
Council for Trade in Services

**A REVIEW OF STATISTICS ON TRADE FLOWS IN SERVICES –
DATA COMPILATION AND AVAILABILITY**

Note by the Secretariat¹

1. This Note has been produced at the request of the Council for Trade in Services at its meeting held on 11 February 2010. It updates and expands previous Notes issued in November 1997, October 2000 and July 2006 (contained in documents S/C/W/27 and Addenda 1 and 2), which provide an overview of recent conceptual achievements and progress made with respect to the measurement of international trade in services. An addendum to this paper describes for each service sector major trends in trade and recent developments.

2. Since 2006 data availability increased in particular for the level of sectors and partner detail of balance of payments trade in services statistics as well as for the new statistical framework on foreign affiliates statistics². Since then, the *Manual on Statistics of International Trade in Services (MSITS 2010)* has also been revised and approved by the United Nations Statistical Commission in February 2010.³ The main features of this revision include the alignment to new or revised statistical standards such as the Balance of Payments, 6th edition (BPM6) or the System of National Accounts (2008 SNA) as well as the development of a new chapter on the international supply of services by mode with a particular focus on the statistical conceptualization of mode 4, i.e., the presence of natural persons. The development of compilation guidance and implementation of MSITS 2010 guidelines are now priorities for the inter-agency Task Force on Statistics of International Trade in Services (TFSITS). Another priority is the quality of available trade in services data.

3. This Note is organised in five Sections. A brief introduction (Section I) is followed by a presentation of the conceptual background surrounding the measurement of the international supply of services (Section II). Section III provides a description of recent developments in the measurement of trade in services. Section IV presents progress made on the measurement of modes of supply, both conceptually and in practice. Finally section V provides concluding remarks and discusses prospects for the measurement of international trade in services.

¹ This document has been prepared under the Secretariat's own responsibility and without prejudice to the positions of Members and to their rights and obligations under the WTO.

² The name of FATS has been changed from "Foreign Affiliates Trade in Services" to the more general "Foreign Affiliates Statistics" as a consequence of the further development of underlying guidelines since the Manual on Statistics of International Trade in Services 2002 was published. FATS may also have been used in the past to mean "Foreign Affiliates Statistics". These expressions all refer to the same statistical framework and for historical consistency the abbreviation has been maintained.

³ The *Manual on Statistics of International Trade in Services* was developed jointly by Eurostat, the International Monetary Fund (IMF), Organization for Economic Cooperation and Development (OECD), United Nations Conference on Trade and Development (UNCTAD), United Nations Statistics Division (UNSD), United Nations World Tourism Organization (UNWTO) and the WTO Secretariat. This Manual provides an internationally agreed framework for compiling statistics of international trade in services, responding to the growing information needs of trade negotiators, analysts and other users.

I. INTRODUCTION

4. The structure of GATS commitments by sector and mode does not coincide with the existing structure of trade statistics. The scope of the Agreement is far wider than what statistics conventionally measure as trade in services (i.e., exchanges between residents and non-residents in balance of payments (BOP) statistics. The vast majority of activities of foreign-owned companies in their host economy markets – covered by commercial presence (mode 3) – are not reflected in these conventional statistics. Moreover, the IMF Balance of Payments services classification, on which the majority of global trade statistics in services is based, is far less detailed than the UN Central Product Classification (CPC). Nevertheless, many conceptual improvements were achieved with the release in 2002 of the first ever *Manual on Statistics of International Trade in Services* (thereafter MSITS 2002), and subsequently with the revision of the Manual in 2010 (thereafter MSITS 2010). The Manual was jointly produced by members of the United Nations Inter-agency Task Force on Statistics of International Trade in Services, which is mandated by the United Nations Statistical Commission.⁴

5. Most statistics currently available and discussed in this Note are compiled according to the first version of the Manual. As highlighted in section II, the quantity of statistics has drastically improved over recent years, whether BOP-based data (sector and partner data) or data describing the activities of foreign affiliates. However, although developing economies are gradually implementing the MSITS 2002 recommendations, at the time of writing most of the detailed statistics (in particular for BOP by partner and FATS) are available for developed and transition economies only. In addition, as will be shown in this paper, quality of statistics is another issue that needs to be tackled in the near future.

6. Increased needs for short-term data, in particular for trade statistics, have also emerged as a consequence of the recent financial and economic turmoil. As for BOP trade in services statistics, a higher number of economies actually produce such information for major aggregates on a quarterly basis, and some economies publish monthly data. However, short-term statistics are still lacking for a large number of economies, and are not available at all for operations of foreign affiliates.⁵

7. At the time of writing, only one Member (Australia) had started implementing the recently adopted BPM6. In the near future, however, the number of economies implementing new statistical standards will increase rapidly. The European Union decided to move to the new guidelines in 2014. The IMF is planning to produce a template that will allow to bridge presentations between the two BOP versions. Starting in 2012, the IMF aims at collecting and publishing data based on the revised classification (i.e. either data provided by countries according to new standards or "old" data converted). As a consequence, a number of breaks in the time series are foreseen and this may render historical analysis difficult.

8. Although the data situation is improving fast, implementation of new manuals and data quality remain a challenge that statisticians will have to tackle in the not too distant future.

II. CONCEPTUAL BACKGROUND: THE MANUALS

9. MSITS 2002 was built upon internationally agreed standards, notably the IMF's 5th edition of the Balance of Payments Manual (released in 1993, BPM5) and the System of National Accounts

⁴ Seven agencies participate in this Task Force: Eurostat, International Monetary Fund (IMF), Organization for Economic Cooperation and Development (OECD), United Nations Conference on Trade and Development (UNCTAD), United Nations Statistics Division (UNSD), World Tourism Organization (UNWTO) and the WTO Secretariat. The Task Force also benefits from the expertise of national consultants, currently from the following countries: Brazil, Germany, Italy, Japan and United States.

⁵ Although not FATS indicators, short-term foreign direct investment data are available for some economies.

1993. It provided guidelines and recommendations on how to use and develop sources to measure trade in services, in particular for responding to GATS information needs.⁶

10. Two building blocks were identified in MSITS 2002:

- (a) **Balance of payments trade in services statistics**, which conform to the balance of payments manual. The BOP's current account as defined in BPM5 covers trade in services between residents and non-residents of an economy according to 10 major commercial services items⁷. BPM5 also includes a limited further breakdown of these items, mainly to be provided on a supplementary basis. MSITS 2002 proposes a much more detailed breakdown of these items to respond to needs of negotiators and analysts. Table 1 shows the data availability for this more detailed classification. These statistics mainly cover the supply of services through modes 1, 2 and 4. 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 instructive concerning mode 3.
- (b) MSITS 2002 expanded the statistical definition of international trade in services to more closely follow the coverage introduced in the GATS. It recommended 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 and/or output, exports and imports of goods and services, number of enterprises, etc.) with a particular – but not exclusive – focus on services.

11. Based on these two building blocks, MSITS 2002 included a number of guidelines and recommendations to improve the coverage and international comparability of information on trade in services. For negotiations as well as for analytical purposes, there is also a need for detailed statistics by trading partner and MSITS recommended the compilation of data by partner economy for both statistical frameworks used for assessing trade in services (balance of payments statistics and FATS).

12. MSITS 2002 also identified the need for further methodological work on measuring the international supply of services by mode and, more specifically, mode 4 (presence of natural persons). It proposed however a first simplified approach for this measurement based on the overall good correspondence between (i) FATS and mode 3, and (ii) BOP services statistics and the three other modes of supply.

⁶ It should be stressed that MSITS 2002 guidelines on the compilation of statistics on the international supply of services are laid out for statistical purposes and that they do not exactly correspond to trade in services as defined in GATS. For instance, GATS Article XXVIII(b) defines the supply of services as including "the production, distribution, marketing, sale and delivery of services" whereas international statistical guidelines mainly focus on the production and delivery aspects for valuing services trade. BPM6 and MSITS 2010 refer to trade in services in the context of economic transactions which are "defined as an interaction between two institutional units by mutual agreement that reflects the creation, transformation, exchange, transfer or extinction of economic value, and involves changes in the volume, composition, or value of an institutional unit's assets and liabilities. It involves purchases of goods or services, [...]". Although there are a number of such differences, the concepts and definitions in economic, tourism and migration statistics respond relatively well to GATS information needs, however, they would necessitate only minor adjustments in some cases.

⁷ The 10 BPM5 standard commercial services items are the following: transportation; travel; communications services; construction services; insurance services; financial services; computer and information services; royalties and license fees; other business services; and personal, cultural and recreational services. Note that there is no one-to-one correspondence between the items of this classification (or its breakdown) with the services sectors identified in classification lists such as W/120. See Section III for further information.

13. A revision of MSITS 2002 became necessary in 2006 to take into account:
- (a) foreseen changes brought to other international statistical standards, in particular those introduced in the balance of payments and national accounts. These changes became official in 2008 in the IMF's 6th edition of the Balance of Payments Manual (BPM6) and the System of National Accounts 2008 (2008 SNA). A number of changes were also introduced in international classifications (e.g. Central Product Classification Version 2);
 - (b) clarifications for the compilation of FATS brought by the releases of the OECD Handbook on Economic Globalisation Indicators, the 4th edition of the OECD Benchmark Definition of Foreign Direct Investment and Eurostat's Recommendations Manual on Foreign Affiliates Statistics; and
 - (c) the necessity to have a more in-depth discussion on modes of supply and more particularly mode 4, taking into consideration the conclusions of the United Nations Subgroup of the Task Force, the Technical Sub-group on the Movement of Persons – Mode 4.⁸ This new chapter and country examples will be further discussed in Section IV.
14. BPM6 differs from its previous version on quite a number of issues, including on the goods and services account. First of all, following a stricter application of the change of ownership rule as well as other considerations on the nature of transactions, certain important items of these accounts were reviewed and reclassified:
- (a) Manufacturing services on physical inputs owned by others is shown under the services account in BPM6 and MSITS 2010 (previously the gross transactions for "goods for processing" were recorded under the goods account in BPM5). The change concerns goods sent by a client to a processor located in another economy and once the processing has taken place the goods are returned to the client.⁹ During the entire process the owner of the goods remains the client.
 - (b) Merchanting of goods is no longer shown under the services account: Merchanting is defined as the acquisition of a good by a merchant and the subsequent sale of this good to a client, without the good entering the country of the merchant. Previously the net value (i.e. difference between the value of sale of the good by the merchant minus the value of acquisition) was recorded under services. As there is a change of ownership, in BPM6 and MSITS 2010 it is recommended to record the corresponding transactions in the goods account.¹⁰
 - (c) Repair on goods has moved from the goods to the services account, and grouped with maintenance services.

⁸ The Technical Sub-group on the Movement of Persons – Mode 4 was convened by UNSD and was established in 2003. It was created in order to develop a full-fledged statistical framework for the measurement of mode 4 and more generally for the movement of persons. It brought together trade in services, balance of payments, migration and labour statistical experts from various organizations and national institutions. The work of the group was terminated in 2006.

⁹ For other processing arrangements such as when the goods are subsequently sold in a third country or the country of the client, the payment for the service rendered already appeared in the services account.

¹⁰ This implies that, as for the other goods transactions, the value of distribution services are included indistinguishably with the value of merchandise sold under the goods account. Only the commissions of merchants (with no change of ownership of goods), commodity brokers, dealers, auctioneers and commission agents are included under services under "trade-related services".

15. The stricter application of the change of ownership may have an impact on the economic analysis of the trading position of individual economies. It also will lead to a greater divergence of trade flows coming from different statistical frameworks as for example customs-based merchandise trade statistics record goods for processing where no ownership change takes place as goods exports and imports. The balance of payments would only record a manufacturing services fee.

16. Besides the amendments brought following the stricter application of the change of ownership principle, a number of other changes and measurement improvements were introduced in the new manuals:

- (a) An alternative presentation of travel by type of product consumed by travellers is proposed in addition to the standard breakdown by purpose of travel. If implemented by compilers this would enable a major improvement for analysis of mode 2.
- (b) The item communications services no longer exists in BPM6 and MSITS 2010, and its sub-components are reclassified as follows: post and courier services is shown under transport services and telecommunications services is grouped with computer and information services.
- (c) The treatment for construction has been aligned between the Balance of Payments Manual and MSITS: it calls for a separate treatment of construction abroad (value of contracts under exports and costs in the country where project is taking place under imports) and construction in the compiling economy (value of contracts under imports and costs by contractor in the country where project is taking place under exports).
- (d) An improved measure of insurance, based on an adjustment for claims volatility, has been included in revised international guidelines.
- (e) Financial intermediation services indirectly measured (FISIM) are now recommended for inclusion under financial services.¹¹ Some economies have begun to compile these data.
- (f) The treatment of intellectual property products and related payments and receipts has been clarified. This should notably improve estimates of computer services, audiovisual services, research and development services and charges for the use of intellectual property.
- (g) There have been a number of rearrangements and call for more details in the classification of other business services (e.g. research and development services, engineering services, support services to agriculture or mining) to better reflect the structure of services trade and the emergence of new services lines.
- (h) The Manuals, in particular MSITS 2010, include clarifications on the employer-employee relationship and provide some guidance on how to distinguish between compensation of employees and payment for services. Such a clarification is crucial for building appropriate measures for mode 4 (see Section IV).
- (i) The treatment of outsourcing is clarified: the corresponding transactions should be classified according to the type of service provided, e.g. call centers selling products

¹¹ Given the difficulty to compile such information, BPM5 and MSITS 2002 had recommended not to include it under the standard items, and simply compile it as supplementary information.

are included in trade-related services, while call centers providing computer support are included in computer services.

- (j) Finally MSITS 2010 now provides a suggested list of complementary groupings, such as audiovisual transactions, computer software transactions, cultural transactions, call centre services or environmental transactions. Compilation of such groupings is recommended for their analytical usefulness.

17. With respect to FATS, the main difference introduced refers to the concept of control which relates to the majority ownership of voting power, rather than majority ownership of ordinary shares or voting power. In addition the concept of ultimate controlling institutional unit (UCI) has replaced that of the ultimate beneficial owner (UBO). Although they do not entirely comply with the GATS definition of mode 3, such changes should improve the international comparability and usefulness of the data, in particular when conducting international analysis and comparing different countries situation in terms of the provision of services through commercial presence as well as the analysis of globalisation.

III. AVAILABILITY OF STATISTICS ON THE INTERNATIONAL SUPPLY OF SERVICES

18. This Section will first provide information with respect to the recent progress in the compilation and publication of detailed trade in services statistics according to the Extended Balance of Payments Services classification (EBOPS). Sub-section B describes the developments and availability of FATS. Finally Sub-section C briefly describes the status as to partner country detail. As this section deals with statistics available at the time of writing, it mainly refers to the data compiled according to previous guidelines and classifications (i.e., 2002 versions of MSITS and EBOPS, and BPM5).

A. RESIDENT – NON-RESIDENT TRADE IN SERVICES STATISTICS

19. Data on BOP trade in services¹² are relatively widespread, in particular when looking at main services categories. The concepts and definitions for these statistics were developed in BPM5 in 1993 which explains why this information is available for many countries. However the level of reporting provided differs widely amongst economies depending on the type of detailed service category, in particular when considering the more detailed EBOPS classification. Table 1 shows the international organisations that publish such information.

¹² This refers mainly to receipts and payments for the supply of services through modes 1, 2 and 4.

Table 1: 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; 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>UN ServiceTrade database</i> (on-line)	Around 200 economies	EBOPS	Yes, over 200 partners
<i>UNCTAD Handbook of Statistics</i> (book, on-line and DVD-ROM)	Around 200 economies	BPM5 main items	No
<i>WTO's International Trade Statistics</i> (book, on-line and CD-ROM)	All economies	Summary data and analysis	Summary data and analysis

20. EBOPS is (primarily) a product-based classification. The 2002 version of the classification, building upon the standard BPM5 classification, disaggregates the 10 main commercial services components further into standard and supplementary, more detailed sub-items. Table 2 reproduces the BPM5/EBOPS classification in full, with EBOPS supplementary items shaded.

21. Overall, EBOPS 2002 includes approximately 60 categories of services transactions at the most detailed level of the classification.¹³ The level of detail varies depending on the categories of services, mainly in terms of the importance of the sector, the reliability and coherence of the detail, and data collection possibilities. For example, for *transportation*, it is possible to distinguish between eight distinct modes of transportation – sea, air, space, rail, road, internal waterway, pipeline, and other supporting and auxiliary transportation services, and several types of transportation service (passenger; freight, other). *Computer and information services* are subdivided into *computer services* (hardware and software related services and data processing services), *news agency services* (provision of news, photographs, and feature articles to the media), and *other information provision services* (database services and web search portals). A category that benefits highly from the expanded classification is *other business services*, where the item *miscellaneous business, professional, and technical services* has been disaggregated into detailed sub-items including *legal services; accounting, auditing; business and management consulting and public relations services*; etc. For other categories, given the little relevance of the detail for many economies or the difficulty to collect reliable detailed data, the service sector is covered by one single item (e.g. *financial services* or *audiovisual and related services*). However although not collected and reported by international organizations, some countries for which it seemed relevant provided more detailed data using a national classification (e.g. India for Software and business process outsourcing and other IT enabled services; United Kingdom for financial services and legal, accounting and management consulting).

22. A detailed breakdown of services transactions can be particularly useful in the context of GATS negotiations, where Members negotiate and make commitments at sector level. MISTS 2002

¹³ EBOPS 2010 proposes almost 80 categories.

contains a table of correspondence between the EBOPS classification and the Services Sectoral Classification List (in document MTN.GNS/W/120, hereinafter W/120).

23. The availability of statistics on trade in services according to BPM5 is relatively well established and has continued to increase since this Note was last drafted. In the previous Note, total commercial services exports statistics were available for less than 176 economies, compared to 182 today. Transportation, travel and other commercial services exports were available for 160 countries compared to 170 in 2010.

24. Table 2 shows the amount of BOP based trade in services data available in the WTO statistical database at the time the Secretariat Note and its subsequent addenda were prepared (1997, 2000, 2006 and 2010).¹⁴ As of 2010, approximately 85-90 per cent of economies (i.e. 182 economies) reported 2010 data on trade in *total commercial services*, an increase of approximately 23-25 per cent compared to the situation in 1997.¹⁵ Concerning the major aggregates, *transportation, travel and other commercial services*, the number of reporters increased at a lower rate (17-20 per cent) reaching approximately 170 in 2010. However as a general rule the increase is more significant for more detailed items, where imports data are actually available for more reporters than exports. The number of countries reporting *communications services, construction and financial services* tripled compared to October 1997. For *computer and information services* and *personal, cultural and recreational services* the increases are much higher (increases of 600 per cent and 300-420 per cent respectively).

25. Looking at the level of availability of these other commercial services items for exports in 2010, *communications services, insurance services, and other business services* remain the sectors for which the coverage is highest (150 and above). Other items such as *construction, computer and information services, financial services* and *personal, cultural and recreational services* reached a lower level (in the range of 100-130 reporting economies). The disaggregation of services transactions into more detailed components requires important resources by economies. However the implementation of the EBOPS 2002 (shaded items in table 2) and the request to report data at this level of detail by international agencies (Eurostat, IMF, OECD, United Nations) has encouraged more detailed data collection and compilation. In a relatively small number of years (EBOPS was first released in 2002) there were already a significant number of reporters of this more detailed information, reaching more than 50 reporters for exports for many items. This information also shows that reporting has increased significantly, especially for a significant number of developing and least-developed economies. In 2010, for instance, 105 countries reported 2007 exports of *telecommunication services*, 73 for *computer services* and over 60 for *postal services and audiovisual and related services*.

¹⁴ Numbers shown here can be considered as a minimum of data available as there could be some additional data which are not made available to international organisations or that the Secretariat is unaware of their publication in national sources.

¹⁵ The general increase in the number of reporters applies to both imports and exports.

Table 2: Number of economies reporting EBOPS trade data, 1997 - 2010

Code	Service description	Exports				Imports	
		Oct. 1997	Oct. 2000	June 2006	July 2010	Oct. 1997	July 2010
	Commercial services (Services excl. government serv.)	146	154	176	182	147	181
205	Transportation	141	146	158	169	147	170
206	<u>Sea transport</u>	42	68	107	114	48	127
207	Passenger transport on sea	13	25	42	45	18	44
208	Freight transport on sea	31	50	101	78	42	113
209	Supporting, auxiliary and other services	31	47	67	87	31	80
210	<u>Air transport</u>	49	77	111	128	48	131
211	Passenger transport by air	39	63	101	100	43	113
212	Freight transport by air	22	48	83	80	26	99
213	Supporting, auxiliary and other services	33	53	77	100	26	89
214	<u>Other transportation</u>	39	61	79	90	35	89
215	Passenger	22	35	45	63	19	52
216	Freight	28	46	68	72	27	80
217	Other transportation services	27	42	54	68	24	61
	<i>Extended classification of other transport</i>						
218	Space transport	-	-	2	2	-	2
219	Rail transport	-	-	33	42	-	40
220	Passenger on rail	-	-	25	32	-	31
221	Freight on rail	-	-	28	36	-	37
222	Supporting, auxiliary and other rail transport services	-	-	25	29	-	28
223	Road transport	-	-	48	60	-	64
224	Passenger on road	-	-	33	46	-	40
225	Freight on road	-	-	44	52	-	58
226	Supporting, auxiliary and other road transport services	-	-	27	36	-	37
227	Inland waterway transport	-	-	8	12	-	14
228	Passenger on inland waterway	-	-	1	12	-	12
229	Freight on inland waterway	-	-	5	9	-	10
230	Supp., auxiliary, other inland waterway transport services	-	-	5	32	-	31
231	Pipeline transport and electricity transmission	-	-	21	28	-	24
232	Other supporting and auxiliary transport services	-	-	17	2	-	2
236	Travel	141	147	162	171	145	170
237	<u>Business travel</u>	24	45	91	101	34	110
238	Expenditure by seasonal and border workers	-	-	12	20	-	23
239	Other business travel	-	-	61	69	-	78
240	<u>Personal travel</u>	39	67	111	127	47	132
241	Health-related expenditure	4	21	54	48	13	69
242	Education-related expenditure	10	31	64	62	25	79
243	Other personal travel	29	53	92	107	37	110
	Other commercial services	141	150	158	169	147	170
245	Communications services	57	97	129	156	57	157
246	Postal and courier services	-	-	51	66	-	-
247	Telecommunication services	-	-	85	105	-	-
249	Construction services	30	50	96	100	36	119
250	Construction abroad	-	-	18	40	-	30
251	Construction in the compiling economy	-	-	55	45	-	68
253	Insurance services	89	106	136	148	131	164
254	Life insurance and pension funding	-	-	26	34	-	42
255	Freight insurance	-	-	71	54	-	95
256	Other direct insurance	-	-	57	76	-	80
257	Reinsurance	-	-	54	54	-	77
258	Auxiliary services	-	-	23	34	-	27
260	Financial services	38	62	112	122	40	131

Code	Service description	Exports				Imports	
		Oct. 1997	Oct. 2000	June 2006	July 2010	Oct. 1997	July 2010
262	Computer and information services	16	51	106	112	19	132
263	Computer services	-	-	61	73	-	81
264	Information services	-	-	39	44	-	49
889	News agency services	-	-	4	16	-	17
890	Other information provision services	-	-	12	22	-	25
266	Royalties and licence fees	46	57	112	112	63	137
891	Franchises and similar rights	-	-	23	21	-	23
892	Other royalties and license fees	-	-	31	51	-	61
268	Other business services	134	134	140	153	143	157
269	<u>Merchanting and other trade-related services</u>	36	50	71	89	31	89
270	Merchanting	-	-	25	60	-	35
271	Other trade related	-	-	33	51	-	55
272	<u>Operational leasing</u>	20	40	68	79	29	88
273	<u>Miscellaneous business, professional and technical services</u>	64	89	112	126	66	136
274	Legal, accounting, management, consulting , public relations	12	24	64	73	19	89
275	Legal services	-	-	23	43	-	45
276	Accounting, auditing, book-keeping and tax consulting serv.	-	-	27	36	-	39
277	Business and management consultancy, public relations serv.	-	-	31	45	-	60
278	Advertising, market research and public opinion polling serv.	14	24	62	69	16	77
279	Research and development services	10	17	39	47	11	49
280	Architectural, engineering and other technical services	11	18	45	56	12	59
281	Agricultural, mining and on-site processing services	6	10	33	37	5	43
282	Waste treatment and depollution	-	-	10	14	-	16
283	Other agricultural, mining and onsite processing	-	-	19	30	-	31
284	Other miscellaneous business, professional and technical serv.	41	52	90	101	42	108
285	<u>Services between affiliated enterprises, n.i.e.</u>	-	-	23	25	-	28
287	Personal, cultural and recreational services	20	46	97	104	27	108
288	<u>Audio-visual and related services</u>	11	29	62	62	16	63
289	<u>Other personal, cultural and recreational services</u>	13	32	64	76	15	76
895	Education services	-	-	5	14	-	17
896	Health services	-	-	5	13	-	15
897	Other	-	-	21	43	-	42

Source: Compiled based on data available to the WTO Secretariat.

Note: Reported data for 1994 in October 1997, for 1996 in October 2000, for 2003 in June 2006 and for 2007 in July 2010. For a description of the EBOPS categories, see S/C/W/27/Add.2, page 13. EBOPS is based on BPM5.

26. Moreover, many economies have considerably increased the level of detail in reporting of *other business services*: the exports of professional services such as *legal, accounting, management, consulting and public relations*, or *advertising, market research and public opinion polling* services were published in 2010 by 73 and 69 countries respectively, compared to only 12 and 14 in 1997.

27. Least-developed economies (LDCs) also have a relatively good level of reporting in 2010, as shown in table 3. Forty-two LDCs out of 49 reported total exports of commercial services. The number of LDCs reporters is significant for main services categories, for some items reaching 50-60 per cent of total LDCs (e.g. *communications services* or *insurance services*). This is true to a lesser extent for *construction, financial services* and *computer and information services*. Although they have increased over recent years, the number of reporters for more detailed EBOPS items is much lower. However according to the information available to the Secretariat, the number of reporters for which data are available has decreased in some cases, as for example *transportation, travel* and *other business services*. A noticeable feature of these reported statistics is the number of LDCs reporting receipts for *royalties and licence fees*. Although for some the figure is shown as 0, for others the amounts are higher. However the Secretariat does not have further information with respect to what these receipts cover.

Table 3: Number of LDCs' reporting EBOPS trade data in July 2010

Code	Service description	Exports	Imports
	Commercial services (Services excl. government serv.)	42	41
205	Transportation	34	35
236	Travel	35	35
	Other commercial services	34	35
245	Communications services	28	29
247	Telecommunication services	20	20
249	Construction services	14	21
253	Insurance services	26	31
260	Financial services	19	22
262	Computer and information services	13	24
263	Computer services	8	15
266	Royalties and licence fees	17	20
268	Other business services	28	29
287	Personal, cultural and recreational services	15	16
288	Audio-visual and related services	7	6

Source: Compiled based on data available to the WTO Secretariat.

Note: Reported data for 2007 in July 2010.

28. There is also the need to be able to analyse short-term developments of trade in services. To date, there are over 100 economies producing quarterly trade in services exports and imports data (although the time lag compared to merchandise trade statistics can be more important, i.e. 1 or 2 months), with some also producing some BPM5/EBOPS detail, as well as selected partner data. All regions of the World are relatively well represented (in particular North America and Europe), except for the Middle East where only 3 countries report quarterly data (Israel, Jordan and Lebanon). Among these reporters of quarterly data, around 30 per cent also produce monthly statistics, such as several EU (27) member countries, Australia, Bangladesh, Brazil, Jamaica, Japan, Republic of Korea, Malaysia, Morocco, Pakistan, Philippines, Serbia, Thailand, Turkey and United States.

B. FOREIGN AFFILIATES STATISTICS (FATS)

29. FATS are useful for assessing the importance of mode 3 (commercial presence) and, more generally, the phenomenon of globalisation. The concepts and definitions of this statistical framework were developed in MSITS 2002 (with a particular focus on services). Principles for recording FATS in MSITS 2010 are in line with international statistical standards, especially those governing the measurement of foreign direct investment (FDI) within the balance of payments manual (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 guidelines of MSITS 2010.¹⁶

30. The relative importance of the international supply of services under different modes varies widely between sectors. This may be due either to technology-related constraints, impinging in turn on transmission cost, or to policy-induced restrictions, or to commercial considerations. A relatively high degree of affiliates that supply a particular service might for instance imply that cross-border supplies are not technically feasible.

31. FATS compilation is still at an early stage of development, especially if compared to the more conventional balance of payments framework presented above. Up to the late 90s the United States was the only economy which had been publishing FATS.¹⁷ EU member states then gradually began

¹⁶ FATS are in general compiled for majority-owned foreign affiliates (i.e. the investor owns more than 50 per cent of shares or voting power). In MSITS 2010, the concept of control was introduced, i.e. the investor controls more than 50 per cent of the voting power.

¹⁷ Detailed information has been published for the last two decades in the U.S. Bureau of Economic Analysis' *Survey of Current Business* (October issue, latest article released in 2010: *U.S. International Services: Cross-Border Trade in 2009 and Sales Through Affiliates in 2008*).

compiling such statistics, and in 2007 FATS data collection became mandatory for all EU members.¹⁸ Consequently data availability in the region is now expected to grow rapidly. Eurostat also issued a recommendations manual on the compilation of FATS, which should help countries which are in the process of initiating such a data collection. A number of EU non-members (EU accession countries and other economies such as Norway or Switzerland) are also working on the basis of the Eurostat program of work. Besides these European experiences, a number of other economies (mainly from OECD but also a small number of non-OECD countries) have also started producing such statistics or have tested the possibility to do so by running pilot surveys.

32. In terms of publication by international organisations, most of the data have been published in the OECD publication *Measuring Globalisation: The Role of Multinationals in OECD Economies* and the accompanying database as well by Eurostat in its free-of-charge online database. This information is also used in UNCTAD's *World Investment Report* and the OECD publication *Measuring Globalisation: OECD Economic Globalisation Indicators*, which was published for the second time in 2010 and draws on various databases in order to analyse the phenomenon of globalisation.¹⁹ A number of national authorities have released relevant information on their respective websites/publications, which have not necessarily been reported to international agencies (e.g. China, Hong Kong China, India, Trinidad and Tobago).

33. Table 4 shows that in only a few years a relatively good FATS dataset has been developed. Actually since this Note was last presented, FATS for 14 additional Members have been published and many economies have also begun providing data for outward FATS (in particular EU members as a result of the new EU regulation). Thirty-nine Members compile FATS, of which 37 on the inward side (statistics on foreign affiliates operating in the compiling economy) and 25 on the outward side (data collected on the affiliates operating abroad of mother companies of the compiling economy). It is indeed easier for national agencies to collect information on inward FATS than to collect statistics on operations performed outside an economy's territory or jurisdiction (outward FATS). Nevertheless, an increasing number of Members have begun compiling such statistics, are envisaging doing so or are expanding their existing FATS data collection to improve their coverage.²⁰

34. The manuals recommend the compilation of a number of variables of interest for assessing the delivery of services through mode 3 and more generally globalisation, such as the value of sales (or output) of goods and services,²¹ value added, exports/imports, number of employees and number of enterprises. Other variables may also be compiled depending on the needs of the compiling economy. These variables are in general broken down by partner (origin or destination of investment) and by industry/product.²² Given the way statistical systems are generally built MSITS recommends as a first priority to break down variables according to the primary activity of the producers. If possible, economies are encouraged at a future stage to break down the variables sales, output and exports and imports by product (at least differentiating goods and services).

35. All countries compiling FATS do so according to the primary activity of the affiliates. Almost all economies publishing FATS compile data for turnover/sales (or output) which is the variable that relates directly to the measurement of mode 3. Other variables such as the number of

¹⁸ At the time of writing there are some derogations in place for some countries for 2-3 years.

¹⁹ The objective of these indicators is to gauge the intensity and magnitude of the globalisation process (including the trade dimension).

²⁰ At the time of writing, the Secretariat was informed that some Members were envisaging the compilation of FATS, in particular for inward.

²¹ Output is a preferred measure. Although in practice for services sales and output are identical, as FATS are primarily compiled by activity it may cause particular problems for wholesale and retail trade, finance and insurance activities where the value of total sales/turnover is much larger than the actual value of the service being supplied. For example, for wholesale and retail trade, the value of sales also includes the value of goods sold, whereas output will only cover the value of services provided by wholesalers (i.e. the margin realized on goods purchased for resale).

²² More information on partner breakdown of FATS is provided in the following sub-section.

employees or value added (at least on the inward side) are also widely compiled. Not many countries compile the exports and imports variables (at least on the outward side), given the difficulties met by reporters to provide appropriate data. However EU members are currently conducting pilot surveys to analyse the possibility of collecting information for these variables. Although not shown in table 4, many other variables are compiled by countries following international recommendations, and published by international agencies, in particular for inward data and at various degrees of detail. All these variables may prove useful for a broader analysis of globalisation (including the international supply of services).

Table 4: Availability of inward and outward FATS for services activities in 2010

	Inward				Outward			
	Number of employees	Sales/turnover or output	Value added	Exports Imports	Number of employees	Sales/turnover or output	Value added	Exports Imports
Australia	x		x		x	x		
Austria	x	x		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 Rep.	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	x		
Germany	x	x			x	x		
Greece	x	x			x	x		
Hong Kong, China	x	x	x					
Hungary	x	x	x		x	x		
India: Banking Software	x	x		x	x	x		x x
Ireland	x	x	x					
Israel	x	x	x	x		x		
Italy	x	x	x	x	x	x		
Japan	x	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		x				
Portugal	x	x	x		x	x	x	x
Romania	x	x	x					
Slovak Rep.	x	x	x		x	x		
Slovenia	x	x	x					
Spain	x	x	x	x				
Sweden	x	x	x	x	x	x		
Switzerland	x				x			
Trinidad & Tobago		x						
United Kingdom	x	x	x					
United States	x	x	x	x	x	x	x	x

Source: *Measuring Globalisation: The Role of Multinationals in OECD countries*, Eurostat online database and national authorities (2010).

36. The level of activity breakdown available differs between inward and outward FATS. In general data are available for all major ISIC activities (e.g. Wholesale and retail trade and repairs;

Transport; Insurance; Real estate, renting and business activities). However for social-type activities, such as Education or Health, or activities of banks (because of difficulty of estimating turnover/output of these firms), although the situation has been improving in recent years, the information is still often lacking.

37. As can be noted from the Eurostat database, for inward FATS, as they are in principle easier to collect (e.g. by extracting relevant information from existing structural business statistics), the breakdown is more detailed, whereas it is generally less detailed for outward.²³ For some countries, in general those where the number of affiliates is important (or probably have a longer experience in compiling FATS) the tendency is to have more detailed breakdowns (e.g. Germany, United States). For others, in particular smaller economies (where confidentiality may become an issue) or those which have recently begun compiling such information, the level of detail (at least for services) is relatively limited, e.g. China, Cyprus, Hong Kong China, Israel, Malta. Finally some economies have for the time being only been compiling FATS for services sectors of particular interest to their economy, such as India for computer and IT enabled services (outward) and banking services (inward and outward).

38. With respect to the product breakdown, only Canada and United States further break down these data by activity into total sales/supply of goods and total sales/supply of services. In its pilot study for outward FATS the Australian Bureau of Statistics had collected sales data broken by more detailed services categories (at the level of all industries and at the world level), however it seemed that such an exercise was burdensome for survey respondents.

39. It is important to bear in mind that balance of payments and FATS are not strictly comparable, the former being classified by services product sold or produced, whereas the latter are broken down according to the primary activity of the affiliate.²⁴ There is generally no direct concordance between these two classifications. However in the case of the data published by the United States Bureau of Economic Analysis, the figures for the U.S. are more comparable than for other countries as they refer to each (relatively detailed) activities' total output of services. However a one to one comparison without issues of interpretation will only be possible once FATS are broken down by detailed product, which is not foreseen in the near future given the difficulties met to report and compile such detail.

40. FATS still being relatively new, the way statisticians compile these statistics may vary widely between economies and not necessarily entirely comply with international guidelines. Given the possibilities they have, compilers may choose different target populations (in particular in terms of inclusion of certain affiliates or not), the identification of foreign ownership or control may differ as well as the choice of the statistical unit. The way the parent company and/or the investor or unit of ultimate control is defined or the choice of the industrial or product breakdown (and which classification) etc. may also be different. Over time comparability of data seems relatively good, nevertheless a number of break in series appear in the data in particular due to the general improvement of data sources and concepts surrounding these statistics. FATS should therefore be interpreted with caution. Although not limited to FATS, given the above considerations it is important that data be clearly documented and that reference is made to the methodological information that accompanies the data when analysing them.

²³ The Eurostat database for inward FATS does not include a total for services (i.e. Community, social and personal services are not covered).

²⁴ Except to a certain extent for services industries where the activities are relatively homogeneous, i.e. referring to the production of a single service or to services belonging to the same sector, e.g. activities of law firms.

C. STATISTICS BY DETAILED PARTNER

41. One of the recommendations of MSITS is that economies compile statistics on international trade in services on an individual trading partner basis, for both BOP trade in services and FATS. Such statistics may prove useful for negotiating and analytical purposes. However, not all economies have the necessary financial and/or human resources to develop bilateral statistics on the international supply of services. Thus, as a starting point, the MSITS suggests that economies start compiling these statistics at least for their main partners and most important services sectors/activities.²⁵ It is also recommended that, to the extent possible, compilers use an identical geographical basis for all related sets of services statistics (i.e. BOP trade in services and FATS).

42. At present about 50 economies, mainly developed, are known as reporting BOP trade in services data by partner to international organisations. As shown in table 1, organisations publishing such detail are Eurostat (where detailed reporting by member states is mandatory), OECD, UNSD (data collection since 2006) and WTO (selected data). The level of partner detail differs depending on the reporting economy and the services items considered. For example, for EU members the level of detail available for total services (i.e. including government services n.i.e.) covers almost all economies of the World. However in general the number of partner economies is inversely proportional to the detail of services categories. Thus, at a very disaggregated level of BOP/EBOPS service items bilateral statistics are available only for a very limited number of partners.

43. As indicated above the countries for which such information is reported are mainly from the EU-OECD area, as well as transition economies (e.g. Belarus, Kyrgyz Republic, Russian Federation). Since this Note was last updated, the number of developing economies for which data are made available is gradually increasing (e.g. Argentina, Hong Kong, China, Netherlands Antilles, Pakistan, Singapore or Tunisia). Given the difficulty to compile such information, some economies have decided to begin with their main partner(s) (e.g. Bhutan, Swaziland), or simply to focus as a first stage on the travel item for which it seems that countries are more at ease at compiling (Mexico, Turkey or Chile). Although not yet reporting data to international organisations, some Members have begun publishing some partner data in their national publications (e.g. China where MOFCOM provides some information on China's trade in services with its main partners) or are envisaging to do so (e.g. Brazil). Finally it seems that there are also a number of economies which actually have some data broken down by partner, but which are not currently made publicly available, in particular for the travel item. It is therefore expected that BOP trade in services data for a larger number of economies will become available in a not too distant future. Thanks to a larger availability of bilateral trade flow statistics and to the use of "mirror statistics", estimates on the composition of world services flows by region can be built, and the Secretariat is planning to develop with the OECD such a matrix for major services categories (total, transport, travel and other).

44. Given the more recent development of FATS, partner detail is less well established than for BOP trade in services statistics. Although in general these are included in the FATS data collection, their availability depends much on the level of development of the respective data collection systems and the types of activities considered. As a general rule the more aggregated the activity considered the less partner detail is available. Due to confidentiality constraints, it is often not possible for economies to publish very detailed FATS data broken down by both partners and industry, in particular in smaller economies or economies where affiliate activity is relatively limited.

²⁵ For BOP data, at least for total services trade and for the 10 main components of the BPM5 classification of commercial services and where possible, this should be done at the more detailed EBOPS level. For FATS this should be done at least for total services activities and for major industry categories. In both cases it is recommended to first concentrate on the most important partners.

D. OTHER INDICATORS

45. Two groups of variables are identified in MSITS in order to assess the international supply of services by mode: first, the value of services supplied (e.g. exports and imports, or inward and outward sales/output of services) which have been described above; and second, a number of more specific variables necessary for a more complete assessment. Additional information related to individual service sectors by modes of supply, such as quantitative information or financial transactions that are linked to the supply of services as defined by the GATS, would provide valuable additional information.

46. Although it may prove difficult to obtain information relating to specific arrangements, it may be useful to obtain aggregated economic statistics to estimate, for instance, the level of foreign direct investment in individual services sectors of a country, or the number of foreign affiliates established in a country's service industry.²⁶ The number of persons crossing a border (flows) or present (stocks) in the context of mode 4 is one of those additional needs (see section IV for a more detailed description). Other indicators include information on prices, production and employment, for example, national accounts, business and employment statistics, or performance indicators which trace the quantitative development of a service sector. Further quantitative information, that can be used to supplement information on international services trade flows, is also obtainable from sectoral performance indicators. Examples include international tourist arrivals, international freight or passengers carried, international telephone traffic, etc.²⁷ Much of this useful information may be drawn from various sources and is often available for a wide range of Members. The sources are described in document JOB(06)/227 *Overview of sectoral services statistics* produced in July 2006.²⁸ The Secretariat also recently developed *Services profiles* that provide in a one-page format standard information on key "infrastructure services" (*transportation, telecommunications, finance and insurance*).²⁹

47. Finally, other tools are also important sources of information for trade negotiators, analysts and economists, such as the WTO Services Database, which presents information on WTO Members' schedules of commitments and exemptions, the World Bank Regulatory Barriers in Services Trade database, providing a comprehensive repository of regulatory barriers to international trade in selected services sectors, or the Quantitative Air Services Agreements Review database. The OECD also developed a Services Trade Restrictiveness Index for three sectors: business services, construction and telecommunications services. These tools are described in the document *Trade and market access data for policy makers* which was first prepared for the Data Day held at the WTO on 18-19 May 2009.³⁰

²⁶ There are important relations between FATS and foreign direct investment (FDI) statistics. FDI is the category of international investment that reflects the objective of an investor to obtain a lasting interest in a foreign enterprise. The universe of the FATS enterprises is therefore a subset of the FDI universe. Although not all FDI result in the establishment of a commercial presence as defined in GATS, it is nevertheless a precondition for it. FDI transactions and positions are not, strictly speaking, FATS variables, but 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. FDI data can be found in Eurostat's online database, the OECD's *International Direct Investment Statistics*, the IMF's *Balance of Payments Statistics* and UNCTAD's *Foreign Direct Investment Database*.

²⁷ While these indicators allow analysis of the sector's developments over time, they are not suitable for cross-sector comparisons.

²⁸ An update of this document is planned for early 2011.

²⁹ At the time of writing *Services profiles* covered around 100 indicators for these sectors relating to investment, market performance, production, employment, trade, as well as performance rankings, for over 90 economies.

³⁰ The January 2010 update is available at http://www.wto.org/english/res_e/statis_e/broch_dataday_feb10_e.pdf.

IV. ASSESSING TRADE IN SERVICES BY MODE OF SUPPLY

48. The introduction of the EBOPS and the new statistical framework on FATS in MSITS 2002 have allowed to improve the coverage and refine measures for trade in services, in particular for approximating modes 1, 2 and 3. However, up to date, no reliable estimate exists on the value of mode 4 trade which renders any quantitative assessment difficult.³¹ When revising MISTS it was acknowledged that a separate chapter on the measurement of the international supply of services by mode needed to be drafted, with a special focus on mode 4 following the outcome of the discussions that took place within the Technical Subgroup on the Movement of Natural Persons – Mode 4. This Section will briefly present the contents of this new chapter of MSITS 2010 and some of the rare modes of supply compilation experiences will be shown. Finally the section will present more specifically additional recent achievements with respect to the development of the new statistical framework for assessing mode 4 (presence of natural persons).

A. ALL MODES OF SUPPLY

49. Table 5 presents an approximation of the relative sizes of modes of supply. This approximation is built on the basis of the new recommendations included in MSITS 2010 and the anecdotal information available for mode 4. Based on 2007 data, it seems that mode 3 represents the dominant mode for supplying services internationally (between 55 and 60 per cent of the total), followed by mode 1 (25-30 per cent) and mode 2 (10-15 per cent). Mode 4 represents less than 5 per cent of total international supply of services (approximately US\$200 billion).

Table 5 Statistical approximation of modes of supply, 2007 (percentage)

Mode 1 Cross-border supply	25–30
Mode 2 Consumption abroad	10–15
Mode 3 Commercial presence	55–60
Mode 4 Presence of natural persons	less than 5

Source: Magdeleine and Maurer, *Measuring Trade in Services in Mode 4*, 2010.

50. To enable an appropriate measurement of the supply of services by mode, as a starting point, MSITS 2010 proposes criteria derived from the GATS definitions, based on the following considerations:³²

- (a) FATS sales or output provide most information on the supply of services through mode 3; and
- (b) Service transactions as recorded in the balance of payments broadly cover mode 1, mode 2 and mode 4.

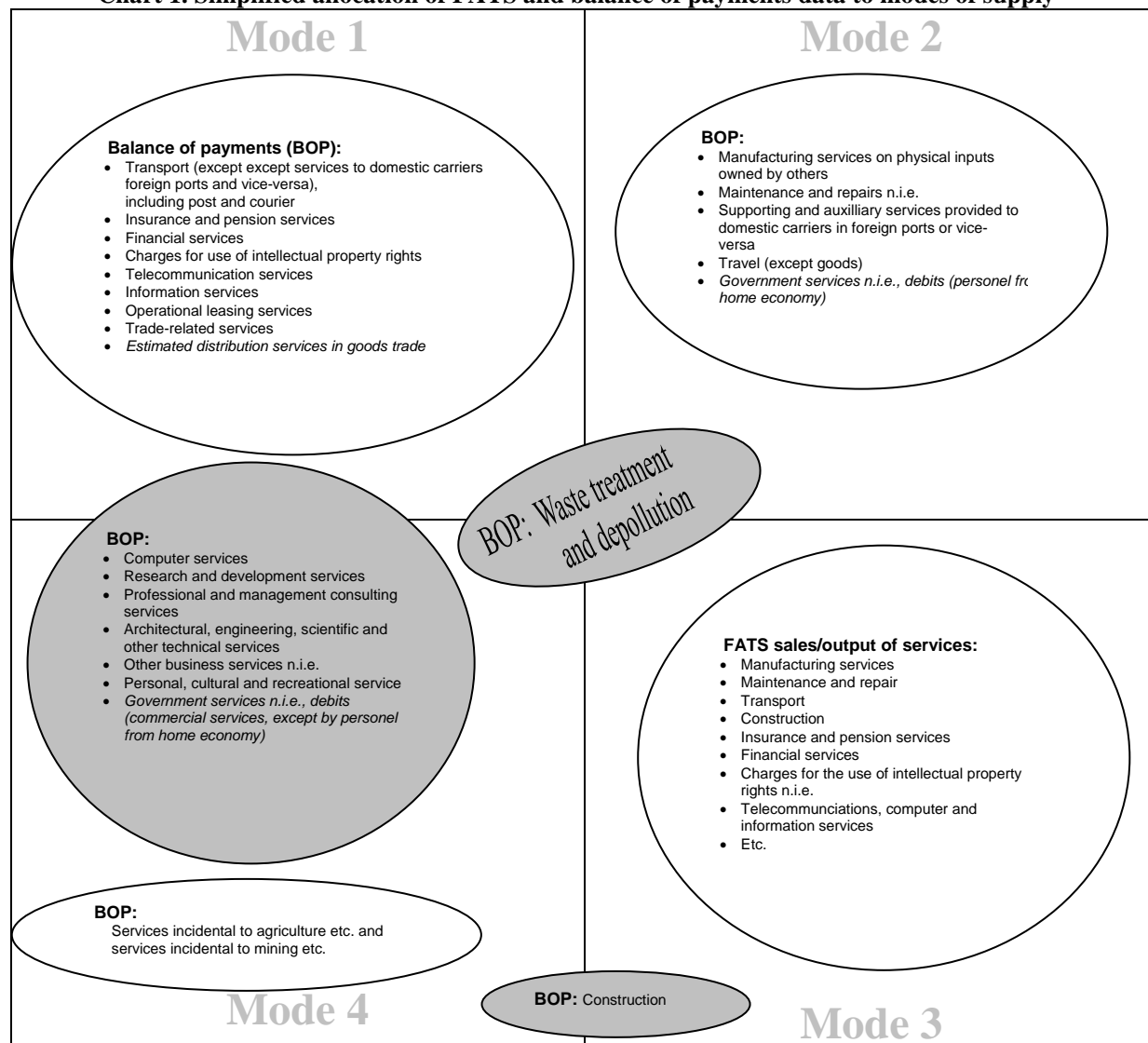
51. Ideally each balance of payments component at the detailed EBOPS level should be allocated to a mode. However this may be difficult as in many cases a single service payment or receipt reported to the BOP compiler, may involve more than one mode. MSITS 2010 therefore proposes some simplifying assumptions, i.e. each EBOPS type of service should be allocated either to one

³¹ As will be shown later in the section, although mode 4 information is often included in these statistics, given the smaller size of this mode it is difficult to identify or estimate it separately from other modes of supply.

³² These are simplification rules set out for statistical purposes.

dominant mode or where there is no dominant mode, to the most significant. Examples of balance of payments services transactions which largely correspond to one mode are communications services (mode 1), travel which is allocated to mode 2 or services incidental to agriculture and mining which are deemed to be provided predominantly through mode 4.

Chart 1. Simplified allocation of FATS and balance of payments data to modes of supply³³



52. There are however some types of service where no single mode is dominant, and in general this involves mode 4 together with another mode of supply (mainly mode 1, but can also be mode 3 for the BOP service item construction or mode 2 for waste treatment and de-pollution). Chart 1 summarizes the MSITS 2010 recommended allocation of statistics which can serve as a first guidance to estimate the value of the international supply of services broken down by modes. It identifies the dominant mode(s) of supply used for balance of payments services transactions, the shaded ovals showing the balance of payments items where there is no dominance and actually where mode 4 may represent an important proportion of transactions.³⁴ Items in italics correspond to items not separately

³³ Based on MSITS 2010 recommendations. The allocation may vary from economy to economy (general needs of economy, as well as taking into consideration more specific needs of sectors, data collection systems in place, resources, etc.). Items in italics are not separately available in BPM6/EBOPS 2010 version.

³⁴ If for a compiling economy allocation does not necessitate the separate identification of modes or if it has difficulties in implementing the allocation according to this chart (too burdensome or costly for compilers or reporters), the

available in EBOPS but if they were available would improve the measurement of the international supply of services by mode.

53. To then allocate transactions to modes, a number of compiling guidelines need to be elaborated on the basis of rules of national legislation and/or accounting conventions. As can be seen above, the possibility of estimating mode 4 flows within the balance of payments services account would help improve the estimations of the international supply of services by modes. To collect further information with respect to mode 4, a clear list of questions needs to be developed to help survey respondents and/or compilers to identify whether the payment for a service contract or a single payment could be classified as the supply through modes 1, 2, 3 or 4. A number of examples of questions are provided in MSITS 2010. The rules applied to compile these estimates by mode of supply, and the list of items where estimates of mode 4 are necessary, can be established using the chart above and considering each country's interest. This list should not necessarily strictly be limited to the services items identified in the chart.

54. At the time of writing most estimates that have been made are based on the basic FATS-mode 3 versus BOP services-other modes assumption (see for instance the examples provided in the previous version of this Note, document S/C/W/27/Add.2). However to the knowledge of the Secretariat some economies (e.g. Hong Kong, China) have started including a question on mode 4 within their main trade in services survey but no result has yet been published. Some other countries have attempted to do so by concentrating on a service sector of particular interest to their economy.

55. Given its interest in the international supply of computer and IT enabled services, the Reserve Bank of India (RBI) has been collecting since 2005 data on the international supply of computer software and information technology enabled services³⁵ according to the four modes. As shown in table 6 in fiscal year 2008-09 it is estimated that modes 1 and 4 exports represent 83 per cent (approximately US\$36.3 billion) of India's total international supply of computer and information technology enabled services (see table below), followed by mode 3 at 16.8 per cent. Indian's supply through modes 1 and 4 can be further broken down showing that although not dominant, mode 4 represents a significant share (26.8 per cent) of the international supply of these services. For the companies which have international transactions of a value of at least US\$22 million, the share is around 28.4 per cent.

Table 6. Indian international supply of computer software and Information Technology enabled services by mode, 2008-09

Size of Transactions (million US\$)	Amount (million US\$)					Per cent Share in Total			
	Mode 1	Mode 2	Mode 3	Mode 4	Total	Mode 1	Mode 2	Mode 3	Mode 4
< 0.2	37	0	6	1	44	83.2	0.0	13.9	3.0
0.2-2.2	447	5	43	18	513	87.1	0.9	8.4	3.6
2-22	1930	0	225	111	2266	85.2	0.0	9.9	4.9
> 22	22194	28	7051	11592	40865	54.3	0.1	17.3	28.4
Total	24607	32	7326	11723	43688	56.3	0.1	16.8	26.8

Source: Reserve Bank of India (2010), Survey on Computer Software & IT Services Exports: 2008-09. (converted to US dollars by the Secretariat).

rules can be simplified by concentrating on the 12 most relevant BPM6 service transaction aggregates, FATS and if possible the estimated value for distribution services associated with cross-border goods trade.

³⁵ This is not a specific service category in EBOPS. In the balance of payments services should be classified according to the type of service rendered, not the way it is delivered. In other words these transactions would be identified in EBOPS under computer services, and other types of business services (e.g. legal services, engineering services).

56. The simplifying assumptions for the allocation by mode of supply set out above should be regarded as a guide to first steps in the estimation process and be subjected to periodic review and empirical testing of their validity and appropriateness. This allocation may vary from economy to economy and should be adapted to each compiling economy's specific situation and information needs. For particular important services sectors of an economy, compilers may invest further to improve the estimation of these items by mode of supply, and this is particularly true for mode 4. The estimation by mode could also be initiated or improved over time according to the information obtained by compilers, notably on the way service sectors operate. For instance the use of partial or anecdotal information on a number of specific sectors could be used as a starting point.

57. Although not entirely consistent with statistical guidelines and the GATS definitions of modes of supply, the Australian International Legal Services Advisory Council (ILSAC) developed a survey on the Australian Export Market for Legal Services for financial years 2004-05 and 2006-07. The latest results showed that a fifth of its international supply of services was supplied through commercial presence and that a bit less than a fifth (approximately US\$93 million) was "Fly in-fly out",³⁶ which could for instance be used to develop an approximation for mode 4 trade. Such survey results could actually be compared to the official BOP and FATS data and eventually be used to derive modes of supply indicators for exports of legal services. According to reports, ILSAC is planning to collaborate further with the Australian Bureau of Statistics in order to better align definitions used and improve the quality of the data published for legal services.

58. We are able today to present some studies on the international supply of services by modes at a specific sector level, however we are still lacking information on the overall structure of Members' trade in services by mode. This probably results from other priorities identified by compilers (e.g. implement BPM5/BPM6 guidelines, implement data collection at the EBOPS level) as well as the difficulty to identify modes of supply within BOP services transactions. However now that the revised statistical guidelines surrounding trade in services statistics have been approved, it is expected that in the not too distant future compilers start implementing the MSITS 2010 recommendations according to a phased approach, in particular the identification of balance of payments services transactions where mode 4 is believed to be an important component. The following step would then be to work on a separate estimation of modes for these transactions.

B. MODE 4³⁷

59. As for other modes, MSITS 2010 identifies the information needs for a complete analysis of modes of supply. For mode 4 it identifies two: first, the value of the service provided for categories of people that fall under the mode 4 regime, and second, the number of natural persons moving (flows) and temporarily present (stocks) in the context of the supply of a service.³⁸

60. In terms of value, only the trade carried out through the presence of contractual service suppliers (CSS) and independent professionals (IP) would prove relevant (i.e. those directly involved in the rendering of services through a service contract).³⁹ For the other categories of natural persons (i.e. those generally indirectly involved in the provision of services), this would not be relevant: for intra-corporate transferees and other foreign employees of foreign service suppliers, the service is

³⁶ This category includes work undertaken by lawyers normally resident in Australia, either on a 'fly in-fly out' basis or from their 'desk' in Australia if it is not necessary to fly in to actually undertake the work.

³⁷ The Secretariat Background Note S/C/W/301 *Presence of natural persons* provided information on the measurement of mode 4, which is why this section only summarizes the major MSITS 2010 outcomes with respect to its measurement.

³⁸ Ideally the information has to be further broken down in terms of the type of service supplied, the countries of origin/destination of the trade, the relation between the parties as well as by skill and occupation of the persons and by length of stay. However it is important to note that it may be difficult to obtain information at such a high level of detail.

³⁹ In international statistical standards, CSS and IP are respectively referred to as 'CSS as employees of a juridical person' and as 'CSS as self-employed'.

being supplied through the affiliate (and captured under mode 3, in FATS), while the activities of business visitors do not, at least initially, involve financial transactions. As a consequence the value of mode 4 trade is mainly recorded in the balance of payments services transactions, as explained in the above section. It is not recorded under the balance of payments items compensation of employees and workers remittances/personal transfers that are often used in economic literature as statistical indicators to estimate the size of mode 4 trade. Those are both labour income measures and in a majority of cases do not cover the mode 4 population. Consequently they cannot be used to measure mode 4. Only BOP trade in services transactions measure trade flows that are specified and originating from service contracts between resident service suppliers and non-resident consumers, or between non-resident service suppliers and resident consumers.

61. As explained above, for a more global analysis of services industries or market opportunities there exist a number of additional useful statistics that can be drawn from various statistical frameworks. With respect to mode 4, information on the number of persons moving and present abroad are naturally important indicators to consider. Relevant information will be found in tourism or migration statistics, but rarely at the appropriate level of detail or separately available. Information on flows and stocks of natural persons could be derived from the definitions used in the corresponding statistical frameworks, that is the International Recommendations on Tourism Statistics – IRTS 2008; Tourism Satellite Accounts: Recommended Methodological Framework – TSA-RMF 2008; and the Recommendations on Statistics on International Migration, Revision 1 – RSIM, Rev.1 (in particular looking at non-migrant categories). While rough aggregated mode 4 information may be drawn from these statistical systems, a more complete picture will require additional breakdowns in relevant categories. Such statistics will not perfectly mirror the definitions of the GATS, but could provide a reasonable indication of the number of mode 4 persons crossing borders and present abroad in the context of trade in services. In addition they would probably only need minor adjustments in order to better respond to information needs related to the GATS.

V. CONCLUSIONS AND FUTURE PROSPECTS

62. This paper describes progress achieved in data availability since 2006. Due to higher data availability, services trade flows can be analyzed in more detail compared to a few years ago (the Addendum describes trends in trade and recent developments for services sectors).

63. Some 180 economies now report aggregated services trade data. At the same time, these economies have extended their reporting of detail for their individual service sectors. According to the recommendations of MSITS 2002, economies have also enhanced their reporting of the trading partner. At the time of writing this Note, some 50 economies report their international trade in services transactions by origin and destination (mainly developed and transition economies). In parallel to improvements for balance-of-payments derived trade in services statistics, with FATS data collection being mandatory in EU since 2007, data for this statistical framework are also more widely available. However, FATS data sets are still mainly disseminated by OECD or EU member countries, although a number of non-OECD countries have either started or are experimenting with pilot surveys. For the analysis of these data sets, nevertheless, analysts often face only a time series period and cross-country comparability is often hampered by methodological differences. In spite of these positive developments of data availability, many developing countries still do not publish either a full breakdown by service category or partner detail, nor are there visible developments of a FATS framework.

64. The Hong Kong Ministerial Declaration, Annex C refers in paragraph 10 to WTO, *inter alia*, providing targeted technical assistance. It spells out that "... such assistance should be provided on, *inter alia*, compiling and analysing statistical data on trade in services, [and] assessing interests in and gains from services trade, ...". Since then, the Secretariat's statisticians have organized a number of national seminars on measuring international trade in services upon the request of Members. The

Secretariat has also pursued seminars that are carried out in co-operation with other international organizations such as the United Nations Statistical Division (UNSD), the OECD, IMF, World Bank, Eurostat and a number of regional organizations (see Annex 1). While these activities helped to spread the awareness and capacity for compiling trade in services statistics according to MSITS 2002, further improvements are still needed as to the reporting of sector and partner detail in the countries' balance of payments. Furthermore, documentation of available statistics often does not include a description of differences with international standards (metadata), which makes interpretation difficult. As for FATS, countries outside the OECD region need to be encouraged further to develop pilot surveys and develop FATS data sets. Statistical reporting on modes of supply is still non-existent, but the revised MSITS 2010 has helped clarifying the "statistical" interpretation of mode 4. The new chapter in MSITS 2010 on measuring the international supply of services by modes of supply should help to guide the development of these statistics.

65. However, it should also be noted that although the revised MSITS 2010 and the respective EBOPS 2010 will bring about further detail and clarification as to the definition of service sectors, gaps will continue to exist as to what statistical systems such as the BOP or FATS can deliver and what trade negotiators may require. A priority is therefore not only the rapid implementation of MSITS 2010, but also the search for alternative data sources that may complement existing data sets on trade in services. Many economies started to provide or experiment the compilation of trade data by enterprise characteristics. These data sets, based on the linkage of trade and business registers, allow to judge trade developments from a microeconomic perspective and are thus an interesting policy element in analysing trade developments from another angle.

66. As for the implementation of MSITS 2010, there are a number of key factors that play an important role. First, MSITS 2010 needs to be complemented with compilation guidance and the inter-agency Task Force on Statistics of International Trade in Services is developing such material. Second, technical assistance by international and national agencies, and bilateral activities between economies need to be coordinated to enhance their efficiency. Third, international and regional agencies need to support national initiatives, for example, the development of pilot studies. Most important, especially for developing FATS, is the close co-operation between national agencies to identify potential uses and data sources that could help to develop this statistical framework. Ideally, these statistics should be gauged against applied regimes in the services sectors to allow for a sound analysis and monitoring of trade liberalization.

ANNEX

Selected Seminars, Conferences, Technical Assistance on Statistics on International Trade in Services, 2006-2011	
2006	
Geneva	Regular participation in WTO Trade Policy Courses, Trade in Services Statistics
February 2006 Dakar, Senegal	WTO Regional Trade Policy Course, Trade in Services Statistics
May 2006 Taipei, Chinese Taipei	National Seminar on Statistics of International Trade in Services
September 2006 Beijing, China	International Seminar on Trade in Services
2007	
Geneva	Regular participation in WTO Trade Policy Courses, Trade in Services Statistics
April 2007 Tunis, Tunisia	Regional Seminar on Statistics of International Trade in Services
May 2007 Islamabad, Pakistan	WTO National Seminar on Statistics of International Trade in Services
Geneva	Regular participation in WTO Trade Policy Courses, Trade in Services Statistics
November 2007 Shanghai, China	China Trade in Services Conference 2nd International Seminar on Trade in Services
2008	
Geneva	Regular participation in WTO Trade Policy Courses, Trade in Services Statistics
October 2008 Manila, Philippines	APEC Capacity Building Seminar Workshop on Measurement of International Trade in Services
October 2008 Beijing, China	3 rd International Seminar on Trade in Services
30-31 October 2008 Mexico City, Mexico	Measuring and Promoting Services Trade -- International Seminar
2009	
Geneva	Regular participation in WTO Trade Policy Courses, Trade in Services Statistics
March 2009 Washington, D.C., United States	International Trade in Services Course World Bank Training in Services
June 2009 Durban, South Africa	World Bank Workshop on Statistics of International Trade in Services Statistics for the BRIC and other countries
November 2009 Lusaka, Zambia	National Seminar on Statistics of International Trade in Services Statistics
December 2009 Rio de Janeiro, Brazil	UNSD/ECLAC/IBGE/BCB Workshop on Statistics of International Trade in Services Statistics for Latin American countries

Selected Seminars, Conferences, Technical Assistance on Statistics on International Trade in Services, 2006-2011	
2010	
Geneva	Regular participation in WTO Trade Policy Courses, Trade in Services Statistics
January 2010 Cairo, Egypt	Services Trade Reform and Negotiations in the MENA region (World Bank Institute)
February 2010, Vienna, Austria	Services Trade Reform and Negotiations in the MENA region (World Bank Institute)
March 2010 Kuala Lumpur, Malaysia	National Seminar on International Trade in Services Statistics
November/December 2010, Kunming, China	5th International Seminar on Trade in Services
December Hanoi, Viet Nam	Statistics of International Trade in Services: Challenges and Good Practices Workshop for the South-East Asian countries
2011	
Geneva	Regular participation in WTO Trade Policy Courses, Trade in Services Statistics
January 2011, Muscat, Oman	Regional workshop on International Trade in Services Statistics (Arab countries)
January 2011 Mauritius	COMESA/Commonwealth Secretariat Workshop on Statistics of International Trade in Services