel* item. Many countries retrieve additional information on (incoming and outgoing) visitors' expenditures from surveys conducted in the framework of migration and tourism statistics. Other sources, such as household expenditure surveys (e.g., to arrive at weights for consumer price indices) or information from credit card companies can also provide useful information on residents' expenditures abroad.

Other data on international trade in services may also be available from **official sources** (government and monetary authorities). In some countries, efficient co-operation with government units enables the BOP compiler to retrieve some statistics on a range of services transactions. Not only information on **governments' transactions** can be used as an input for the compilation of the item *government goods and services n.i.e.*, it may also be useful for other services-related activities, such as airport departure tax collected from non-residents (*travel*), landing and stevedoring charges collected by government authorities (*transportation*). Furthermore official sector institutions are often able to provide data as a **by-product of their various functions**. A typical area of interest for international trade in services is data that may be maintained by governments on education and health services provided to or by non-residents (*travel; personal, cultural and recreational services*).

Information obtained from **partner countries** is useful when data is not available within a country and also to validate and improve statistics of the compiling country. As discrepancies are identified and explained, compilers can improve the quality of their BOP statistics (see

Section V.4). Data from international organizations are useful for aid recipient countries to compile data on technical assistance services.

3. DATA COLLECTION SYSTEMS FOR FATS

a) *Key features for the collection of FATS*

The FATS universe refers to two populations that compilers may need to approach in different ways. Domestic affiliates of foreign enterprises are to be surveyed directly on their activity (**inward FATS**), whereas activities of foreign enterprises that are majority-owned by domestic firms are (indirectly) measured by addressing the resident parent enterprise (**outward FATS**).

Inward and outward FATS may be collected on the basis of, at various extents, several existing sources and statistics. In particular, there are likely to be links to existing data on FDI, especially for determining the FATS target population. The register used for collecting FDI data should enable the compiler to identify or approximate the portion of majority controlled affiliates of the FDI universe. It should also provide information useful for the geographical allocation of FATS (residence of foreign owners and foreign affiliates).

There are two basic approaches – not mutually exclusive – for developing FATS:

- The first is to design **surveys with the aim of collecting FATS** on operations of resident affiliates of foreign firms and of foreign affiliates of domestic firms. It may be considered to design **new surveys on FATS** or **add key FATS variables** to existing surveys on FDI. Making such a choice requires balancing costs and benefits of each approach (e.g. FATS surveys could avoid increasing the response burden on enterprises not concerned by foreign control and do not necessarily need to be conducted as frequently as FDI surveys). Whatever the approach chosen, surveys on FATS should strive to collect key FATS variables at the greatest possible detail of the ICFA Rev.1 classification, which may also raise concerns about resource availability and response burden.
- The second approach, that can be used only for inward FATS, **identifies the subset of existing statistics on resident enterprises referring to foreign controlled affiliates**. Most countries indeed conduct surveys of resident enterprises that comprise variables such as employment, turnover (may also be available broken down by product) or value added, on the basis of a detailed classification of activities. Among the data collected, FATS could be obtained as an aggregation of variables across the foreign-controlled population of resident enterprises.

One of the main challenges for this statistical domain stems from the fact that the collection and definition of these statistics may draw on expertise and responsibilities that are scattered among multiple institutions, such as central banks, national statistical offices and various ministries. As it is the case for BOP statistics, close co-operation among the different institutions involved is necessary for compiling FATS.

b) *Examples of country practices*

Various options can be combined for the compilation of inward and outward FATS. As an example, the United States and several EU countries that compile outward FATS collect both inward and outward FATS on the basis of **FDI surveys**. Belgium and United Kingdom use FDI surveys for outward FATS but compile inward FATS data on the basis of statistics collected on domestic enterprises. **Many countries compile only inward FATS**: when this is the case (e.g. Hong Kong, Spain) they tend to use **existing business statistics**. Sweden produces both inward and outward FATS statistics on the basis of a specific separate survey.

4. DATA QUALITY

While means of compiling BOP trade in services statistics or FATS are various, these strive to produce data complying with common concepts and definitions described in international guidelines (e.g. MSITS 2010 and BPM6). In this respect, each national system – made up of a unique combination of collection and compilation processes – bears its strengths and weaknesses. The quality of results obtained differs widely among countries, none providing a perfect picture of the reality. Data quality issues may be evidenced and addressed through the analysis of discrepancies between countries' statistics and mirror data from partner countries. As deviations from international standards can greatly affect the comparability of statistics and their interpretation, it is of utmost importance for countries to implement sound dissemination practices for their statistics and accompanying documentation.

a) *BOP asymmetries*

In theory when looking at bilateral statistics, imports reported by a country from a partner country should equal the corresponding reported exports of this partner ("mirror imports"). In practice, this is only exceptionally the case: the discrepancy observed between two countries' respective imports and exports are referred to as bilateral **asymmetries**. Asymmetries concern also trade flows between more than two countries, and are often monitored at the level of specific economic zones or at the global level (aggregate exports of all countries of the world should equal corresponding aggregate imports).

In its 2009 report, the IMF Committee on BOP presented the situation of global imbalances (world asymmetries) covering the period of 2002 to 2008. As regards *total services* (i.e. including government services), the report shows that credits (exports) have been higher than debits (imports) since 2002, the positive imbalance (asymmetry) being USD 209.2 billion in 2008 (2.8% of gross services flows, i.e. exports + imports). Between 1996 and 2002 the imbalance was negative. However, in the case of more disaggregated figures by services components and/or partners (the ones trade negotiators may be more interested in) much larger discrepancies can emerge (e.g in 2008 for other commercial services the discrepancy is USD 330 billion).

Many **factors** contribute to the occurrence of such asymmetries: misallocation, implementation of different thresholds for recording transactions, different times of recording, difficult geographical identification of the counterpart, etc.¹⁸

To **address problems of asymmetries**, a number of regional and bilateral initiatives seek to reconcile statistics. In the standard procedure (termed "bottom-up"), groups of two or more countries scrutinise the main asymmetries to find their origin and take appropriate actions. As an illustration, such an exercise is regularly being performed between Canada and the United States: for a number of BOP items, these countries substitute each other's bilateral flows (deemed to be more reliable) for the data originally compiled. Another approach is also tested at the level of the European Union (EU): this "top-down" method, called the BoP Global Method, consists of applying a mathematical model that distributes and eliminates intra-EU asymmetries on the basis of a probabilistic approach and using qualitative information.

b) *Data dissemination and metadata*

Transparency is one of the most important aspects of statistical quality: data need to be accessible, along with all the methodological information (called metadata) necessary for a proper analysis and interpretation. In general, as countries implement the new recommendations of MSITS 2010, it is expected that they **provide updated explanatory**

¹⁸ It is also to be mentioned that, although rare, under BPM5 recommendations some transactions are inherently asymmetric, such as *merchanted* services. This item is no longer included under services in BPM6.

notes along with published data. These notes should include information about data coverage and definitions, particularly where these deviate from MSITS 2010's recommendations. Metadata on how data are collected or estimated are equally important, in particular for the interpretation of FATS. For example, these statistics can be collected at the enterprise level or the level of individual business locations (establishments). Neither basis is unequivocally superior to the other, but they can produce different results in terms of the breakdown by activity.¹⁹ It is therefore particularly important that FATS metadata, among other, include information on the statistical unit used.

The IMF's Data Dissemination Initiative, composed of the Special Data Dissemination Standard (SDDS) and the General Data Dissemination System (GDDS), serves as a worldwide reference for the dissemination of statistics and metadata.

The **SDDS** is a monitored standard designed to guide countries that have or might seek access to international capital markets in the dissemination of economic and financial data. It sets standards concerning coverage, periodicity and timeliness of statistical data and informs the public on data accessibility, integrity and quality. The **GDDS**, less prescriptive, guides countries in the provision of comprehensive, timely, accessible and reliable data to the public.

All the metadata compiled by over 165 countries and economies participating in the SDDS and GDDS are **published in a standardised format on the IMF Dissemination Standards Bulletin Board (DSBB)**. BOP being among the statistical areas covered by SDDS and GDDS, users have access to a wide range of methodological information about statistics on trade in services between residents and non-residents.

For further information...

- * *on the compilation of BOP statistics:* IMF BOP Compilation Guide (<http://www.imf.org/external/pubs/cat/longres.cfm?sk=540.0>).
- * *on the compilation of FATS:*
 - MSITS 2010 section J of Chapter IV
 - OECD Handbook on Economic Globalisation Indicators, Chapter III;
 - Eurostat Recommendations Manual on the Production of Foreign Affiliates Statistics.
- * *on asymmetries:*
 - Asymmetries in EU Current Account data, Eurostat Working Papers and Studies;
 - Bilateral flows and asymmetries, OECD
- * *metadata on trade in services between residents and non-residents:* IMF DSBB (<http://dsbb.imf.org/>).

¹⁹ This can be illustrated by an enterprise having two establishments. One establishment offers financial services representing 60% of the enterprise's output, the remaining 40% being accounted for by information services produced by the other establishment. In establishment-level statistics, the output would be recorded in the two industries in the proportions indicated. In enterprise-level statistics, the entire output would be allocated to financial activities, which is the enterprise's primary activity.

VI. DATA AVAILABILITY AND DISSEMINATION BY INTERNATIONAL ORGANIZATIONS

International and regional organizations collect and disseminate trade in services and foreign affiliates statistics. In this section readers are given information on data availability and dissemination: the type of indicators and breakdown published, the number of countries reporting, and the mode of dissemination of data.

1. INTRODUCTION

An essential element of the quality of BOP and FATS is the **public access to the data**. International and regional organizations collect and disseminate trade in services statistics compiled by individual countries, which enables users to have an immediate access to a wide range of data and also allows the dissemination of statistics that are internationally comparable. Moreover, international and regional organizations encourage national compilers to produce statistics at the highest useful level of detail. The following Sections review the type of trade in services indicators and breakdowns disseminated. **Sub-section 2** focuses on the availability and international dissemination of BOP trade in services statistics **Sub-section 3** examines FATS and FDI data.

2. BOP TRADE IN SERVICES DATA AVAILABILITY AND DISSEMINATION

a) *BOP/EBOPS trade in services data*

BOP trade in services data collection is relatively well established and widespread according to the principles and framework of BPM5. Although the IMF has recently published a new BOP Manual (BPM6) which contains a revised services classification, available statistics are still based on the BPM5. Annex IV gives an overview of the number of countries that report components and supplementary items of BPM5, as of July 2010. Concerning the major aggregates, *transportation, travel* and *other commercial services*, data are available for most of the economies (around 170) reporting total commercial services (around 180).

On the basis of information included in Annex IV, table VI.1 below highlights progress made in the dissemination of some major balance of payments services components in 2010 compared to the exports information available in October 1997. For *total commercial services, transportation, travel* and *other commercial services* the number of countries for which exports data are available has increased by approximately 20-25%. However the increase is more significant for more detailed items. The number of countries reporting *communications services, construction* and *financial services* exports tripled compared to October 1997. For *computer and information services* and *personal, cultural and recreational services* the number of reporters in 2010 is much higher (increases of 600% and 420% respectively) compared to 1997 (from 16 to 112 for the former and from 20 to 104 for the latter). When looking at more detailed services items, for instance the breakdown of *miscellaneous business, professional and technical services*, the number of countries reporting this breakdown, although lower than those reporting BPM5 standard items, has also significantly increased, in particular given the low availability for these items in 1997.²⁰ Concerning services items according to the more detailed EBOPS, the number of countries able to provide trade in services data for part or all of this classification has also increased rapidly.

²⁰ BPM5 supplementary items are reported to IMF on a voluntary basis by countries. These items are present in the IMF BOP questionnaire mainly due to the fact that they are part of EBOPS.

Table VI.1: Increase of number of countries reporting exports of selected BOP services components between 1997 and 2010

	Growth (percent)
Total commercial services	25
Transportation	20
Travel	21
Other commercial services	20
Communications services	174
Construction services	233
Insurance services	66
Financial services	221
Computer and information services	600
Royalties and licence fees	143
Other business services	14
Miscellaneous business, professional and technical services	97
Legal, accounting, management, consulting, public relations serv.	508
Advertising, market research and public opinion polling services	393
Research and development services	370
Architectural, engineering and other technical services	409
Agricultural, mining and on-site processing services	517
Other services	146
Personal, cultural and recreational services	420

Sources: WTO (October 1997 and July 2010).

An increasing number of countries are also breaking down their BOP/EBOPS trade in services statistics by partner country (approximately 50 economies, mainly EU and/or OECD but also non-OECD economies such as Singapore, Hong Kong, China, the Russian Federation or Tunisia). The degree of partner detail varies widely across reporters, services sectors and years. For instance Israel compiles a partner breakdown by individual categories of business services and Argentina for a selection of services items. Other countries (Belarus, Bangladesh, Bhutan, Swaziland, Ukraine) disseminate time series on a limited partner breakdown by type of services. Some others report partner detail only for travel (Chile, Mexico, Morocco, Turkey), while other countries report very detailed partner information, such as EU member/candidate countries. China has recently started to collect data on total commercial services with its main partners. However, it is very difficult to assess the status quo of partner data collection as not all countries report their available partner detail to international organizations. This is particularly true for the item travel, where many countries may have the information but do not disseminate it.

Finally, a larger number of economies are now collecting quarterly/monthly data on trade in commercial services to monitor recent trade developments.

b) International dissemination of BOP statistics

As may be seen in Table VI.2 below, which summarises the dissemination of statistics by international organizations, **Eurostat, the OECD, the IMF, UNCTAD and the UN currently collect and disseminate BOP data by type of service** for their respective member countries (Eurostat is also responsible for information concerning EU candidate countries). Additional general BOP items are also collected and disseminated by these organizations. **WTO** also estimates and publishes world and regional totals for main commercial services items (e.g total, transport, financial, computer and information services).

With respect to **geographical breakdown**, Eurostat and the OECD collect and disseminate data broken down by partner country mainly for their members. The UN also publishes trade in services data, as part of its worldwide collection of data broken down geographically. These data sets make it possible to partially estimate non-reporting countries' exports and imports of services by partner on the basis of bilateral ("mirror") data.

Table VI.2 Summary of BOP trade in services data dissemination by international organizations

Publication	Country coverage	By type of service	By partner country
<i>IMF Balance of Payments Statistics Database</i> (book and CD-ROM) – also available from ITC's <i>Trade Map</i>	IMF members	BPM5 and EBOPS (provided to IMF on voluntary basis)	No
<i>Eurostat Database</i> (on-line and CD-ROM)	EU members, total EU, euro area, EU candidate countries	EBOPS	Yes, over 200 partners
<i>OECD Statistics on International Trade in Services Volume 1 Detailed Tables by Service Category and Volume 2 Detailed Tables by Partner Country</i> (book, on-line and CD-ROM)	OECD members; Hong Kong, China and Russian Federation	EBOPS (and additional detail)	Yes, over 200 partners
<i>UNCTAD Handbook of Statistics</i> (book, on-line and DVD-ROM)	Around 200 economies	BPM5main items	No
<i>UN ServiceTrade database</i> (on-line)	Around 200 economies	EBOPS	Yes, over 200 partners
<i>WTO's International Trade Statistics</i> (book, on-line and CD-ROM)	All economies, regions and world total	Summary data and analysis	Summary data and analysis

3. COMMERCIAL PRESENCE: INFORMATION AVAILABLE

Compared with trade in services in BOP, FATS are still at an early stage of development. Nevertheless, their collection and dissemination are taking an increasing importance **at Eurostat, OECD and UNCTAD**, fuelled by the growth in national activity in this area. When countries do not yet collect FATS, FDI statistics can provide a useful indication of commercial presence.²¹ The international and regional organizations are working together to co-ordinate data collection, to improve consistency of data, to avoid duplication of effort and to reduce reporting burdens on countries.

a) Availability and dissemination of FATS

Eurostat and OECD use FATS questionnaires inquiring their member countries both inward and outward FATS information, by activity (40-50 services categories of the ISIC Rev.3 classification) and by country of origin/destination of investment. Table VI.3, derived from OECD and Eurostat with additional information available to WTO, shows the relatively good coverage of inward FATS statistics compared to the outward situation which is due to the difficulty for national agencies to collect statistics on operations performed outside the country territory or jurisdiction.²²

Many countries cannot provide all requested data. The results of these surveys are published in *Measuring Globalisation: The Role of Multinationals in OECD Economies, Volume II: Services*. Eurostat has also several publications in the Statistics in Focus series, and publishes available FATS in its reference online database. These data are also collected and used by UNCTAD and WTO. UNCTAD also collects data on FDI (see below) and conducts a direct

²¹ See Section III.

²² It should be noted that FATS figures, at the detailed activity/geographical breakdown level, are not disseminated due to the requirement in most countries to protect the confidentiality of individual firms' data (e.g. when it only concerns a small number of firms or when a small number of firms account for a significant part (e.g. 75%) of the figure).

survey of multinationals. The UNCTAD publishes combined results including estimates in the *World Investment Report*.

Table VI.3: Availability of inward and outward FATS

	Inward			Outward		
	Number of employees	Turnover/output	Value added	Number of employees	Turnover/output	Value added
Australia	X		X	X	X	
Austria	X	X		X	X	
Belgium	X	X		X	X	
Bulgaria	X	X	X	X	X	
Canada				X	X	
China (total services)	X	X				
Cyprus		X	X	X	X	
Czech Republic	X	X	X	X	X	
Denmark	X	X	X			
Estonia	X	X	X			
Finland	X	X	X	X	X	
France	X	X	X	X	X	
Germany	X	X		X	X	
Greece	X	X		X	X	
Hong Kong, China	X	X	X			
Hungary	X	X	X	X	X	
India (IT and banking)	banking	banking		banking	X	X
Ireland	X	X	X			
Israel	X	X	X		X	
Italy	X	X	X	X	X	
Japan	X	X	X	X	X	X
Latvia	X	X	X	X	X	
Lithuania	X	X	X	X		
Luxembourg	X	X				
Malta				X	X	
Netherlands	X	X	X	X		
New Zealand	X	X				
Norway	X	X	X			
Poland	X	X				
Portugal	X	X	X	X	X	X
Romania	X	X	X			
Slovak Republic	X	X	X	X	X	
Slovenia	X	X	X			
Spain	X	X	X			
Sweden	X	X	X	X	X	
Switzerland	X			X		
Trinidad and Tobago		X				
United Kingdom	X	X	X			
United States	X	X	X	X	X	X

Source: OECD and Eurostat (2010) and national sources.

Note: IT: Computer and IT enabled services.

b) FDI statistics

The state of implementation regarding the collection of FDI statistics by activity of the ISIC Rev.3 and by origin and destination is well described in reports on the joint OECD/IMF Survey of Implementation of Methodological Standards for Direct Investment (SIMSDI). The report of the 2001 SIMSDI update showed a significant improvement of data availability for

the 61 countries²³ which participated in the update exercise. 53 collect data on inward flows with geographic breakdowns (43 countries for outward flows) and 49 collect inward flows with an activity breakdown (36 for outward flows). Corresponding figures for FDI income flows and FDI positions are lower. More than 90 percent of OECD countries were able to provide geographic disaggregations of FDI financial flows and disaggregations by economic activity were almost as commonly available. Around 80 per cent of non-OECD countries participating in the update exercise were also able to provide geographic and activity disaggregations.²⁴

The main collectors and disseminators of FDI data are Eurostat, the IMF, the OECD, and the UNCTAD. Eurostat and the OECD use a common questionnaire to collect FDI inward and outward stocks, flows and income data, broken down by industry and by country of origin or destination. The IMF collects FDI positions, flows and income according to the components set out in BPM5, but without any industry and partner country breakdowns. Data can be found in Eurostat's reference database, the OECD's *International Direct Investment Statistics*, the IMF's *Balance of Payments Statistics* and UNCTAD's *Foreign Direct Investment Database*.

In 2010 the IMF is conducting the 2009 Coordinated Direct Investment Survey (CDIS) in conjunction with its interagency partners. As of October 2009, 132 economies had indicated interest in the CDIS, including virtually every major FDI investing and FDI receiving economy. The purpose of the CDIS is to improve the quality of direct investment position statistics in the international investment position and by immediate counterpart economy. Specifically, the objectives of the CDIS are to collect comprehensive and harmonized data, with geographic detail of counterpart country, on direct investment positions, with equity reported separately from debt investment. The measurement date is end-2009. Data for both inward and outward direct investment positions are sought and first results are expected end 2010-early2011.

For further information...

- * *on publication of BOP based trade in services statistics:*
 - IMF Balance of Payments Statistics database
 - Eurostat database,
 - OECD Statistics on International Trade in Services, publication (2 volumes) and database
 - UN ServiceTrade database (unstats.un.org/unsd/ServiceTrade/default.aspx)
 - WTO's International Trade Statistics (www.wto.org/English/res_e/statis_e/statis_e.htm)
- * *on publication of FATS :*
 - Measuring Globalisation: The Role of Multinationals in OECD Economies, , Volume II: Services and database
 - Eurostat database
 - UNCTAD World Investment Report
 - WTO's International Trade Statistics
- * *on publication of FDI statistics:*
 - IMF Balance of Payments Statistics database
 - Eurostat database
 - OECD International Direct Investment Statistics
 - UNCTAD Foreign Direct Investment database

²³ 30 OECD members plus 31 of the 84 non-OECD countries participating in the 1997 SIMSDI.

²⁴ This exercise was conducted in 2003 but no comparative report was produced. In 2008 an update was conducted by OECD.

VII. CURRENT STATE AND PROSPECTS

This section shows how the promotion and assistance in the implementation of the Manual on Statistics of International Trade in Services recommendations takes place. It reviews the progress made in terms of quantity and quality of statistics on trade in services and on activities of foreign affiliates in the services sector. It also informs on improvements needed and future work.

1. INTRODUCTION

International and regional organizations have been very active in the area of trade in services statistics over the past years. The Interagency Task Force on Statistics of International Trade in Services²⁵ (Task Force) developed the MSITS, which was completed in 2002. Following revisions of international statistical frameworks such as the System of National Accounts and the Balance of Payments, MSITS has subsequently been revised to align the concepts.

The tasks of the Task Force are multiple and concentrate in the short term on the advocacy of MSITS 2010. In addition, the group will work on compilation guidance. Such compilation guidance shall help in the MSITS' approach of phased implementation (**Sub-section 2**). Some results achieved to date in the measurement of trade in services, as well as ongoing work are reviewed in **Sub-section 3**. To conclude, **Sub-section 4** examines areas where improvements are necessary and medium-term plans of the Task Force.

2. THE PHASED APPROACH OF MSITS TO IMPLEMENTATION

MSITS 2010 proposes a phased approach to the implementation of its recommendations so that countries, including those that are starting to develop statistics on international trade in services, can gradually structure the available information in line with this new international standard framework. This **phased approach is reflected in a set of core recommendations and other recommended elements**. While their sequence takes into account the relative ease that many compilers may find in their implementation, the order is quite flexible, so that countries can meet the priority needs of their own institutions.

The implementation of the **core elements** would provide a basis for internationally comparable basic data sets. These core elements are:

- the implementation of BPM6 recommendations on service transactions between residents and non-residents;
- the compilation of BOP data according to items in the EBOPS 2010 classification (beginning with items of major economic importance to the country); partner country detail, first at the level of total services trade and then for each main type of service in BPM6 and EBOPS2010;
- the collection of FDI statistics by activities of ISIC Rev.4; including partner country detail (for the aggregate and major activity); and
- the compilation of basic FATS variables, broken down by activity according to ICFA Rev. 1, including partner country detail (for the aggregate and major activity).

²⁵ The seven International Organizations are the Organisation for Economic Co-operation and Development (OECD), the Statistical Office of the European Communities (Eurostat), the International Monetary Fund (IMF), the United Nations Statistical Division (UNSD), the United Nations Conference on Trade and Development (UNCTAD), the United Nations World Tourism Organization (UNWTO), and the World Trade Organization (WTO). The Task Force also benefits from expertise in national organizations, particularly the US Bureau of Economic Analysis, the Deutsche Bundesbank, Bank of Japan, Banco Central do Brasil and Central Bank of Italy.

The implementation of **other elements – generally seen as a long-term goal** – would represent a considerable increase in the detail of information available on trade in services.

These elements relate to:

- the full implementation of EBOPS 2010, to the extent relevant to the compiling economy;
- the additional details in FATS;
- trade between related and unrelated parties;
- the allocation of transactions between residents and non-residents over GATS modes of supply; and
- develop additional statistics on the presence of natural persons.

3. RECENT PROGRESS AND SHORT-TERM PLANS

The **quality and quantity of statistics on international trade in services dramatically improved** over the past years. Before 1995, with the exception of *travel* and *transport*, services in BOP statistics were all lumped together in one category named "other goods, services, and income". The detail provided has progressively improved. Thanks to the detail required in BPM5, there is now a multi-country data set on statistics for major services categories. For example, for most of the major BPM5 service components, **the number of reporting countries has more than doubled since 1997** and more than tripled in some instances. The number of countries reporting **BPM5 supplementary items has also significantly increased** between 1997 and 2010, that is, an increasing number of countries are now able to provide trade in services data according to part or all of the **EBOPS classification** (up to 70-80 countries for a number of items), and provide statistics broken down by **partner countries**.

Up to recently, **the United States was the only country compiling FATS**. It was therefore not possible to determine the magnitude of the third GATS¹ mode of supply: commercial presence. On a wider context, using new FATS from the OECD together with BOP statistics, it has been estimated that trade through commercial presence surpasses the three other modes of supply together.²⁶ Despite its limitations, such an estimate shows the importance of FATS, which had been neglected for so long in the economic/statistics literature. The importance of FATS is now well recognised, and data collection has started in many OECD and non-OECD countries (see Section VI.3). However progress still remains to be done, in particular to fully respond to GATS information needs as set out in MSITS 2010.

As shown in Section IV.3 over the past years there has been a significant increase in the number of countries compiling FDI data with geographic and activity breakdowns. In addition progress in terms of direct investment position data availability and quality is expected in 2011 following the IMF and its partner agencies' coordinated direct investment survey initiative.

Eurostat has issued two regulations, which require from EU member states a more detailed reporting of trade in services, using MSITS as the benchmark. One of these regulations which was adopted in June 2004 by the European Parliament and the Council of Community Statistics covers **BOP statistics** - trade in services and FDI, which embodies the EBOPS classification. EBOPS has thus become binding for EU member states. The other regulation, covering the compilation of **FATS**, was issued in June 2007, also making this compilation mandatory. A "Recommendations manual on the production of foreign affiliates statistics

²⁶ See Section I.1.b.

(FATS)" was recently issued by the Eurostat "Joint Working Group on Foreign Affiliates Statistics".

The IMF, OECD and UNSD collect data according to EBOPS including memorandum items (on a voluntary basis for the IMF. **The OECD** is progressively expanding its collection of BOP trade in services by partner country as well as of FATS as recommended in MSITS. The latter is part of a wider OECD work on developing indicators of economic globalisation. **The United Nations Statistics Division** is disseminating BOP trade in services data by partner, in particular for non-OECD/EU countries. This is believed to be an incentive for countries to make this information available. Such statistics are also believed to help compilers assess the quality of their statistics.

Eurostat and OECD are working together to **monitor the implementation of MSITS and data quality**. The joint Methodological Soundness Questionnaire on Measurement of Trade in Services in the Balance of Payments, issued in 2003, provides useful information for around 30 countries. The results of the questionnaire were published in 2006. The Task Force is also at the time of writing developing a process to improve data quality.

International agencies have organised/participated in a number of **regional/country workshops** in order to present and discuss the concepts and methodologies of MSITS (e.g. South-Eastern European countries, UN ESCWA, UN ECLAC, CIS, APEC, South-East Asia, World Bank workshop for emerging and middle income economies). Moreover **joint projects** (e.g. Caribbean Community/USAID or Andean Community/EU) have been established, which cover the improvement and introduction of common guidelines for the compilation of trade in services statistics.

4. PROSPECTS FOR TRADE IN SERVICES STATISTICS

a) Areas where improvements are needed

Statistics on international trade in services still need important improvements. Although a majority of countries report the main BPM5 services breakdown, only 25-40% of countries report the full BPM5 requested detail (see Annex IV) and the reported data often lack reliability. In addition, documentation on data coverage and deviations from standards is often insufficient. Although the dissemination of BOP services data by partner is increasing this is still mainly limited to developed economies.

Due to the infancy stage of FATS, the lack of data reliability and inter-country comparability is almost a general rule. According to available information outside the EU/OECD area, only a handful of countries have started collecting FATS. In the FATS context, confidentiality issues severely limit the amount of detail countries are able to provide. At present, there is little incentive for non-OECD countries to collect FATS, since no international organization collects and disseminates such data. This adds to the inherent difficulties and cost to engage in such an exercise.

The 2008 SNA, the Balance of Payments 6th edition (BPM6), ISIC Rev.4 and CPC Version 2, now set out the fundamental frameworks that serve as a base for reliable and comparable services statistics (including trade). As a consequence, recommendations with respect to services (definitions, classifications) have been clarified and MSITS 2010 has been adopted. In addition to the revisions of the international statistical guidelines listed above and new recommendations with respect to FATS, MSITS 2010 also includes a new chapter which deals with the measurement of the supply of services by modes of supply. Now that these frameworks have been adopted, it is expected that countries begin compiling data according to new standards in the near future. However some areas, such as manufacturing services, intellectual property products, financial services or research and development, still require a

number of clarifications for an appropriate and comparable compilation. For FATS compilation should be further developed to better respond to information needs as set out in MSITS 2010. Finally, compilation of data by modes of supply needs to be developed.

b) Future work

In the framework of the phased approach adopted for the implementation of MSITS, the Interagency Task Force on Statistics of International Trade in Services identified the need to further develop technical assistance to build statistical capacities on measuring trade in services. Work on **compilation guidance** is under way.

The on-going work of the Task Force will provide helpful tools for improving statistics on trade in services. This is however a long term process and the success of this challenge depends on a number of factors:

- efforts by national agencies to employ the appropriate methodologies;
- governments' willingness to allocate the necessary resources;
- co-operation and co-ordination between national institutions, such as Central Banks, National Statistical Offices and Ministries of Trade;
- co-operation between international and regional institutions, and their support to national initiatives;
- effective technical assistance, i.e. transfer of knowledge and resources from countries having advanced statistical systems to the other countries, especially developing and least developed ones; and
- ability of international and regional institutions to provide effective compilation guidance.

For further information...

* *on trade in services development work, etc .:*

unstats.un.org/unsd/tradeserv

www.oecd.org/std/trade-services

* *on the MSITS revision process:* unstats.un.org/unsd/tradeserv/TFSITS/msits.htm

ANNEX I – EXTENDED BALANCE OF PAYMENTS SERVICES CLASSIFICATION 2010

This table sets out the components of the EBOPS 2010 Classification and relates these to the components of the BPM6. For each component:

an X in the first column indicates that the component is a BPM6 standard component

an X in the second column indicates that the component is a BPM6 supplementary item

the three digit number in the fifth column identifies the internationally accepted code for reporting balance of payments components. However at the time of writing the code was not available, but will be included as soon as it becomes available.

Annex I (cont'd): Extended Balance of Payments Services Classification

	BPM6 standard components	BPM6 supplementary items	Internationally accepted codes
Component			
1 Manufacturing services on physical inputs owned by others	X		
1.1 Goods for processing abroad – Goods returned (CR.), Goods received (DB.)		X	
1.2 Goods for processing in reporting economy – Goods sent (CR.), Goods returned (DB.)		X	
2 Maintenance and repair services n.i.e.	X		
3 Transport	X		
Alternative 1: Mode of transport			
3.1 Sea transport	X		
3.1.1 Passenger	X		
<i>Of which: 3.1.1.a Payable by border, seasonal, and other short-term workers</i>		X	
3.1.2 Freight	X		
3.1.3 Other	X		
3.2 Air transport	X		
3.2.1 Passenger	X		
<i>Of which: 3.2.1.a Payable by border, seasonal, and other short-term workers</i>		X	
3.2.2 Freight	X		
3.2.3 Other	X		
3.3 Other modes of transport	X		
3.3.1 Passenger	X		
<i>Of which: 3.2.1.a Payable by border, seasonal, and other short-term workers</i>		X	
3.3.2 Freight	X		
3.3.3 Other	X		
3.4 Postal and courier services	X		
Extended classification of other modes of transport			
3.5 Space transport			
3.6 Rail transport			
3.6.1 Passenger			
3.6.2 Freight			
3.6.3 Other			
3.7 Road transport			
3.7.1 Passenger			
3.7.2 Freight			
3.7.3 Other			
3.8 Inland waterway transport			
3.8.1 Passenger			
3.8.2 Freight			
3.8.3 Other			
3.9 Pipeline transport and electricity transmission			
3.10 Electricity transmission			
3.11 Other supporting and auxiliary transport services			
For all modes of transport			
Alternative 2: What is carried			
3a.1 Passenger	X		
<i>Of which: 3a.1.1 Payable by border, seasonal, and other short-term workers</i>		X	
3a.2 Freight	X		
3a.3 Other	X		
3a.3.1 Postal and courier services			
3a.3.2 Other			

	BPM6 standard components	BPM6 supplementary items	Internationally accepted codes
4	Travel	X	
	4.1 Business	X	
	4.1.1 Acquisition of goods and services by border, seasonal, and other short-term workers		X
	4.1.2 Other		X
	4.2 Personal	X	
	4.2.1 Health-related		X
	4.2.2 Education-related		X
	4.2.3 Other		X
	Alternative presentation for Travel (for both business and personal travel)		
	4.a.1 Goods		X
	4.a.2 Local transport services		X
	4.a.3 Accommodation services		X
	4.a.4 Food-serving services		X
	4.a.5 Other services		X
	<i>Of which:</i>		X
	<i>4a.5.1 Health services</i>		X
	<i>4a.5.2 Education services</i>		X
5	Construction	X	
	5.1. Construction abroad		X
	5.2 Construction in the reporting economy		X
6	Insurance and pension services	X	
	6.1 Direct insurance		X
	6.1.1 Life insurance		
	<i>6.1.1 a Gross life insurance premiums receivable (CR. and DB.)</i>		
	<i>6.1.1 b Gross life insurance claims payable (CR. and DB.)</i>		
	6.1.2 Freight insurance		
	<i>6.1.2 a Gross freight insurance premiums receivable (CR. and DB.)</i>		
	<i>6.1.2b Gross freight insurance claims payable (CR. and DB.)</i>		
	6.1.3 Other direct insurance		
	<i>6.1.3 a Gross other direct insurance premiums receivable (CR and DB)</i>		
	<i>6.1.3 b Gross other direct insurance claims payable (CR and DB) (see paragraph 3.188)</i>		
	6.2 Reinsurance		X
	6.3 Auxiliary insurance services		X
	6.4 Pension and standardized guarantee services		X
	6.4.1 Pension services		
	6.4.2 Standardized guarantee services		
7	Financial services	X	
	7.1 Explicitly charged and other financial services		X
	7.2 Financial intermediation services indirectly measured (FISIM)		X
8	Charges for the use of intellectual property n.i.e.	X	
	8.1 Franchises and trademarks licensing fees		
	8.2 Licenses for the use of outcomes of research and development		
	8.3 Licenses to reproduce and/or distribute computer software		
	8.4 Licenses to reproduce and/or distribute audiovisual and related products		

	BPM6 standard components	BPM6 supplementary items	Internationally accepted codes
8.4.1 Licenses to reproduce and or distribute audiovisual products			
8.4.2 Licenses to reproduce and/or distribute other products			
9 Telecommunications, computer, and information services	X		
9.1 Telecommunications services		X	
9.2 Computer services		X	
9.2.1 Computer software <i>of which: 9.2.1.a Software originals</i>			
9.2.2 Other computer services			
9.3 Information services		X	
9.3.1 News agency services			
9.3.2 Other information services			
10 Other Business services	X		
10.1 Research and development services	X		
10.1.1 Work undertaken on a systematic basis to increase the stock of knowledge			
10.1.1.1 Provision of customised and non customised R&D services			
10.1.1.2 Sale of proprietary rights arising from R&D			
10.1.1.2.1 Patents			
10.1.1.2.2 Copyrights arising from R&D			
10.1.1.2.3 Industrial processes and designs			
10.1.1.2.4 Other			
10.1.2 Other			
10.2 Professional and management consulting services	X		
10.2.1 Legal, accounting, management consulting, and public relations			
10.2.1.1 Legal services			
10.2.1.2 Accounting, auditing, bookkeeping, and tax consulting services			
10.2.1.3 Business and management consulting and public relations services			
10.2.2 Advertising, market research, and public opinion polling <i>of which: 10.2.2.1 Convention, trade-fair and exhibition organisation services</i>			
10.3 Technical, trade-related and other business services	X		
10.3.1 Architectural, engineering, scientific and other technical services			
10.3.1.1 Architectural services			
10.3.1.2 Engineering services			
10.3.1.1 Scientific and other technical services			
10.3.2 Waste treatment and de-pollution, agricultural and mining services			
10.3.2.1 Waste treatment and de-pollution			
10.3.2.2 Services incidental to agriculture, forestry and fishing			
10.3.2.1 Services incidental to mining, and oil and gas extraction			
10.3.3 Operating leasing services			
10.3.4 Trade-related services			
10.3.5 Other business services n.i.e. <i>of which: 10.3.5.1 Employment services i.e. search, placement and supply services of personnel</i>			

	BPM6 standard components	BPM6 supplementary items	Internationally accepted codes
11 Personal, cultural, and recreational services	X		
11.1 Audiovisual and related services	X		
11.1.1 Audiovisual services			
<i>of which: 11.1.1.a Audiovisual originals</i>			
11.1.2 Artistic related services			
11.2 Other personal, cultural, and recreational services	X		
11.2.1 Health services			
11.2.2 Education services			
11.2.3 Heritage and recreational services			
11.2.4 Other personal services			
12 Government goods and services n.i.e.	X		
12.1.1 Embassies and consulates			
12.1.2 Military units and agencies			
12.1.3 Other government goods and services n.i.e.			
4.0 <i>Tourism-related services in travel and passenger transport</i>		X	

EBOPS 2010 Complementary groupings

- C.1. Audiovisual transactions
 - of which: C. 1.1 Licenses to use audiovisual products
- C.2. Cultural transactions
- C.3. Computer software transactions
 - of which: C.3.1 Licenses to use computer software products
- C.4. Call-centre services
- C.5. Total services transactions between related enterprises
- C.6. Total trade related transactions
- C.7. Environmental transactions
- C.8. Total health services
- C.9. Total education services

ANNEX II – DESCRIPTION OF BASIC VARIABLES FOR FATS

Any number of variables pertaining to the operations and financing of foreign affiliates may have analytical and policy relevance, but MSITS 2010 has identified five core indicators that should be included in any FATS system: (a) sales (turnover) and/or output, (b) employment, (c) value added, (d) exports and imports of goods and services, and (e) number of enterprises. These are defined and discussed briefly below.

a) Sales (turnover) and/or output:

Sales and turnover are used interchangeably in MSITS 2010 to mean the same thing. Following the 2008 SNA, output differs from sales because it includes changes in stocks of finished goods and work in progress and because of differences in measurement applicable to activities involving trade or financial intermediation. For most purposes, output is a superior and more refined measure of economic activity. However, services activities do not involve stocks of finished goods, and changes in work-in-progress will usually be impossible to measure. In addition, sales data are easier to collect and may present more options for disaggregation. Taking these factors into account, there may be a continuing role in FATS and AMNE statistics for both measures.

Sales measures gross operating revenues, less rebates, discounts and returns. Although lacking the duplication-free quality of value added, the sales variable generally presents fewer collection difficulties and thus is likely to be more widely available than value added. Also unlike value added, the sales variable indicates the extent to which foreign affiliates are used to deliver outputs to customers, irrespective of the extent to which the output originated in the affiliates themselves or in other firms. Further, sales are more comparable than value added with regard to such variables as exports and imports, which are themselves measures of sales.

In addition to disaggregation by industry and by country, other breakdowns of sales may be useful for particular purposes. One such breakdown is to distinguish among sales within the host country (local sales), sales to the country of the parent enterprise, and sales to third countries. All three types of sales result from a commercial presence by the home country in the host country. However, only the local sales represent the delivery of output within host economies and thus relate directly to the commitments made under the GATS Mode 3 by those economies. In addition, elimination of the sales to the parent country (which would already be included as imports in that country's BOP accounts) may be desired in an analysis of FATS variables in conjunction with data on the parent country's trade with non-residents, to avoid duplication.

b) Employment:

In a FATS context, employment would normally be measured as the number of persons on the payrolls of foreign affiliates. Data on employment can be used in several ways in a FATS system. For example, they can be used to determine the share of foreign affiliates in host country employment or to help determine the extent to which employment by foreign affiliates complements or substitutes for domestic (home country) employment by parent companies or other domestic firms. An industry breakdown of affiliates' employment can yield further insights into the impact of foreign-owned enterprises on specific parts of the economy. Used in conjunction with data on compensation of employees (one of the suggested "additional" variables), the employment variable may be used in examining compensation practices of affiliates relative to those of domestically owned firms.

Although data would not, in general, appear to be available to identify separately the portion of employment by affiliates that is accounted for by employees from abroad, such information, if available, could be used for elaborating on the GATS presence of natural persons Mode of supply (Mode 4).

c) Value added:

The 2008 SNA defines ‘the gross value added of an establishment, enterprise, industry or sector’ as ‘the amount by which the value of the outputs produced exceeds the value of the intermediate inputs consumed’. A related concept, “net value added”, is defined as gross value added less the consumption of fixed capital (e.g., depreciation). Gross value added can provide information about the contribution of foreign affiliates to host country gross domestic product. For this reason and because it may be easier to compute (because it does not require estimation of capital consumption) and thus is more widely available, the higher priority is accorded to the gross measure of value added.

Because it includes only the portion of the firm’s output that originates within the firm itself, value added is a particularly useful measure from the perspectives of both the GATS and globalization analysis. This is why it has been included among the ‘basic’ FATS variables, even though, as a measure that may have to be estimated or derived from other variables, it may be among the more difficult variables to compile.

d) Exports and imports of goods and services:

International goods and services transactions of foreign affiliates is another basic indicator relevant to FATS. These are to be measured as outlined in BPM6 and, for services, in MSITS (and in section II of these materials). Both balance of payments data and data provided by parent enterprises and affiliates in separate questionnaires may be appropriate sources for such information. Where the data are obtained through linkages with primary data sources for BOP transactions, breakdowns by product and by origin or destination often will be possible. However, it often may prove difficult or impossible to separately identify the transactions of foreign-owned firms in such data. Thus, it may be possible to develop the necessary data only through the use of separate questionnaires.

If this is done, selected additional breakdowns may prove useful. For example, trade with related parties might be distinguished from trade with unrelated parties, or trade with the country of the parent enterprise might be distinguished from trade with other countries. If possible, these breakdowns should be obtained separately for goods and for services. For inward FATS, for example, that would mean disaggregating the affiliate’s exports of goods and exports of services into (a) exports to the parent enterprise, (b) other exports to the country of the parent, and (c) exports to third countries.

e) Number of enterprises:

The number of enterprises (or establishments, where that is the statistical unit) meeting the criteria for coverage by FATS is a basic indicator of the prevalence of majority ownership by foreigners in the host economy. That number may be compared with the total number of firms in the economy. It may also be assessed in relation to the other FATS variables because it allows the computation of ratios – such as value added or number of employees per enterprise – that may be compared with the same ratios for domestically owned firms, thus giving an indication of the behaviour of foreign affiliates.

It should be recognised that the number of firms alone may not give an accurate picture of the overall importance of foreign-owned firms, because of differences in size between these firms and those that are domestically owned.

MSITS 2010 may be consulted for additional details and examples.

ANNEX III - ISIC CATEGORIES FOR FOREIGN AFFILIATES IN SERVICES (ICFA REV. 1)

ICFA code	ICFA label	ISIC Rev. 4 code
1	Agriculture, forestry and fishing	section A (01 to 03)
1.1	Crop and animal production, hunting and related service activities	01
1.1.1	Support activities to agriculture and post-harvest crop activities	01.6
1.1.2	Hunting, trapping and related service activities	01.7
1.2	Forestry and logging	02
1.2.1	Support services to forestry	02
1.3	Fishing and aquaculture	03
2	Mining and quarrying	section B (05 to 09)
2.1	Mining support service activities	09
3	Manufacturing	section C (10 to 33)
3.1	Repair and installation of machinery equipment	33
4	Electricity, gas, steam and air conditioning supply	35
4.1	Electric power generation, transmission and distribution	35.1
5	Water supply, sewerage, waste management and remediation activities	section E (36 to 39)
5.1	Water collection, treatment and supply	36
5.2	Sewerage	37
5.3	Waste collection, treatment and disposal activities; materials recovery	38
5.4	Remediation activities and other waste management services	39
6	Construction	section F (41 to 43)
7	Wholesale and retail trade; repair of motor vehicles and motorcycles	section G (45 to 47)
7.1	Wholesale and retail trade and repair of motor vehicles and motorcycles	45
7.2	Wholesale trade, except of motor vehicles and motorcycles	46
7.3	Retail trade, except of motor vehicles and motorcycles	47
8	Transportation and storage	section H (49 to 53)
8.1	Land transport and transport via pipelines	49
8.1.1	Passenger rail transport, interurban	49.11
8.1.2	Freight rail transport	49.12
8.1.3	Other passenger land transport	49.22
8.1.4	Freight transport by road	49.23
8.1.5	Transport via pipeline	49.3
8.2	Water transport	50
8.2.1	Sea and coastal water transport	50.1
8.2.2	Inland water transport	50.2

ICFA code	ICFA label	ISIC Rev. 4 code
8.3	Air transport	51
8.4	Warehousing and support activities for transportation	52
8.5	Postal and courier activities	53
9	Accommodation and food service activities	section I (55 to 56)
9.1	Accommodation	55
9.2	Food and beverage service activities	56
10	Information and communication	section J (58 to 63)
10.1	Publishing activities	58
10.1.1	Publishing of books, periodicals and other publishing activities	58.1
10.1.2	Software publishing	58.2
10.2	Motion picture, video and television programme production, sound recording and music publishing activities	59
10.3	Programming and broadcasting activities	60
10.4	Telecommunications	61
10.5	Computer programming, consultancy and related activities	62
10.5.1	Computer programming activities	62.01
10.5.2	Computer consultancy and computer facilities management activities	62.02
10.5.3	Other information technology and computer service activities	62.09
10.6	Information service activities	63
10.6.1	Data processing, hosting and related activities; web portals	63.1
10.6.2	Other information service activities	63.9
10.6.2.1	News agencies activities	63.91
10.6.2.2	Other information service activities n.e.c.	63.99
11	Financial and insurance activities	section K (64 to 66)
11.1	Financial service activities, except insurance and pension funding	64
11.2	Insurance, reinsurance and pension funding, except compulsory social security	65
11.2.1	Life insurance	65.11
11.2.2	Non-life insurance	65.12
11.2.3	Reinsurance	65.2
11.2.4	Pension funding	65.3
11.3	Activities auxiliary to financial services and insurance activities	66
11.3.1	Activities auxiliary to financial service activities, except insurance and pension funding	66.1
11.3.2	Activities auxiliary to insurance and pension funding	66.2
11.3.3	Fund management activities	66.3
12	Real estate activities	section L (68)
13	Professional, scientific and technical activities	section M (69 to 75)

ICFA code	ICFA label	ISIC Rev. 4 code
13.1	Legal and accounting activities	69
13.1.1	Legal activities	69.1
13.1.2	Accounting, bookkeeping and auditing activities; tax consultancy	69.2
13.2	Activities of head offices, management consultancy activities	70
13.2.1	Activities of head offices	70.1
13.2.2	Management consulting activities	70.2
13.3	Architectural and engineering activities; technical testing and analysis	71
13.4	Scientific research and development	72
13.5	Advertising and market research	73
13.5.1	Advertising	73.1
13.5.2	Market research and public opinion polling	73.2
13.6	Other professional, scientific and technical activities	74
13.7	Veterinary activities	75
14	Administrative and support service activities	section N (77 to 82)
14.1	Rental and leasing activities	77
14.2	Employment activities	78
14.3	Travel agency, tour operator reservation service and related activities	79
14.4	Security and investigation activities	80
14.5	Services to buildings and landscape activities	81
14.6	Office administrative, office support and other business support activities	82
15	Education	section P (85)
16	Human health and social work activities	section Q (86 to 88)
16.1	Human health activities	86
16.2	Residential care and social work activities	87 to 88
17	Arts, entertainment and recreation	section R (90 to 93)
17.1	Creative, arts and entertainment activities	90
17.2	Libraries, archives, museums and other cultural activities	91
17.3	Sporting and other recreational activities; gambling and betting activities	92+93
18	Other service activities	section S (94 to 96)
18.1	Activities of membership organizations	94
18.2	Repair of computers and personal and household goods, other personal service activities	95 to 96

**ANNEX IV - REPORTING STATUS OF BPM5 COMPONENTS AND SUPPLEMENTARY ITEMS,
AS OF OCTOBER 1997 AND JULY 2010²⁷**

Service description	Number of reporters			
	Exports		Imports	
	1997	2010	1997	2010
Total commercial services	146	182	147	181
Transport	141	169	147	170
<u>Sea transport</u>	42	114	48	127
Passenger transport on sea	13	45	18	44
Freight transport on sea	31	78	42	113
Supporting, auxiliary and other services	31	87	31	80
<u>Air transport</u>	49	128	48	131
Passenger transport by air	39	100	43	113
Freight transport by air	22	80	26	99
Supporting, auxiliary and other services	33	100	26	89
<u>Other transportation</u>	39	90	35	89
Passenger	22	63	19	52
Freight	28	72	27	80
Other transportation services	27	68	24	61
Travel	141	171	145	170
<u>Business travel</u>	24	101	34	110
<u>Personal travel</u>	39	127	47	132
Health-related expenditure	4	48	13	69
Education-related expenditure	10	62	25	79
Other personal travel	29	107	37	110
Other commercial services	141	169	147	170
Communications services	57	156	57	157
Construction	30	100	36	119
Insurance services	89	148	131	164
Financial services	38	122	40	131
Computer and information services	16	112	19	132
Royalties and licence fees	46	112	63	137
Other business services	134	153	143	157
<u>Merchanting and other trade-related services</u>	36	89	31	89
<u>Operational leasing</u>	20	79	29	88
<u>Miscellaneous business, professional and technical services</u>	64	126	66	136
Legal, accounting, management, consulting and public relations	12	73	19	89
Advertising, market research and public opinion polling services	14	69	16	77
Research and development services	10	47	11	49
Architectural, engineering and other technical services	11	56	12	59
Agricultural, mining and on-site processing services	6	37	5	43
Other services	41	101	42	108
Personal, cultural and recreational services	20	104	27	108
<u>Audio-visual and related services</u>	11	62	16	63
<u>Other personal, cultural and recreational services</u>	13	75	15	75

²⁷ Reported data for 1994 in October 1997 and for 2007 in July 2010.

ANNEX V - SIMPLIFIED ALLOCATION OF FATS AND BALANCE OF PAYMENTS DATA TO MODES OF SUPPLY

This table sets out the MSITS 2010 recommend simplified allocation of statistics which can serve as a first guidance to estimate the value of the supply of services broken down by modes. However it is important to note that this is a general guideline and the allocation may consequently vary from country to country (general needs as well as for specific sectors, data collection system, resources, etc.).

It identifies the dominant mode(s) of supply used in resident/non-resident transactions; for FATS all sales/output in the host economy are supplied through Mode 3 (see X). If for a compiling country, allocation of resident/non-resident transactions does not necessitate the separate identification of modes, or if it has difficulties in implementing the allocation according to this table (too burdensome or costly for compilers or reporters), the rules can be simplified by concentrating on the 12 major balance of payments services transactions, FATS and, if possible, the estimated value for distribution services associated with cross-border trade (see X). For example, telecommunication services transactions are deemed to be provided through Mode 1 whereas computer services are deemed to be provided either through Mode 1, Mode 4 or a combination of both. However, if a country only compiles the aggregate of telecommunication, computer and information services, then compilers should consider additional information to estimate the allocation between modes (1 and 4) or the dominant mode. Sales of telecommunication services or computer services by foreign affiliates should all be allocated to Mode 3.

Shaded rows refer to categories not considered as the supply of services from a GATS perspective. Rows presented in italics are not separately available in the EBOPS 2010 classification, but are indicated to improve the clarity concerning the links of existing balance of payments items with modes of supply.

	FATS (sales or output) ²⁸	Balance of payments trade in services					
	Mode 3	Mode(s)					
		1	2	4	1 and 4	2 and 4	3 and 4
Manufacturing serv. on physical inputs owned by others	X		X				
Maintenance and repair services n.i.e.	X		X				
Transport	X	X					
• Passenger	X	X					
• Freight	X	X					
• Post and courier services	X	X					
• Other	X						
– <i>Serv. to domestic carriers in foreign ports (and vice-versa)</i>	X		X				
– <i>Other</i>	X	X					
Travel			X				
• Goods							
• Local transport services			X				
• Accommodation services			X				
• Food-serving services			X				
• Other services			X				
Construction	X						X
• <i>Goods</i>							
• <i>Services</i>	X						X
Insurance and pension services	X	X					
Financial services	X	X					
Charges for the use of intellectual property n.i.e. ²⁹	X	X					
Telecommunications, computer and information services	X				X		
• Telecommunications services	X	X					
• Computer services	X				X		
• Information services	X	X					
Other business services	X				X		
• Research and development services	X				X		
• Professional and management consulting services	X				X		
• Technical, trade-related and other business services	X						
– <i>Architectural, engineering, scientific and other technical services</i>	X				X		
– <i>Waste treatment and de-pollution, agricultural and mining services</i>	X						
○ <i>Waste treatment and de-pollution</i>	X					X	
○ <i>Services incidental to agriculture, forestry and fishing</i>	X			X			
○ <i>Services incidental to mining, and oil and gas extraction</i>	X			X			
– <i>Operational leasing services</i>	X	X					
– <i>Trade-related services</i>	X	X					
– <i>Other business services, n.i.e.</i>	X				X		
Personal, cultural and recreational services	X				X		
Government goods and services n.i.e.							
• <i>Government goods n.i.e., Credits and debits</i>							
• <i>Government services n.i.e., Credits</i>							
• <i>Government services n.i.e., Debits</i>							
– <i>Commercial services purchased in host economies</i>							
○ <i>Government units in diplomatic and similar enclaves</i>					X		
○ <i>Personnel from home economy and dependants</i>				X			
– <i>Other commercial services n.i.e. purchased by government</i>					X		
– <i>Non-commercial services acquired by government</i>							
<i>Distribution (wholesale, retail trade) services</i>	X	X					

²⁸ In the economic territory where the affiliate is established. If not possible to breakdown by EBOPS 2010 product, total sales (or output) of services by activity using ICFA Rev.1.

²⁹ There is a certain degree of uncertainty with respect to the coverage of certain *charges for the use of intellectual property n.i.e.* See Chapter V of MSITS 2010.

BIBLIOGRAPHY

Eurostat (Statistical Office of the European Communities) (ec.europa.eu/eurostat)

- *Asymmetries in EU current account data*, Working Papers and Studies.
- *European Union international trade in services*.
- *European Union Foreign Direct Investment Yearbook*, annual.
- *Statistics in focus* (in themes Industry, Trade and Services and Economy and Finance), 2001-2009.
- Eurostat database.

ILO (International Labour Organization) (www.ilo.org and laborsta.ilo.org)

- *International Standard Classification of Occupations (ISCO-88 and 08)*, 1990 and 2007.
- *International Classification of Status in Employment (ICSE-93)*, 1993.
- *Yearbook of Labour Statistics*, annual.
- International Labour Migration Database.

IMF (International Monetary Fund) (www.imf.org)

- *Balance of Payments Manual*, Fifth Edition, 1993.
- *Balance of Payments Compilation Guide*, 1995.
- *Balance of Payments and International Investment Position Manual*, Sixth edition, 2009.
- IMF Committee on Balance of Payments Statistics - *Annual Report*.
- Dissemination Standards Bulletin Board, dsbb.imf.org/.
- *Balance of Payments Statistics*, annual (also published in monthly CD-ROMs and online at www.imfstatistics.org/imf/).

OECD (Organisation for Economic Co-operation and Development) (www.oecd.org)

- *Benchmark Definition of Foreign Direct Investment*, Third Edition, 1996 and Fourth Edition, 2008.
- *International Direct Investment Statistics Yearbook*
- *Measuring Globalisation: The role of multinational in OECD countries. Volume II – Services 2000-2004*, 2008.
- *OECD Handbook on Economic Globalisation Indicators*, 2005.
- *OECD Statistics on International Trade in Services, Volume 1 Detailed Tables by Service Category and Volume 2 Detailed Tables by Partner Country*, annual.
- OECD.stat database (<http://stats.oecd.org>).

UN (United Nations) (unstats.un.org/unsd)

- *Central Product Classification*.
- *International Standard Industrial Classification of All Economic Activities*.
- *Recommendations on Statistics of International Migration, Revision 1*.
- *Background Note on GATS Mode 4 Measurement* (WTO), 2006.
- UN Service Trade database (unstats.un.org/unsd/servicetrade/default.aspx).

UNCTAD (United Nations Conference on Trade and Development) (www.unctad.org)

- *World Investment Report*, annual.
- UNCTADStat database (unctadstat.unctad.org).

World Bank (www.worldbank.org)

- *World Development Indicators*, annual.

- *WDI online* (data.worldbank.org).
- *World Trade Indicators*.

WTO (World Trade Organization) (www.wto.org)

- General Agreement on Trade in Services. *The Results of the Uruguay round of Multilateral Negotiations: The Legal Text*, appendix IB, 1995.
- *International Trade Statistics*, annual.
- S/C/W/27. A review of statistics on trade flows in services: Note by the Secretariat, 10 November 1997.
- S/C/W/27/Add1. A review of statistics on trade flows in services: Note by the Secretariat, Addendum, 30 October 2000.
- S/C/W/27/Add2. A review of statistics on trade flows in services: Note by the Secretariat, Addendum, 30 June 2006.
- *Trade profiles*, annual.
- *Service profiles*, annual.
- WTO Staff Working Paper, ERSD-2008-05. *Measuring GATS Mode 4 Trade Flows*, 2008.
- WTO Statistics database.

OECD/IMF

- *Report on the Survey of Implementation of Methodological Standards for Direct Investment*, March 2000.
- *Foreign Direct Investment Statistics: How Countries Measure FDI*, October 2003.

European Commission; IMF; OECD; UN; UNCTAD; UNWTO; WTO

(unstats.un.org/unsd/tradeserv)

- *Manual on Statistics of International Trade in Services* (MSITS), United Nations publication, 2002.
- *Draft Manual on Statistics of International Trade in Services 2010* (MSITS 2010), United Nations publication, 2002.

European Commission, IMF, OECD, UN and World Bank

(unstats.un.org/unsd/nationalaccount)

- *System of National Accounts*. United Nations publication, 1993, 2008.

European Commission, OECD, UN and UNWTO (UN World Tourism Organization)

- *Tourism Satellite Account: Recommended Methodological Framework*, 2008.

UN and UNWTO

- *International Recommendations for Tourism Statistics*, 2008.

Eurostat - UNECE (United Nations Economic Commission for Europe) joint meeting on migration statistics, 2003 (www.unece.org/stats/documents/2003.04.migration.htm)

- *GATS, Modes of Supply and the MSITS: the case of the movement of natural persons*, (WTO).
- *A Needle in a Haystack: Migration Statistics and GATS Mode 4* (OECD).

UNECE Group of Experts on the Impact of Globalization on National Accounts - jointly with Eurostat and OECD, 2009 (www.unece.org/stats/groups/wggna.e.htm)

- *Measurement issues of labour mobility and trade in services through the movement of persons* (WTO).