

V. Trade in services statistics by mode of supply

A. Introduction

5.1. Outcomes of trade negotiations depend on governments' policy objectives and constraints as well as their negotiators' skills and strategies. In this context, research and analysis are important factors to identify issues of commercial importance to an economy. The parties involved need to identify their economies' strengths and weaknesses, assess impacts of different policies and they also need to be informed of the opportunities offered by their partners' markets. Trade statistics play an important information role in building strategies based on individual performances of domestic services industries and/or the existence of regulatory barriers. While available statistics allow the analysis of trade at the global level, for a country, region or the world, it is much more difficult to analyse bilateral trade flows of individual service sectors by mode of supply, given the lack of adequately disaggregated data.

5.2. As described in paragraphs 2.xx to 2.xx on GATS, in addition to *general obligations* which apply across all service sectors of all WTO members, countries undertake *specific commitments* with respect to market access or national treatment in individual services sectors. In this context, members are allowed to subject their commitments to limitations with regard to particular types of mode of supply. Statistical information on these services sectors by mode of supply and origin and destination (partner country) can be used to improve individual countries' negotiation strategies, to monitor trade developments in general, or to compare and analyse the extent and effects of trade liberalization over time.

5.3. Thus, governments would need statistics on service sectors and modes of supply for which they may want to negotiate commitments in order to assess the economic stakes involved. However, in many instances, available statistics do not allow for a detailed assessment. The balance of payments only registers transactions between residents and non-residents, and important aspects of trade in services taking place through commercial presence or the presence of natural persons are either not captured or difficult to identify

separately.¹ In addition, service negotiations take place mainly on the basis of W/120 developed by the GATT Secretariat, which was elaborated on the basis of the CPC Prov. The W/120 has not been revised since 1991 for changes in the CPC, nor have existing schedules of commitments been transposed to subsequent versions of the CPC. Moreover, the divergence of coverage with the classifications used for available trade in services statistics and the lack of information on modes of supply make a proper assessment of trade in services difficult. Box xx provides an example of information needs for tourism services for a complete analysis of this service sector.

5.4. At a disaggregated level, it would be desirable to have information on flows by mode of supply and trading partner to be able to analyse the origin of the service or service supplier and its territorial presence at the moment of the transaction.² Ideally, statistics on international trade flows should therefore be available by country of origin and destination to allow for an identification of principal suppliers and consumers. A link of trade with output data, whether by activity or product, would enable a more complete and improved analysis of trade in services. Trade data at volume level would allow rounding up the economic analysis with respect to constant price considerations in various statistical frameworks.

5.5. Gaps exist between what a country's trade in services statistics (notably the balance of payments) can cover in terms of detail on international transactions by service sector and mode of supply and the respective needs of trade negotiators. Furthermore, service suppliers/consumers may not always be aware of their international supply/consumption of services. Potentially any individual or economically active entity, whether in the government or private sector, profit making or not, can purchase foreign services, whether directly or through intermediaries.

¹ See footnote xx for a definition of natural persons.

² Statistical requirements of GATT and UNCTAD in the Area of International Trade in Services. Voorburg Group meeting, Oslo, 1993. Joint paper of GATT and UNCTAD.

Box xx: An example: analyzing trade in tourism and travel-related services

Tourism and travel-related services are an important type of service exported by many economies. The international supply of tourism services is often associated with the second mode of supply identified by GATS, mode 2. However, other GATS modes of supply may be involved when supplying tourism services to foreign consumers, such as the establishment abroad of a branch of a hotel chain (mode 3) which may be associated with the presence of a foreign manager (intra-company movement, mode 4); the sale of services by international tourism operators through computer reservation systems (mode 1); foreign tourist guides present in the host economy to provide tourist guide services (contractual service supplier, mode 4), etc.

In the GATT Services Sectoral Classification list (W/120), which is generally used by negotiators for making commitments, this sector is divided into four sub-sectors: Hotels and restaurants, Travel agencies and tour operator services, Tourist guide services, and Other services. Negotiations are in general conducted according to these sectors (or a breakdown of these sectors) and for the four modes of supply.

For a complete assessment of this service sector, negotiators and analysts will need to use statistics sourced from various statistical frameworks. As a starting point analysts would analyse the tourism industries within a given economy. This could be done by using national accounts, business or employment statistics relating to the tourism industry. However, for a more detailed analysis, tourism statistics would be the most relevant source. The Tourism Satellite Accounts will notably provide comparable macroeconomic aggregates on tourism, on the demand of visitors for and the supply of tourism services, production accounts of national tourism industries, basic information required for the development of models of the economic impact of tourism and links between economic data and other non-monetary information (number of trips, duration of stay, purpose of trip).

To measure trade in tourism services, one should consider the travel item of the balance of payments. While it excludes transportation of non-residents provided by non-residents in the visiting economy as well as international transportation (covered under passenger services in transportation), the standard breakdown of this balance of payments item (business and personal) does not allow a correspondence with the scope of the W/120. BPM6 and EBOPS suggest an alternative supplementary breakdown into goods, local transport, accommodation services, food-serving services and other services which would improve links with the classification used by negotiators -- but this covers only mode 2 where the consumer is abroad to consume tourism services. To cover the supply of tourism services through mode 1 or 4, one should be considering other balance of payments items such as other business services n.i.e. (e.g., the cross-border provision of services by tour operators on the Internet or foreigners supplying tourist guide services in a host country). While balance of payments breakdowns may match some needs of trade negotiators, they do not fully meet the scope of the negotiating classification. This could therefore be complemented with a further breakdown of these items using the list of tourism characteristic products as defined in the IRTS 2008 and TSA-RMF 2008. International tourism expenditure as defined in tourism statistics could also complement travel data (see annex xx). To measure trade through mode 3 FATS sales of services for activities related to tourism (Hotels and restaurants activities, Travel agency activities) should be considered.

The previous paragraph has identified how to measure trade in tourism services. However negotiators also need to consider other types of statistics for a more in-depth analysis of this trade as well as of market access commitments. From a mode 3 perspective, information on FDI flows, income and positions would enable an analysis of foreign investment in the tourism sector, which could be complemented with foreign affiliates statistics on their number, employment or gross capital formation. For mode 2 one could consider statistics on the number of arrivals of international passengers drawn from tourism statistics. This framework could also be used for collecting information on the number of persons traveling abroad to supply tourism services under mode 4. For this, as an alternative, the non-migrant category of the RSIM Rev.1 could be considered.

5.6. While statistical frameworks need to be geared towards user needs, they also have to maintain consistency of time series over time. Furthermore,

budget constraints and the respondent's willingness to provide additional information limit the extension of statistical coverage with respect to scope as well as

descriptive variables. The Manual strikes a balance between these constraints and needs. While Chapter xx deals with the extension of the breakdown of the services item of the balance of payments classification and Chapter xx with the supply of services through foreign affiliates, Chapter xx describes in more detail the supply of services through the presence of natural persons and measurement issues of trade in services by mode of supply.

5.7. GATS is an important driving force for the development of international trade in services statistics. Section B addresses the GATS extension of the definition of trade in services to include the four modes of supply, explores links between these and describes information needs. Section C portrays the conceptual framework for measuring trade in services by mode of supply and individual services sector using a country's balance of payments statistics and FATS. It describes the statistical allocation of trade in services by mode of supply that is operational in a statistical context and consistent with international standards. Particular attention is given to the statistical conceptualisation of trade through the presence of persons as defined in GATS. Section D describes additional indicators that are useful in analysing trade in services commitments and other aspects of flows by mode of supply. Albeit this Manual does not serve as a compilation guide, it does provide some indications as to how to use and possibly extend existing statistical frameworks and data derived thereof for analysing international trade in services by mode of supply.

B. The GATS' four modes of supply and information needs

1. GATS international trade in services

5.8. As indicated in Chapter xx, the definition of trade in services in GATS covers four different modes of supply.

(a) Cross-border supply

5.9. **Mode 1, cross-border supply**, takes place when a service is supplied "from the territory of one Member into the territory of any other Member." That is, the service is rendered by a resident in one economic territory to a resident of another economic territory and only the service "crosses the border". This is similar to trade in goods where the product is delivered across borders and the consumer and the supplier remain in

their respective territories. Such a supply of service may be enabled by communication tools such as telephone, fax, Internet, courier or post. For example, a law firm delivering legal advice by phone to a consumer, a physician providing medical diagnosis to a patient via e-mail, or a financial services supplier supplying portfolio management or brokerage services across the border.

(b) Consumption abroad

5.10. **Mode 2, consumption abroad**, occurs when the service is supplied "in the territory of one Member to the service consumer of any other Member". That is, the consumer consumes the service outside his/her home territory: either the consumer or his property is abroad. Tourist activities such as visits to museums and theatres, or persons traveling abroad to receive medical treatment, or follow language courses are typical examples. Services such as ship repair abroad, where only the property of the consumer moves or is situated abroad, are also covered. Services suppliers may often not be aware of their international supply under mode 2.

(c) Commercial presence

5.11. **Mode 3, commercial presence**, takes place through "the supply of a service (...) by a service supplier of one Member, through commercial presence in the territory of any other Member". GATS recognizes that it is often necessary for services suppliers to establish a commercial presence abroad to ensure closer contact with the consumer at various stages of the production, distribution, marketing, sale and delivery as well as after-sales services. Commercial presence in a market abroad covers not only juridical persons in the strict legal sense, but also legal entities that share some of the same characteristics, such as representative offices and branches. Services supplied by a foreign-owned branch or subsidiary of a bank, medical services provided by a foreign-owned hospital and courses offered in its host country by a foreign-owned school are examples of supplies through commercial presence.

5.12. Commercial presence as defined in GATS means any type of business or professional establishment, including through the constitution, acquisition or maintenance of a juridical person, or the creation or maintenance of a branch or representative office, within the territory of a member for the purpose of supplying a service. In this case a juridical person has to be owned (i.e. the owner holds more than 50% of the equity interest) or controlled (power to name a majority of its directors or otherwise to legally direct its actions) either

by a natural person (i.e. an individual) or by a juridical person of another member. This definition of commercial presence shows that this mode of supplying services is closely linked to the objective of foreign suppliers to obtain a lasting interest in another economic territory to render services to consumers of that territory or other territories. In such cases, direct investment flows are deemed to be associated. As will be shown below, short-term arrangements (i.e. establishing a commercial presence for less than one year with no direct investment relationship) that may be preferred by foreign suppliers (whether for a matter of convenience or necessity such as certain short-term construction projects) will qualify as well as the supply of services through mode 3 under the GATS. The associated transactions will be covered by the services account of the balance of payments.

(d) Presence of natural persons

5.13. **Mode 4**, *presence of natural persons*, occurs when an individual is temporarily present in the territory of an economy other than his own to provide a commercial service.³ GATS defines mode 4 as 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 is generally understood as covering contractual services suppliers, whether (i) employees of a foreign service supplier or (ii) self-employed⁴; (iii) intra-corporate transferees and foreign employees directly recruited by foreign established companies⁵; (iv) service sellers who

enter the host country to establish contractual relationships for a service contract or persons responsible for setting up commercial presence. There is initially no actual service traded by category (iv). Mode 4 applies to service suppliers at all skill levels. The purpose of the stay in the territory of the member should be to supply a service. For example, mode 4 covers computer services delivered to the consumer either by an employee of a foreign computer company or by a self-employed computer consultant within the context of a services contract. Other examples include a computer programmer who is transferred temporarily to work abroad in the branch of his employer (intra-corporate transferee), a plumber present in a host country in order to work on a building site in the context of a service contract or a fruit-picker going abroad to work temporarily in a farm in the context of a services contract between a foreign specialized employment agency (the employer of the fruit-picker) and a host country farm (the client of the employment agency).

³ A natural person of a WTO member is an individual which is a national of that member. However this definition may be extended where a member has specifically indicated that some non nationals which are permanent resident in that member have the same rights as its nationals in respect of measures affecting trade in services and as notified in its acceptance of or accession to the WTO Agreement. There are only 6 members which have notified this treatment and these are Armenia, Australia, Canada, Hong Kong - China, New Zealand and Switzerland.

⁴ Some self-employed persons may also establish in the host market and supply services from within this territory. Although a mode 4 commitment guarantees the right for this person to be present in this territory, it is considered in this Manual that the supply of the service is carried out through a commercial presence.

⁵ The supply of the service to the consumer is through the affiliate. For foreigners directly recruited by the foreign affiliate there may be ambiguity with respect to their coverage under mode 4 as one could consider, in particular for foreigners recruited from within the host economy, that these individuals are seeking to access the employment market of the host economy.

Box xx: Self-employed or employee?

“Self-employed” and “independent” service suppliers are terms that are often used interchangeably. BPM6 recommendations describe these individuals (hereafter named self-employed) as deemed to operate their own unincorporated enterprises, and sell output they produce.^a Self-employed persons, who may also employ others, are generally responsible for decisions on markets, scale of operations and finance, and are also likely to own, or rent, machinery or equipment on which they work.

An employer-employee relationship exists when there is an agreement, which may be formal or informal, between an enterprise and an individual, entered into voluntarily by both parties, whereby the individual works for the enterprise in return for remuneration in cash or in kind. The remuneration is normally based on either the time spent at work or some other objective indicator of the amount of work undertaken. If an individual is contracted to produce a given result, it suggests a service contract relationship between the enterprise and a self-employed.

It may not always be clear whether an employer-employee relationship exists between the individual and the enterprise or whether the individual is a self-employed and is supplying a service to the client enterprise. Provision of several types of services may pose such problems because enterprises may choose either to purchase a service from a self-employed worker or to hire an employee to perform the job. The status of the worker has important implications. If an employer-employee relationship exists between the worker and the enterprise for which the work is being done, the corresponding payment constitutes compensation of employees. If the individual is self-employed (i.e. an employer-employee relationship does not exist), then the payment constitutes a purchase of services.

Several factors may have to be considered in determining whether an employer-employee relationship exists. An important test is that of control. The right to control or to direct, both as to what shall be done and how it shall be done, is a strong indication of an employer-employee relationship. The method of measuring or arranging for the payment is not important as long as the employer has the effective control both on the method and the result of the work undertaken by the individual. However, a certain control on the work being undertaken may also exist for the purchase of a service. Therefore, other criteria should also be used to define more clearly the employer-employee relationship. For example, an individual being solely responsible for social contributions would suggest that it is a self-employed service provider. In contrast, payment of social contributions by the employer is an indication of an employer-employee relationship. If the individual is entitled to the same kind of benefits (e.g. allowances, holidays, sick leaves, etc.) that the enterprise generally provides to its employees, this may indicate an employer-employee relationship. Payment of taxes on the provision of services by the individual is an indication for a self-employed service provider.

For operational reasons it is the payment of taxes or social security contributions that will frequently determine the perception of individuals involved, the way accounting systems record their remuneration and as a consequence how the distinction is made in available sources for statistics (registration in the client economy of a transaction as compensation of employees or payment for a service).

a BPM6 recommendations for the identification of self-employed and employees are consistent with those of 2008 SNA. These recommendations are also broadly consistent with those in the Resolution concerning the International Classification of Status in Employment (ICSE-93) adopted by the fifteenth International Conference of Labour Statisticians (ICLS) in January 1993 and with other resolutions of the ICLS concerning the definitions of the economically active population. "The groups in the ICSE-93 are defined with reference to the distinction between "paid employment" jobs on the one side and "self-employment" jobs on the other. Groups are defined with reference to one or more aspects of the economic risk and/or the type of authority which the explicit or implicit employment contract gives the incumbents or to which it subjects them. Paid employment jobs are those jobs where the incumbents hold explicit (written or oral) or implicit employment contracts which give them a basic remuneration which is not directly dependent upon the revenue of the unit for which they work (this unit can be a corporation, a non-profit institution, a government unit or a household). Some or all of the tools, capital equipment, information systems and/or premises used by the incumbents may be owned by others, and the incumbents may work under direct supervision of, or according to strict guidelines set by the owner(s) or persons in the owners' employment. (Persons in "paid employment jobs" are typically remunerated by wages and salaries, but may be paid by commission from sales, by piece-rates, bonuses or in-kind payments such as food, housing or training.) Self-employment jobs are those jobs where the remuneration is directly dependent upon the profits (or the potential for profits) derived from the goods and services produced (where own consumption is considered to be part of profits). The incumbents make the operational decisions affecting the enterprise, or delegate such decisions while retaining responsibility for the welfare of the enterprise. (In this context "enterprise" includes one-person operations.)" For more information on ISCE see <http://www.ilo.org/public/english/bureau/stat/class/icse.htm>.

5.14. The *Annex on the Movement of Natural Persons supplying Services under the Agreement* specifies that the agreement does not apply "to measures affecting natural persons seeking access to the employment market" nor does it apply "to measures regarding citizenship, residence or employment on a permanent basis."

Understanding mode 4 – an excursion

5.15. If the service supplier is defined as being located in member B, and the service consumer is located in A, then GATS Mode 4 may be considered as covering the following major categories of natural persons:⁶

- *Contractual service suppliers - self-employed*: a self-employed person of member B enters member A in the context of a service contract with a service consumer in A.⁷ For example, legal advice is delivered to foreign consumers by a self-employed lawyer. However it may not always be straightforward to determine if the specialist is a self-employed person or if an employee-employer relationship exists between this person and the "client" (see box xx). If an employer-employee relationship exists then the individual would not be included in this statistical framework.
- *Contractual service suppliers as employees of a juridical person*: employees of the service supplier in member B are sent to member A in order to supply a service in the context of a contract between their employer and a service consumer in A. For example, computer services are supplied to consumers of A by an employee of a foreign IT services firm of B who is sent to A to deliver this service;

⁶ These categories are the major groupings of persons moving abroad in the context of mode 4 used in this statistical framework. In trade negotiations, schedules may refer to these major groupings but may also use different naming or refer to more specific categories of persons. To ensure the international comparability and transparency of the data, compilers are encouraged to use the categories identified in this statistical framework and break down information according to the more specific needs identified.

⁷ Trade negotiators often refer to this category as "independent professionals". Some self-employed persons may also establish themselves in the host market and supply services from within this territory. Although a mode 4 commitment guarantees the right for this person to be present in this territory, it is considered in this Manual that the supply of the service is carried out through a commercial presence.

- *Intra-corporate transferees and foreign employees directly recruited by foreign established companies*: the service supplier of member B has a commercial presence in member A and sends its employee to its affiliate in A or the affiliate recruits directly foreign employees.⁸ The supply of the service to the consumer is however taking place through the affiliate (mode 3). For example, a surgeon is transferred temporarily to work in a branch of his employing hospital in a country abroad. The mode 4 commitment guarantees the right of the supplier in B to send staff to A (or the affiliate to recruit foreign staff) in order to supply a service through its local affiliate.⁹ Intra-corporate transferees are a particularly relevant sub-group as many commitments are made and negotiations carried out with respect to this category of persons.
- *Services sellers* who are attempting to establish contractual relationships for a service contract, and *persons responsible for setting up commercial presence*: these persons enter member A in the context of the negotiation for a service contract or for setting up the establishment of an affiliate in member A.¹⁰ There is no trade in economic terms and consequently no accompanying transaction taking place, at least initially. Their movement in order to conduct negotiations is guaranteed by commitments under mode 4. The negotiations will then eventually lead to the future provision of services through either of the modes of supply.

⁸ For foreigners directly recruited by the foreign affiliate there may be ambiguity with respect to their coverage under mode 4 as one could consider, in particular for foreigners recruited from within the host economy, that these individuals are seeking to access the employment market of the host economy.

⁹ Note that the mode 4 presence is not always necessary to supply a service via mode 3. This is just a possibility. Many services will be delivered by foreign affiliates without a mode 4 component involved.

¹⁰ Trade negotiators often refer to these categories as "business visitors". Business visitors as defined in a GATS context are not the same as business visitors or travellers as defined in international statistical frameworks such as BPM6, 2008 SNA, etc.

Table xx: Summary of GATS mode 4 coverage

	Included	Excluded
Duration of stay	Temporary presence as well as non-specified periods of stay (temporary undefined in the GATS, and the period is set by host country)	Permanent migration (Undefined but GATS does not apply to measures affecting residence, citizenship or employment on a permanent basis)
Purpose of stay	Presence of natural persons for the supply of commercial services	Persons seeking to access the employment market Presence of natural persons for the production of goods (e.g., agricultural products, manufactures) Services supplied under governmental authority
Skill level	All skill levels	–
Main categories of natural persons	Self-employed service suppliers <i>(Contractual services suppliers – self-employed)</i> Employees of service suppliers sent abroad to supply a service <i>(Contractual services suppliers – employees)</i> Employees of foreign service suppliers established in the host country (linked to mode 3, i.e. firms established in host country which have foreign capital participation of at least 50% or are controlled by foreign owner) <i>(Intra-corporate transferees and directly recruited foreign staff)</i> <i>Service sellers /persons responsible for setting up commercial presence</i>	Foreign employees of domestically owned juridical persons

5.16. The GATS provides for the possibility that commitments, and therefore access conditions, be scheduled according to different categories of natural persons. Members' commitments in Mode 4 have been undertaken largely on the basis of the above categories. However, a number of WTO members refer to particular categories such as "installers and servicers", artists, sportspersons or other suppliers of services taking part in public performances, graduate trainees etc. For statistical purposes, these categories may be seen as falling under one of the four above categories (e.g., "installers and servicers" may be considered as contractual service suppliers or intra-corporate transferees, artists as contractual service suppliers, graduate trainees as intra-corporate transferees, etc.).

5.17. In their commitments, WTO members have in general indicated the length of stay of natural persons

by the respective categories.¹¹ For example, in the case of contractual services suppliers, whether self-employed or employees, the duration ranges between 3 months to one year, rarely exceeding 2 years; for intra-corporate transferees it is generally limited to 2-5 years; for services sellers/persons responsible for setting up commercial presences it is normally limited to 3 months.

¹¹ In the "Guidelines for the scheduling of specific commitments under the General Agreement on Trade in Services" (S/L/92), which was adopted by the WTO Council on Trade in Services on 23 March 2001, members are encouraged to include in their commitments the duration of temporary stay of natural persons for the purpose of supplying a service. In the absence of a reference to a specific duration for the temporary stay of a foreign service supplier, it could be understood that no binding is being undertaken in respect of the duration of that stay.

2. Determining the relevant mode of supply

5.18. Allocating international services trade to the different modes of supply is difficult as a service can often be produced, distributed, marketed, sold and/or delivered through one mode or another or a combination of modes:

- A doctor can assist a foreign patient by offering medical advice online (mode 1), may request his client to travel for an appointment with him (mode 2), may decide to open a practice abroad (mode 3), may re-locate to work in this practice or simply travel there to treat an individual patient (mode 4);
- A single service contract between an architect and his client may cover the design of the construction project, its delivery to the client through electronic mail and occasional visits to the country of the client at the implementation phase. In such a case the supply of the service involves a mode 1 and mode 4 component;
- The operation of an affiliate in a foreign country supplying services under mode 3 may imply the need to have specialized personnel such as managers, technicians etc. transferred from the parent company to the affiliate (guaranteed by mode 4 commitments). For example a construction company signs a contract with a client abroad involving the establishment of a temporary site office (mode 3) and/or the transfer of workers (mode 4) at whatever skill level.
- A lawyer working for a law firm while traveling abroad establishes a business link with a client (mode 4 movement but initially no service trade), which may lead to the future provision of advisory work online to the client (mode 1), and the attraction of new clients who travel to consult the law firm (mode 2). This direct relationship with the client abroad may also provide an incentive for a subsequent establishment abroad of an affiliate by the law firm (mode 3).
- A computer services supplier and a consumer are established in two different territories and the supplier has commercial presence in a third territory (mode 3). The affiliate may act as an intermediary between the supplier and the client (e.g. marketing, factoring – mode 3), however, most of the supply of these services may be taking place through mode 4

(e.g. if the parent company sends a computer specialist to the client's country) and/or mode 1 if part of the services are also supplied cross-border (online). In other cases, this affiliate may also be more closely involved in the supply, either cross-border (online) or itself sending an employee.

5.19. As shown in the previous paragraphs, modes of supply are essentially defined on the basis of the location of the service supplier and consumer, the nationality of the supplier, and/or the way the service is provided. Even if these factors are known, it may be difficult in certain cases to determine (i) the allocation of the trade by origin and destination and (ii) which individual mode(s) was (were) involved for the supply of a particular service. This ambiguity is particularly noticeable between modes 1 and 2 when under both of these modes the supplier is not physically present within the territory of the consumer. The distinction between both modes hinges upon whether the service is supplied within the territory of the consumer from the territory of the supplier or whether the service is supplied to the consumer outside his/her resident country. For example the supply of financial or insurance services often does not require the physical presence of the consumer. Electronic means associated with the globalization of financial markets have made it possible to "deliver" a financial service almost anywhere in the world. Once the physical presence of the consumer ceases to be an unequivocal benchmark for determining the place to or from which a service is supplied electronically, it becomes difficult to clearly determine whether mode 1 and/or 2 are involved.

5.20. All these issues make the task of estimating values of trade in services by modes of supply challenging. In addition, depending on the point of view adopted (importer or exporter), the way compilers allocate transactions to modes of supply may differ, particularly when there is a combination of modes involved (e.g. service supplier and consumer are located in two different countries and commercial presence of the supplier in a third country is acting as an intermediary). This will result in asymmetries with respect to the recording of corresponding transactions. Accounting legislations, conventions and conveniences will also affect the way enterprises, banks and compilers report related payments by services items and modes and may have implications for the recording (or not) of associated payments and receipts in the balance of payments or in the FATS statistical frameworks (e.g. the way residency

principles apply/one-year principle, implications in the case of services contracts in the balance of payments, etc.)

3. *Information needs for assessing trade in services by modes of supply*

5.21. Two groups of variables are identified in order to assess trade in services by mode of supply: first the **value of services 'exports' and 'imports'**; and second a number of more specific variables necessary for a more complete assessment of trade in services as well as to respond to **additional analytical needs**. Such variables include foreign direct investment transactions and positions in services industries or the number of persons moving (flows) and temporarily present (stocks) abroad in the context of the supply of services.

5.22. While it is useful to analyse information according to the overall structure of GATS, it may be difficult to obtain detailed data needed as for instance relevant variables may not be readily available in data sources of compilers. Ideally variables should be broken down according to:

(a) The type of service product provided (i.e. the service which is the subject of the transaction between the supplier and the consumer and for which a payment is made). If a breakdown by product (i.e. type of service) is not possible then a breakdown by type of activity (i.e. industry) of the service supplier would be the best approximation. More information on appropriate classifications may be found in chapters xx and xx;

(b) The direction of trade (i.e. the destination/origin of the service provided by the service supplier to the consumer). For mode 4, as a lower priority, origin/destination of persons (for some categories of persons this may be the only information available). For this mode of supply there may indeed also be a particular interest in the nationality and categories of persons involved;

5.23. Additional breakdowns are useful for the number of persons supplying services through mode 4:

(c) By skills and occupations of persons;¹² and

¹² Some WTO members make commitments under mode 4 defining specific types of occupations and skills of persons

(d) By length of stay, although this is a very low priority. Compiling this breakdown will be difficult, even using the one year or other statistical guidelines for determining residency. The *Manual* proposes that as a starting point compilers break down relevant statistics between permanent and non-permanent stays according to their national definition of residency, regardless of whether stays may be substantially longer than the one-year rule generally recommended by statistical systems.¹³

C. *Value of trade by modes of supply*

5.24. **The value of trade is central to measuring trade flows.** This *Manual* conceptualizes the valuation of trade by mode of supply in a statistical context. A comprehensive statistical treatment by mode of supply that would fully mirror the GATS legal definition and other GATS articles would be out of the scope of the present *Manual*. Such an approach would fail to ensure compatibility with international statistical systems, such as BPM6 and the 2008 SNA, and would demand excessive resources for implementation. **For mode 4, the value of services trade is relevant only in the case of contractual service suppliers**, whether these services are supplied by an employee of the service supplier or if the service supplier is a self-employed and supplies the service himself. This information is not needed for intra-corporate transferees and foreign employees directly recruited by the foreign affiliate, and for services sellers/persons responsible for setting up commercial presence. For the former the supply of the service **by the service supplier (i.e. the juridical person) to the consumer** is taking place through mode 3 (the mode 4

involved. A breakdown by type of occupations and/or skills would thus also be useful, although it may be difficult to obtain. It may be worthwhile exploring whether (a significant number of) commitments may be 'translated' into categories of ISCO, even if the available statistics do not provide these distinctions.

¹³ It may be national legislations that will determine whether or not a unit and its activities are included as 'resident' in the national statistics. In some cases, these legislations will be either vague on the (duration) criteria for residency or specify a duration that is different from the one-year guideline of international statistical frameworks. The one-year guideline has had very little influence on actual definitions of 'residency' as used by national legislation regulating immigration or population registers, and thus on the registrations in the main administrative data sources.

commitment enables the presence of the person in order for the service supplier to supply the service via mode 3) and for the latter there is no service transaction (the transaction takes place at a later stage).

5.25. *This* section outlines how an approximate picture of the value of transactions by mode of supply may be built up. Depending on a country's situation, it is often important that **several institutions cooperate to provide these relevant statistics, such as the central bank, the national statistical office, tax, VAT, customs and social security agencies, etc.** Drawing on GATS provisions, the Manual proposes, as a first approximation, a simplified approach to the statistical allocation of trade in services to modes of supply, operational in a statistical context and consistent with international statistical standards. Compilers, taking into account their country's situation and need, should consider this type of presentation a first guidance for presenting their trade in services by modes of supply.

5.26. After presenting the basic assumptions underlying the simplified approach, this section proposes a number of recommendations with respect to the allocation of balance of payments services transactions to the four modes of supply, shows how the FATS variables sales/output can be used to measure trade through commercial presence and finally explains how, if meaningful for the compiling economy, the personal transfers of self-employed individuals can be used to complement the measurement of trade in services through mode 4. As a summary to this section a table is provided which presents a recommended simplified allocation of FATS and BPM6/EBOPS trade in services data to modes of supply which could serve as a first guidance to present estimates by modes of supply.

1. Statistical treatment of modes of supply for estimating the value of trade: the simplified approach

5.27. To allow the allocation of services transactions to modes of supply in a systematic way, the *Manual* proposes criteria derived from the GATS definitions. The *Manual* acknowledges that this allocation is only a first step in the estimation process and that further research and empirical information will be required to validate and to refine the estimates. These simplified criteria are based on the following considerations:

- (a) To the extent that foreign affiliates are a good approximation of commercial presence entities, FATS provide most information for services supplied through mode 3;
- (b) Service transactions between residents and non-residents, as captured in the balance of payments accounts described in the BPM6 system, broadly cover mode 1, mode 2, and mode 4.¹⁴

5.28. It is therefore possible to derive much information on services transactions by modes of supply from BPM6 statistics and FATS.

5.29. The simplified statistical criteria are based on the territorial location of the transactors (consumer and supplier) at the time the service is supplied, as well as on the type of the supplier (an individual or a business enterprise, respectively termed “natural or juridical persons” in GATS). However, it should be stressed that the Manual's guidelines on the compilation of statistics by modes of supply are laid out only for statistical purposes and do not imply any interpretation of GATS provisions. These criteria are shown in chart xx. These simplified statistical criteria for the allocation of modes of supply are further complemented by the rules discussed below.

¹⁴ There are some limitations, however, to the assimilation of commercial presence entities to foreign affiliates or to the correspondence between BPM6 service transactions and modes 1, 2 and 4. For example, such limitations relate to the foreign ownership criteria used for the identification of foreign affiliates and to the residence criteria that underpin statistical systems, while GATS legal provisions are not based on these statistical criteria. These limitations are discussed further in the present chapter as well as in chapters III and IV.

2. *GATS modes of supply and BPM6/EBOPS trade in services transactions*

5.30. Ideally, each EBOPS component should be allocated among the different modes, using the principles above. It may be that compilers are only able to make this allocation at a less detailed level of EBOPS. Although less desirable, compilers are encouraged to make the allocation at least at the level of the 12 major components of the BPM6 classification (see para. 5.xx above). Recognizing the difficulty of allocating balance of payments transactions to modes of supply, the *Manual* recommends that a full allocation be accorded a low priority. The discussion should not be limited to BPM6 items, but be linked to the more detailed analysis of EBOPS items which is included in Chapter III.

5.31. As in many cases a single service transaction may involve more than one mode of supply, the present *Manual* acknowledges that compilers will not be able to identify the real and full complexity of allocating each EBOPS type of service by the GATS mode of supply. To facilitate the feasibility of data collection and as a first step, some simplifying assumptions are recommended following the principles set out in paragraphs 5.xx-5.xx above. In short, each EBOPS type of service is allocated either to one dominant mode or, where there is no single dominant mode, to the most significant mode of supply.

5.32. Services provided internationally by government agencies and services provided by government units that are based in diplomatic and other similar enclaves in the host economy are not of interest in this context.

(a) BPM6/EBOPS services transactions largely corresponding to mode 1

5.33. Mode 1 applies when a service is delivered from a supplier abroad to a consumer in the consumer's territory of residence. This is the case for the majority of balance of payments transactions recorded under *transport* (except supporting and auxiliary services that are provided to domestic carriers in foreign ports or to non-resident carriers in domestic ports), *telecommunication services*, *information services*, *insurance and pension services*, *financial*

services, and fees for franchises (part of *charges for the use of intellectual property*).¹⁵

5.34. Non-mode 1 transactions covered by these balance of payments items may in general take place in three instances:

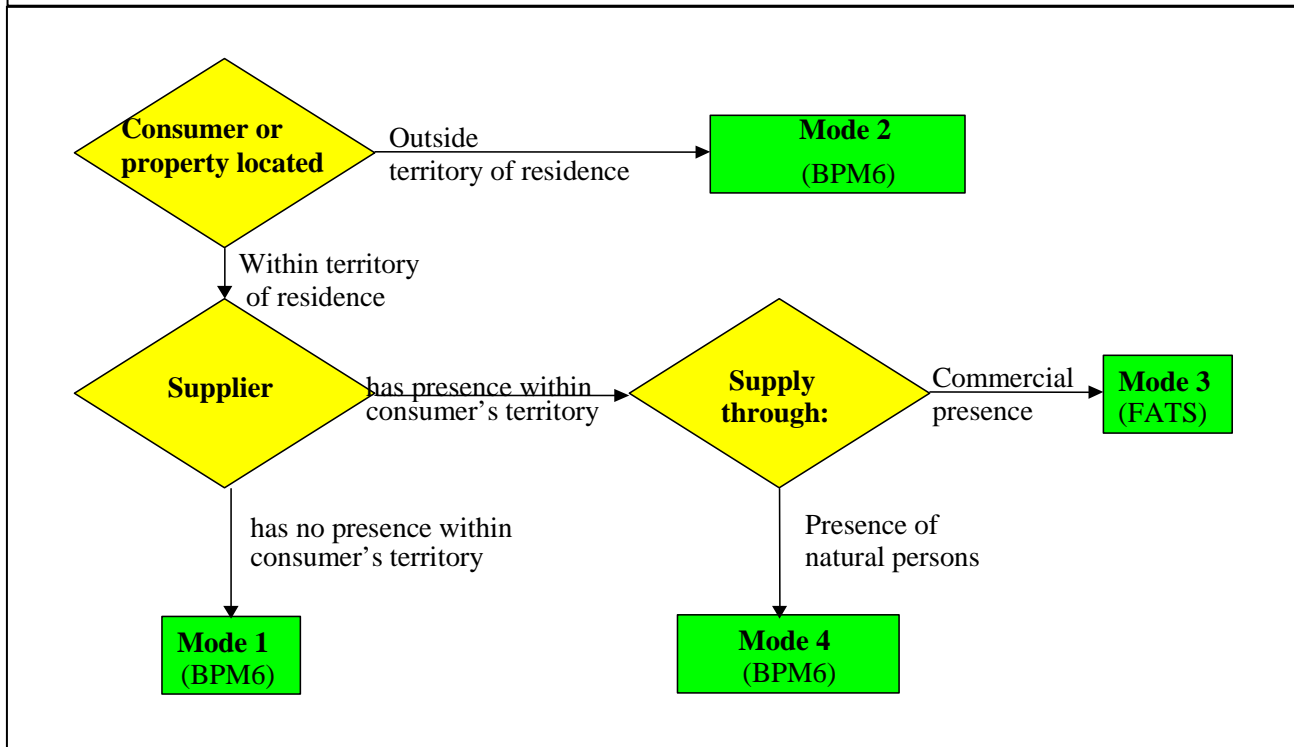
- Transactions occurring through presence of natural persons (mode 4), which are presumed to be marginal in these components;
- Transactions that involve elements of both modes 1 and 4 (such as an insurance agent travelling to discuss the terms of a contract, whereas most of the insurance service would be produced in the country where the insurance company is located). In those cases, it might appear reasonable to allocate the entire transaction to mode 1;
- Transactions involving mode 2 (such as non-resident carriers in domestic ports or the consumer of financial services who has travelled abroad to the supplier's offices to open a bank account). In general these transactions are presumed to be marginal in these components. With respect to the determination of the mode of supply (1 or 2) for financial and insurance services which is described in section 5.xx, unless this is an important issue in the compiling economy, this *Manual* recommends the full allocation of these transactions to mode 1;

Thus, applying the simplified approach, the BPM6/EBOPS components indicated above would be allocated to mode 1.

¹⁵ Other payments for the use of intellectual property such as for trademarks, patents and copyrights (rights to reproduce/distribute) on software, audiovisual products etc. are not captured by the Services Sectoral Classification list W/120.

Chart xx. The four modes of supply: statistical simplified criteria

Territorial presence of transactors	Mode of supply	Major statistical areas
Consumer (or his/her property) outside territory of residence	Mode 2. Consumption abroad	BPM6
Consumer in the territory of residence: Supplier has no presence in the territory of the consumer	Mode 1. Cross-border supply	BPM6
Supplier has a presence in the territory of the consumer: (a) commercial presence	Mode 3. Commercial presence	FATS
(b) presence of natural persons	Mode 4. Presence of natural persons	BPM6



5.35. Estimating the value of the service provided by commission agents, wholesalers and retailers (distribution services) would present a particular useful complement to services statistics covered in the balance of payments. Wholesalers and retailers are treated as supplying services to their customers by storing and displaying a selection of goods in convenient locations and making them easily available for customers to buy. Their output is measured by the total value of trade margins realized on the goods they purchase for resale. However, the services that are provided by them are not measured within the balance of payments services account, as the value of international wholesaling and retailing services (including merchanting which covers cases where the goods bought and subsequently sold do not enter the merchant's economy during the process) are indistinguishably included in the value of the traded goods. Estimating and providing this information on a supplementary basis, excluding holding gains and losses, would enable a more complete analysis of trade in services.¹⁶ Box xx shows the U.S. experience in developing experimental estimates of trade in distribution services. The value of these services (i.e. those provided cross-border) are deemed to be supplied via mode 1.

¹⁶ Services provided to customers in the case of merchanting could be approximated by the BPM6 item net exports of goods under merchanting, excluding holding gains and losses.

Box xx: U.S. experimental estimates of distribution services associated with cross-border trade

Estimates of services provided by wholesalers and retailers in facilitating international trade are important for understanding both the role of the distribution services industries in trade and the importance of trade for these industries. The inclusion of these services in the value of merchandise trade follows the treatment recommended in BPM6 and reflects the fact that data on cross-border trade are collected by product. As a consequence, statistics on cross-border trade in services do not include estimates of distribution services provided by exporters because those services are included in the value of trade in goods.

Nevertheless, services provided by wholesalers and retailers could be important as shown by U.S. BEA rough estimates. BEA has constructed these estimates of distribution services associated with merchandise trade by using exports of goods of wholesalers and retailers and the average percentage of distribution services per dollar of sales of goods. For imports, it assumed that foreign wholesalers accounted for the same share of U.S. imports as U.S. wholesalers did of U.S. exports. These 2002 experimental results show that considering these figures for GATS purposes would increase U.S. exports and imports of services (resident/non-resident trade) by more than 10% and 20% respectively.

Source: *Improved Measures of U.S. International Services: the Cases of Insurance, Wholesale and Retail Trade, and Financial*

(b) BPM6/EBOPS services transactions and mode 2

5.36. All services recorded in the balance of payments as *travel* are deemed to fall under consumption abroad or GATS mode 2. However, the *travel* component of the balance of payments classification also includes the purchase of goods, for their own use or to give away, by non-residents during visits outside their economy. These goods are outside the GATS mode 2 coverage. Thus, travel expenditure on goods should be separately identified from their expenditure on services, and only the services portion of travel expenditure should be allocated to mode 2. The goods portion would not be allocated to any mode of supply. In addition, further refinements of the services share of *travel* would be needed for a better measurement of mode 2 by type of service. Although it does not categorize all the types of services supplied to non-residents while travelling abroad, the BPM6/EBOPS classifications provide an alternative supplementary breakdown of services consumed by these non-residents: local transport services, accommodation services, food serving services and other services. To respond to the particular interests in health and education services, BPM6 and EBOPS also provide for a distinction within the standard component *personal travel* into education-related expenditure and health-related expenditure. As noted in paragraph 3.xx, the collection of separate data on specific expenditure on health and education services would be particularly useful for analysing the supply of these services via mode 2. Finally, countries willing to compile a more detailed breakdown of travel

services expenditure may do so on the basis of the list of tourism characteristics products provided in the IRTS 2008 and TSA-RMF 2008.

5.37. *Supporting and auxiliary services* that are provided to resident carriers in non-resident ports or to non-resident carriers in resident ports (sub-component of transportation) should be allocated to mode 2 if they can be separately identified. Finally *maintenance and repair services n.i.e.* and *manufacturing services on physical inputs owned by others* (i.e. the service component of the repair or processing service fee) are also covered by mode 2 as the property of the consumer is moving in order for the service to be supplied. It is important to note that if repair or manufacturing services are supplied through persons moving abroad then these would fall under mode 4. However these are not believed to represent large transactions.

(c) BPM6/EBOPS services transactions where no single mode is dominant

5.38. For other types of services transactions the picture may be more complex as individual transactions might involve significant elements of different modes. Indeed, mode 4 might be relevant, where the supplier (or his employee) travels abroad to provide the service at the site of the client. To take a simple example, a consultant resident in the compiling economy providing services to a non-resident client may supply the service *either* on-site (mode 4) *or* from the office of the consultant transmitting reports cross

border (mode 1) *or* a combination of those two. For construction, companies may want to establish a commercial presence-mode 3 (which would not qualify as a branch and which may or may not involve a mode 4 presence) for a couple of months and/or post own workers in the host country under mode 4.

5.39. For the more specific case of mode 4, as stated above, information is needed for contractual service suppliers (either employees of a foreign-based service supplier or self-employed service suppliers) who are present in the host economy in order to supply a service. Depending on the category of person and the length of stay of this person abroad, the value of the services trade is in principle recorded in the balance of payments as follows:

- (a) Contractual service suppliers as employees of the foreign-based service supplier: a service supplier obtains a service contract with a consumer in another country. He sends his employee to that other country in order to supply the service. The transaction corresponding to the service contract remains between a resident and a non-resident and will be recorded as an export or import in the respective type of services regardless of whether that person stays abroad for more or less than 12 months. In the majority of cases considered in this chapter, the presence of contractual service suppliers as employees will not imply substantial operations that can be identified separately from the overall operations of the service supplier. A group of persons *per se* cannot be considered to constitute a branch or representative office (if this was the case the trade would fall under mode 3, commercial presence, see below).¹⁷

¹⁷ As noted in chapter xx, "the definition of branches as separate institutional units requires indications of substantial operations that can be identified separately from the rest of the entity, so as to avoid creating numerous artificial units. Either a complete set of accounts, including a balance sheet, exists for the unit, or it is possible and meaningful, from both an economic and legal viewpoint, to compile a complete set of accounts if they were to be required. The availability of separate records indicates that an actual unit exists and makes it practical to prepare statistics. In addition, all or most of the following factors tend to be present for a branch to be recognized:

- undertaking or intending to undertake production on a significant scale based in the territory for one year or more in a territory other than that of its head office:

- (b) Self-employed service suppliers: a **self-employed** person obtains a **service contract** with a consumer in another country or this foreign person is established in a host economy and supplies services to consumers.¹⁸ For the former he/she moves abroad in order to supply that service. If the person stays less than 12 months, the corresponding transaction should be recorded as an export/import of services. If it is possible and if the amounts are believed to be significant, information on self-employed persons under mode 4 should be provided separately. If he/she is established in the host economy (i.e. for more than 12 months), then the transaction corresponding to the service contract would no longer be defined as a balance of payments transaction. This particular issue is further discussed in Section C.4.

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- (i) If the production process involves physical presence, then the operations should be physically located in that territory. Some indicators of an intention to locate in the territory include purchasing or renting business premises, acquiring capital equipment, and recruiting local staff;
 - (ii) If the production does not involve physical presence, such as some cases of banking, insurance, other financial services, ownership of patents, and "virtual manufacturing," the operations should be recognized as being in the territory by virtue of the registration or legal domicile of those operations in that territory;
 - the recognition of the operations as being subject to the income tax system, if any, of the economy in which it is located even if it may have a tax-exempt status."

¹⁸ See box xx.

Mode 1 and mode 4

5.40. Combined mode 1 and 4 transactions are often found in computer services, other business services and personal, cultural and recreational services. For these components, further analysis and empirical information is needed to determine how they can be separately identified or estimated. In particular, the knowledge of the location of the supplier at the time when major transactions are delivered would be critical for a proper assessment of the share of modes in these balance of payments components. A first proposal to estimate separately these modes within payments (at least for major transactions) is provided in paragraphs 5.xx-5.xx below. If research were to indicate that for certain EBOPS components a particular mode of supply provides only a small proportion of the total supply, then all supplies might be allocated to the dominant mode.

5.41. If detailed EBOPS statistics are compiled, it may be easier to allocate some of the items where mode 1 is deemed to be the dominant mode and then subsequently concentrate on the remaining items. Table xx presents the services categories that are believed to be delivered through either dominant mode and those where more refinement is necessary:

Mode 2 and mode 4

5.42. Within other business services, for waste treatment and de-pollution, international transactions can involve significant mode 2 (treatment of radioactive and other waste) and mode 4 components (pollution cleaned up by workers, etc.).

Mode 3 and mode 4

5.43. The preceding paragraphs have set out how balance of payments transactions may be allocated to modes 1, 2 and 4. Commercial presence (mode 3) concerns mostly domestic sales of foreign affiliates (i.e., transactions between residents), as described in FATS and is discussed in detail in paragraphs 5.xx-5.xx below.

5.44. There are cases, however, where a commercial presence is not considered as being resident in its host country in BPM6 and the present *Manual* (i.e. if the entity does not qualify as a branch). Foreign entities established on a short-term basis (less than one year, e.g. an unincorporated site office carrying out a short-

term construction project or providing consulting services) or operations based from the home territory rather than a local office, to supply services are considered as non-residents in the host country. Service transactions with residents are thus recorded in the balance of payments.¹⁹ However, the supplies of any foreign established entities are considered to fall under commercial presence of the GATS, which ignores the one-year statistical rule. A commercial presence may be any type of establishment owned or controlled by foreign entities, even those created for a short period. This is particularly relevant in the case of construction services. The services provided in the host country by this type of commercial presence involve transactions between residents and non-residents, and they are recorded in the balance of payments accounts under *construction* and not in FATS. However, for GATS, these service transactions should be accounted for as mode 3.²⁰ For the sake of simplification, it is recommended to limit this issue to construction services, unless the specific situation of a country requires another treatment.

5.45. In turn, the balance of payments component *construction* does include transactions related to mode 4 - presence of natural persons, i.e. transactions not conducted through mode 3. This will be the case when the operations are not substantial enough to qualify for the creation of a branch in the accounts. Whether or

¹⁹ Examples where there could be operations which are not substantial enough to satisfy the criteria for a branch to be recognized are for short-term arrangements covering maintenance services, training, technical assistance, computer serv., consulting serv. or health care.

²⁰ BPM6: "Some construction projects undertaken by a nonresident contractor may give rise to a branch. Construction may be carried out or managed by a nonresident enterprise, without the creation of a local legal entity:

- For major projects (such as bridges, dams, power stations) that take a year or more to complete and that are managed through a local site office, the operations would usually satisfy the criteria for identification of a branch (...) and so would not be classified as trade in services;
- In other cases, the construction operations may not satisfy the conditions for recognition as a branch, for example, for a short-term project or one based from the home territory rather than a local office. In those cases, the work provided to customers resident in the territory of those operations is classified as international trade in construction and included in services (i.e., an import to the territory of operations)." Paragraphs 3.xx-3.xx discuss construction operations included under services.

not these mode 4 transactions are minor relative to the mode 3 transactions in this category will depend on the compiling country's situation and the type of arrangements for the different projects (for example, does a site office qualify as a branch or can it be considered that the operations are conducted from the home territory?).

Mode 1, mode 2 and mode 4

5.46. Services purchased in host economies by government units that are based in diplomatic and similar enclaves are included in *government goods and services, n.i.e.*. Those services transactions are covered by GATS (mode 1 or 4) when provided on a commercial or competitive basis.²¹ Unless being relevant for the compiling country, this *Manual* does not recommend that purchases of services supplied by non-government entities be separately identified from those supplied by government entities or from purchases of goods.²² In addition, services purchased by diplomats, consular staff, military personnel working in government enclaves and their dependants (considered as GATS mode 2) failing specific identification are included under *government goods and services n.i.e.*. Again, unless deemed relevant for the compiling economy, this *Manual* does not recommend a separate identification of these transactions as their share is believed to be relatively small.

(d) Developing practices to separately identify modes of supply information within BPM6/EBOPS services transactions

5.47. As discussed in Section 5.xx, a given balance of payments service item generally includes transactions corresponding to several modes. With a view to facilitating the analysis and compilation of service transactions between residents and non-residents by modes of supply, it is recommended that, if estimates cannot be provided for the subdivision of

the transaction value by modes, the transaction be allocated to the most important mode in terms of time and resources associated with it.

5.48. To 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. From a general point of view, the possibility of estimating mode 4 flows within the balance of payments services account would help improve the estimations of trade in services by modes of supply. 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 trade in mode 1, 2, 3 or 4. The rules applied to compile these estimates by mode of supply and the list of items where estimates of mode 4 are necessary should be established depending on each country's interest, and this list should not strictly be limited to the services items identified in this chapter.

²¹ The services are provided in extraterritorial government enclaves which are resident of their home territory, rather than the host territory in which they are physically located. Therefore the commercial services consumed are supplied cross-border or through the presence of persons. In principle a foreign affiliate cannot establish in this enclave and services consumed by the embassy, consulate etc. cannot be considered as consumption abroad.

²² See paragraphs 3.xx-3.xx below for a more detailed discussion of these issues.

5.49. Given the complexity of services contracts (i.e. several modes for supplying the service), the allocation should be made on a broad basis. Compilers should concentrate on services categories relevant in the context of their economy and not necessarily attempt to differentiate mode 4 from other modes for services where this mode of supply is not believed to be an important component.

5.50. There are various options which could help determine whether a transaction should be allocated to mode 4 or not:

- (a) Indicate if the provision of the service involved the physical presence of non-resident individual(s), whether as self-employed or as employee(s) sent to the compiling economy by their non-resident company (This question alone seems appropriate for collecting this information for the first time). If it involved the presence of the(se) person(s), how was most of the value of the service delivered (e.g. time and/or resources involved)? That is, if most of the service was provided by fax, email etc., with the supplier remaining in its own country and the person(s) just went to supervise a final stage, it is mostly mode 1 (or 2), but if the embodied knowledge went with the person(s) and was transmitted directly to the client, it is mostly mode 4.
- (b) Another option could be to define in surveys the four modes of supply as defined in the GATS and ask respondents to allocate transactions to modes of supply. If it involves various modes of supply, the questionnaire could suggest allocating the transaction to the most important mode in terms of time and resources associated with it. While this option will be costly and very burdensome for respondents, it could be used for specific service sectors for which countries have a particular mode 4 interest.
- (c) Another possibility could be to add a question related to the estimated share of the inputs for the services trade related to the presence of the service supplier or his/her employees.

5.51. Compilers should keep in mind that questions need to be formulated differently depending on whether

exports or imports are involved (an importer may have less information on the shares of different modes in the supply process and/or the breakdown of inputs in the service supply).

5.52. It may be difficult to allocate transactions by mode of supply when a service supplier and a client are located in two different economic territories and commercial presence of the supplier in a third territory is involved (see paragraph 5.18). If service payments relating to the service contract are directly made between the client and the supplier, then it will be possible to allot the transaction to the relevant mode(s). However if the payment is made by the client to the affiliate and most (or part) of the service is supplied by the parent company, it will be difficult (i) to define the mode of supply and (ii) to determine the direction of the flow.

3. *GATS mode 3 and Foreign Affiliates Statistics*

5.53. FATS, as recommended in the Manual, differs from the coverage of the GATS in the following ways:

- (a) Under the GATS, a foreign service supplier is defined on the basis of majority ownership or control, whereas it is recommended that FATS are compiled for the foreign-controlled subset of foreign affiliates, where “control” is defined in the FDIR (control is deemed to exist if there is majority ownership of the voting power at each stage of the change of ownership);
- (b) GATS covers the services (products) as well as their suppliers, whereas FATS are primarily based on activities of affiliates.

5.54. By including commercial presence as a mode of supply, GATS has created interest in information on foreign affiliates in host economies. Service suppliers may choose to set up affiliates as a means to sell their services in foreign markets as an alternative to or a complement for exports through other modes. On the grounds that such sales may, to a certain extent, substitute for cross-border exports, the Manual views domestic sales of foreign affiliates as the primary statistical indicator of mode 3.

5.55. Although output is considered a superior and more refined measure of activity for most purposes, in many instances only sales data are compiled as they are easier to collect and may present more options for

disaggregation.²³ As FATS are primarily compiled by activity this may cause particular problems for certain services industries such as wholesale and retail trade and financial intermediation. For wholesale and retail trade most of the value of the sales will be accounted for by the value of the goods that are sold.²⁴ Gross output for these particular activities is therefore a more appropriate estimation of the wholesale/retail service provided to the consumer, as it refers to the trade margins realized on goods purchased for resale and therefore excludes the value of the goods that are sold (see Chapter 4). Providing estimates for wholesale and retail services would give a clearer picture of distribution services provided. Similarly output is a preferred measure for financial intermediaries and insurance in order to exclude the amounts that pass through the enterprise without being considered a part of its intermediate consumption (see Chapter 4).

5.56. A generalized framework for statistics on affiliates' operations would provide information on domestic sales/output according to both an activity breakdown (ICFA categories) and a product breakdown (EBOPS components). When product breakdowns are not available, the ICFA activity breakdown is used. This has been aligned with EBOPS for the purpose of approximating products resulting from various industrial activities. There is, however, no intention of establishing a one-to-one correspondence between ISIC, Rev.4 and EBOPS for the estimation of services produced by foreign affiliates. Such a correspondence might overlook important areas of secondary production by industries (for further explanation, see annex xx). Only when compilers are able to classify the output of foreign affiliates on a product basis will it be possible to directly compare the values of specific types of services, delivered to foreign markets through trade between residents and non-residents, with sales/output by foreign affiliates and therefore to conduct a more complete assessment of trade in services by modes of supply.

4. The case of resident foreign self-employed individuals

5.57. The preceding paragraphs have shown that transactions falling under mode 4 are covered in BPM6

²³ In general measured output will be identical to sales for most service activities. See paragraph 4.xx.

²⁴ If only sales are available for wholesale and retail trade activities, it is recommended not to use these data to measure trade in services through commercial presence as it would result in an overestimation of mode 3 trade.

service components. However, self-employed service suppliers staying (or intending to stay) more than 12 months in the host economy will become residents of this economy and the transactions corresponding to the services contracts will no longer be international transactions. The only transactions that may appear in the balance of payments for resident foreign self-employed service suppliers will be the amount they remit to their home economy (therefore recorded under personal transfers) and/or an increase in assets in the home economy (if the person is saving in the home economy) – for a more detailed explanation of GATS mode 4 and remittances statistics- see box xx in section D.

5.58. In general, these persons will represent (i) a very small proportion of the overall mode 4 population in the host economy, and (ii) if they indeed remit it will be difficult to identify their specific personal transfers (very small proportion of the total personal transfer transactions). However, compiling countries for which the category of self-employed persons established in an economy other than his own (the compiling economy on the imports side or abroad for exports) is believed to be an important component of personal transfers receipts/payments or an important share of the mode 4 population, may wish to estimate this information.

5. Conclusion

5.59. The simplifying assumptions for the allocation of trade by mode of supply set out in paragraphs 5.xx to 5.xx 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 country to country 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.

5.60. Estimation could be improved over time according to the information obtained by compilers, notably on the way service sectors operate. For instance the simplified allocation could be amended by the use of partial or anecdotal information on a number of specific sectors. If identified as an information need of the compiling economy, these estimates would also be improved for specific services sectors if practices were developed to separately identify modes of supply in relevant services transactions as presented above (see paragraph 5.xx).

5.61. Table xx summarizes the recommended allocation of statistics which can serve as a first guidance to estimate the value of trade in services broken down by modes of supply. It identifies the dominant mode(s) of supply used for EBOPS/BPM6 services transactions. If for a compiling country allocation 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 10 most

relevant BPM6 service transaction aggregates, FATS and if possible the estimated value for distribution services associated with cross-border trade (see highlighted X). Shaded rows shown in this table refer to categories not considered as trade in services from a GATS perspective. Rows presented in italics are not separately available in the BPM6/EBOPS classifications but are indicated in this table to improve the clarity concerning the links of existing balance of payments items with modes of supply.

Table xx. Simplified allocation of FATS and EBOPS data to modes of supply²⁵

	Modes of supply						
	1	2	3	4	1 and 4	2 and 4	3 and 4
Foreign Affiliates Statistics (by service product using EBOPS; if not possible by service activity using ICFA)							
Services sales/output (by type of service)			X				
Balance of Payments (by service product using EBOPS)							
Manufacturing serv. on physical inputs owned by others		X					
Maintenance and repair services n.i.e.		X					
Transport	X						
• Passenger	X						
• Freight	X						
• Post and courier services	X						
• Other							
–Serv. to domestic carriers in foreign ports (and vice-versa)		X					
–Other	X						
Travel		X					
• Goods							
• Local transport services		X					
• Accommodation services		X					
• Food-serving services		X					
• Other services		X					
Construction							X
• Goods							
• Services							X
Insurance and pension services	X						
Financial services	X						
Charges for the use of intellectual property							
• Licenses to reproduce and/or distribute computer software							
• Licenses to reproduce and/or distribute audiovisual products							
• Charges for use of outcomes of research and development							
• Franchises and trademarks licensing fees	X						
Telecommunication, computer and information services					X		
• Telecommunication services	X						
• Computer services					X		
• Information services	X						
Other business services					X		
• Research and development services					X		
• Professional and management consulting services					X		
• Technical, trade-related and other business services							
–Architectural, engineering, scientific, other technical serv.					X		
–Waste treatment, de-pollution, agricultural, mining services							
o Waste treatment and de-pollution						X	
o Services incidental to agriculture				X			
o Services incidental to mining				x			
– Operational leasing services	X						
– Trade-related services	X						
– Other business services, n.i.e.					X		
Personal, cultural and recreational services					X		
Government goods and services n.i.e.							
• Government goods n.i.e., Credits and debits							
• Government services n.i.e., Credits							
• Government services n.i.e., Debits							
– Commercial services purchased in host economies							
o Government units in diplomatic and similar enclaves					X		
o Personnel from home economy and dependants		X					
– Other commercial services n.i.e. purchased by government					X		X
– Non-commercial services acquired by government							
Estimated distribution (wholesale, retail trade) services	X						

²⁵ The allocation may vary from country to country (general needs as well as for specific sectors, data collection system, resources, etc.)

D. Additional indicators for analyzing trade in services

5.62. Statistical needs of negotiators and trade analysts are numerous, such as to further guide negotiations, to support comparison of commitments, as background for the settling of disputes, or for the assessment of trade in services as requested in GATS Article XIX:3.²⁶ Additional information is also necessary for a more complete economic analysis of trade in services or to evaluate market access opportunities. To conduct such analyses it would not only be useful to look at the level and structure of trade values as presented above, but also to **obtain additional information related to this trade in 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.

5.63. 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. The number of persons, crossing a border (flows) or present (stocks) in the context of GATS mode 2 or mode 4 is also one of those additional needs. **For mode 4** this type of statistics should be identified for all categories of persons involved in the supply of services with **priority given to contractual service suppliers** (either as employees of the service supplier or self-employed) and employees of foreign service suppliers established in the host country (**intra-corporate transferees** and foreigners directly recruited).²⁷ This Manual considers that collecting separate information for services sellers / persons responsible for setting up commercial presence is not a priority as there is, at least initially, no trade transaction.

5.64. This section discusses the additional information needs relating to commercial presence and the presence

²⁶ GATS Article XIX:3 states that prior to establishing negotiating guidelines for a new round of negotiations "The Council for Trade in Services shall carry out an assessment of trade in services in overall terms and on a sectoral basis with reference to the objectives of this Agreement".

²⁷ Intra-corporate transferees are a particularly relevant grouping as many commitments are made and negotiations carried out with respect to this category of persons.

of natural persons. It identifies variables of interest within the foreign direct investment statistics and FATS frameworks. It also explores possible extensions of existing statistical frameworks (tourism and migration) that would be needed in order to collect the more detailed information relevant to improve the monitoring and analysis of trade in services through the presence of persons, as well as linking this information to a comprehensive description of the flows which result from this particular way of trading services (derived from balance of payments or related statistics). Finally it provides a list of other indicators which would also be relevant in the context of a complete analysis of a service sector. This includes statistics on national production, current and constant prices estimates, employment data, quantitative indicators.

1. GATS mode 3 and mode 4 and foreign direct investment and foreign affiliates statistics

(a) Foreign direct investment and foreign affiliates statistics and commercial presence

5.65. The Sections above have described how information of the FATS statistical framework can be used to measure the value of trade through mode 3 (commercial presence). To conduct a more complete analysis of mode 3, sales (and output) statistics need to be complemented by other statistical variables drawn from FDI statistics and the FATS framework. This supplementary information may be related, for instance, to the categories of supplies or suppliers as inscribed in schedules of specific commitments: number of service suppliers, total value of assets, number of natural persons that may be employed by a service supplier, total value of individual or aggregated foreign investment, etc.

5.66. As stated in chapter xx, although FDI statistics (financial transactions, income and position) do not reflect the operations of foreign affiliates, they should be considered an important complement to FATS. Although they have a broader coverage (FDI considers all affiliates whereas FATS deals with those that are majority owned) FDI statistics can provide useful information when no FATS are available.

5.67. Compiling FDI statistics on stocks and flows broken down according to services activities and countries of origin and destination of investment is instrumental in assessing the impacts of commercial

presence on economies. This would reflect the interest of foreign service suppliers in establishing affiliates in the host country and provide useful information with respect to the income on investment returning to the home economy. This Manual recommends that FDI statistics be compiled as specified by BPM6 and BD4. The guidelines for compiling FDI statistics are summarized in box xx/chapter 4.

5.68. FATS variables other than sales or output will provide useful complementary information both for assessing the implications of market access commitments (number of enterprises, assets, employment) and conducting a more detailed analysis of the impact of commercial presence on a particular services sector of the receiving economy (gross capital formation, research and development expenditure) as well as an economy's use of commercial presence for supplying services to different markets.

(b) Foreign affiliates statistics and presence of natural persons

5.69. Employment of foreign staff in foreign affiliates, in particular intra-corporate transferees, is relevant as a mode 4 category of natural persons referred to in countries' commitments. As noted in chapter xx, although data on foreign employment of foreign affiliates would not in general appear separately from data on the number of employees of foreign affiliates, such information could be used for a more in-depth analysis of mode 4 commitments, including their relationship to the supply of services through mode 3. Information on the compensation of foreign employees in foreign affiliates would be an indicator of the *income* dimension of mode 4 linked to mode 3.

5.70. Although a service is actually sold by the foreign invested company, the presence (and movement) of foreign staff is covered by mode 4 commitments. It may therefore still be of analytical interest to have a sense of the contribution of these persons to the sales involved. The intra-corporate transferees and other foreign employees of the services foreign affiliate do not necessarily have to be directly involved in the provision of the service. For instance, in the case of a financial services company, the person which enters a host economy, as an intra-corporate transferee or as a foreign employee of the affiliate located in country A, may be sent as a financial or computer specialist to work for this company. But compilers must remember that what is relevant is the financial service provided by

the company to the final consumer located in country A.

2. GATS, tourism and migration statistical systems

5.71. Other statistical systems may offer additional sources of information of interest for a more in-depth analysis of trade in services. The IRTS 2008 and TSA-RMF 2008 can assist with respect to the tourism sector. Information on flows and stocks of persons is necessary for a more detailed analysis of mode 2 as well as for categories of persons identified within mode 4 and this information could be derived from the definitions used in IRTS 2008, TSA-RMF 2008 and RSIM, Rev.1. While rough aggregated mode 4 information may be drawn from these statistical systems, for a more complete picture compilers will have to identify in frameworks relevant categories and breakdowns. This section presents how these frameworks could be used and extended in order to develop relevant trade in services additional indicators. Although such statistics will not perfectly mirror the definitions of GATS, they would provide a reasonable indication of the flows and stocks of mode 4 persons crossing borders in the context of trade in services.

(a) GATS, International Recommendations for Tourism Statistics 2008 and Tourism Satellite Accounts: Recommended Methodological Framework 2008

5.72. The IRTS 2008 is a comprehensive methodological framework for the collection and compilation of tourism statistics. This conceptual framework defines tourism and related concepts such as country of residence, place of usual residence, usual environment, notion of tourism trips and visits, and the different forms of tourism, including international. It introduces the activity of visitors from the point of view of their expenditure and presents the standard classification of products and productive activities that need to be used to conduct a comparable analysis of the demand and supply related to tourism. An extension of the IRTS2008 is the tourism satellite account by which tourism statistics are linked with the mainstream of macroeconomic analysis (see TSA-RMF 2008). Statistics compiled according to these frameworks would be a useful complement for an in-depth analysis of the tourism sector from a trade perspective, covering all modes of supply.

5.73. Looking more specifically at the categories of persons covered in tourism statistics, the IRTS 2008 identifies international visitors as being characterized by the fact that they are on a tourism trip and that they are non-residents traveling in the country of reference or residents traveling outside of it. They must not be employed by a resident entity in the country visited and receive compensation for the labor input provided. This framework proposes to breakdown trips according to their main purpose: personal (holidays, leisure and recreation, education and training, health and medical care, etc.) and business and professional purposes.

5.74. Although very aggregated, collecting data on the flows of visitors whose main purpose of trip is business and professional is useful to conduct an analysis of flows of mode 4 persons. It includes the activities of self-employed and employees as long as they do not correspond to an employer-employee relationship with a resident producer in the country visited, as well as those of investors, businessmen, and any other type of professional purposes. Although the IRTS 2008 recognizes that for some countries it may be difficult to implement the breakdown as indicated in these recommendations (such as separately identifying business and professional), it suggests that for some others it may be sufficiently important to disaggregate this information further. For instance, although not of direct interest from a GATS perspective, ITRS 2008 suggests that the business and professional purpose could be split into "attending meetings, conferences, or congresses, trade fairs and exhibitions" and "other business and professional purposes." Section (c) below presents how this framework could be used to derive mode 4 relevant information. More information on tourism statistics and relevant information for the compilation of trade in services related indicators may be found in IRTS 2008 and TSA-RMF 2008.

(b) GATS and UN Recommendations on Statistics of International Migration, Revision 1

5.75. The RSIM, Rev. 1 defines two main groups of internationally mobile persons: non-migrants, and international migrants (of which short-term migrants and long-term migrants). It also provides a framework for the compilation of statistics on inflows and outflows of these groups of persons.

5.76. An international migrant is defined as any person who changes his or her country of usual

residence. The country of usual residence is the country in which a person lives, that is to say, the country in which he or she normally spends the daily period of rest. Temporary travel abroad for purposes of recreation, holiday, visits to friends and relatives, business, medical treatment or religious pilgrimage does not change a person's country of usual residence.

5.77. Short-term migrants are persons admitted in a country other than that of their usual residence for a period of at least 3 months but less than 12 months, except in cases where the movement is for purposes of recreation, holiday, visits to friends and relatives, business, medical treatment or religious pilgrimage. For purposes of international migration statistics, the country of usual residence of short-term migrants is considered to be the country of destination during the period they spend in it.

5.78. Long-term migrants are persons who move to a country other than their usual residence for a period of at least one year, so that the country of destination becomes their country of usual residence. From the perspective of the countries of departure and arrival, respectively, the person will be a long-term emigrant or immigrant.

5.79. The RSIM, Rev. 1 suggests a number of definitions of categories of migrants (short-term and long-term) and non-migrants that could be used for the compilation of statistics on international inflows and outflows of internationally mobile persons. Although some of these categories cover some persons of interest in the context of trade in services, a one-to-one correspondence is not possible. More information on statistics of international migration and relevant information for the compilation of trade in services related indicators may be found in RSIM, Rev. 1.

5.80. Statistics collected along the lines of these recommendations could serve to measure the number of persons present abroad and as a consequence consuming services via mode 2. Within non-migrant categories these would cover border workers, tourists, business travelers, etc. and within migrant categories they would cover various types of nationals which change their place of residence and consume services abroad. For instance, one particular category of migrants, which would be of interest, are those admitted for education or training. Similar to tourism statistical guidelines, recommendations on migration statistics could also be useful to compile statistics on mode 4 flows and stocks of persons notably by looking at the

non-migrant category corresponding to business travelers (refers to the category business and professional in IRTS 2008). Identifying persons falling under mode 4 within other categories proposed in the RSIM Rev.1 (such as foreign migrant workers, migrants for settlement, for free establishment etc.) is a difficult task. These definitions were not designed for trade in services analysis. However as shown in Section (c), by adopting a number of assumptions and simplifying rules it will be possible to derive more meaningful and detailed mode 4 estimates from migration statistics.

(c) Deriving mode 4 indicators: Links between RSIM, Rev. 1 and IRTS 2008

5.81. As indicated above the IRTS 2008 category business and professional purposes of trip is particularly interesting category to conduct an analysis of flows of mode 4 persons. If relevant for the compiling economy it is recommended that compilers further disaggregate this category. On this basis compilers willing to collect information on the number of mode 4 persons may further break down the category of business and professional into contractual service suppliers (of which self-employed persons); intracorporate transferees and other foreign staff (only those for which the employer-employee relationship remains with the parent company); and services salespersons and investors. However, unless supplementary information is considered, statistics resulting from this framework will not cover cases where there is a change of usual residence (from one country to another) and intra-corporate transfer and direct recruitments by the foreign affiliate (employer-employee relationship with a producer resident in the host economy).

5.82. Relevant information could also be gained from migration statistics with the help of **some simplification rules**, i.e.: (i) the best source of information on mode 4 persons is the category of non-migrants and (ii) intra-corporate transferees and other foreign employees maintaining an employer-employee relationship with the affiliated entity in the host country fall largely under the migrant categories. This Manual therefore recommends that:

- For non-migrants moving for less than one year, the category of business travelers (which should cover persons moving abroad for professional reasons, but for which no employer-employee relationship with an enterprise resident in the host country exists)

would need to be broken down as follows: contractual service suppliers (further broken down into self-employed and others), services sales persons or responsible for the establishment of commercial presence, intra-corporate transferees and other foreign employees (those for which the employer-employee relationship remains with the parent company) and other business travelers.²⁸ If necessary, supplementary statistics (i.e. beyond the RSIM Rev.1 guidelines) could be compiled to include as well, for the same categories identified, persons who have changed their country of usual residence (i.e. staying for more than 12 months) but for whom the employer-employee relationship remains with an enterprise located outside the host country or who are self-employed;²⁹

- For migrants, identify within short-term and long-term migrants employed in the host country, those persons who have been transferred within the same company (i.e. the intra-corporate transferees which are remunerated from within the economy visited) and those foreign employees which are directly recruited by the foreign affiliate. Where there is a need identified, supplementary statistics (beyond the RSIM guidelines) could be compiled, extending the length of stay to cover also moves of less than three months (of which those involving intra-corporate transferees).

5.83. If possible this information 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 and their length of stay in the host country. Information on the number of visits during last months could also be collected, as well as an indication of the value of services supplied and/or purchased.

²⁸ The category "business travellers" as defined in RSIM, Rev. 1 does not refer explicitly to the employer/employee relationship but states that the persons are on "short visits related to business or professional activities not remunerated from within the country visited."

²⁹ In the case of self-employed staying more than 12 months, there can be an overlap with entrepreneurs and investors in services-producing industries.

5.84. Various sources exist for collecting this information, such as data obtained from migration authorities or other administrative sources (population registers, permit data, visas), census data (which could be used as a benchmark), household, enterprise, labour force surveys or border/passenger surveys. The UNWTO developed a model border survey which

combines administrative data (entry/exit cards) and statistical data obtained from surveys when travelers leave the country visited. In order to be operative, such a proposal, as for other types of data collection, would require a clear co-operation between national tourism administrations and migration authorities.

Table xx. Links between RSIM Rev. 1, IRTS 2008 and GATS mode 4: classification of persons by purpose of stay

Purpose of trip or migration	Length of stay of individuals		
	Less than 3 months	3 to 12 months	more than 12 months
Visitors	<i>IRTS 2008</i>		
Personal			
Holiday, leisure and recreation			
Visiting friends and relatives			
Education and training			
Health and medical care			
Religion/pilgrimages			
Shopping			
Transit entering eco./legal territory			
Other			
Business and professional			
(no employer-employee relationship with entity established in compiling economy)			
<i>Contractual service supply</i>			
- <i>self-employed</i> ^a			
- <i>employed</i>			
<i>Intra-corporate transfer</i>			
<i>Serv. salespersons/ commercial pres.</i>			
<i>Other</i>			
Employment (migrant workers, employment-based settlement)			
<i>Intra corporate transfer</i>	x		X
<i>Directly recruited by a foreign established company</i>	x		X
International civil servants			
<i>Other</i>			
Trainees			
Family reunification/formation			
Family based settlement			
Ancestry based settlement			
Retiree settlement			
Entrepreneurs and investors settlement ^a			
Humanitarian reasons (refugees, etc.)			
Border workers			
Frequent border crossers			
Nomads			
Transit not entering economic/legal territory			
Diplomatic and consular personnel			
Military personnel			

a See footnote in paragraph 5.xx.



Non-migrant categories



Migrant categories

5.85. Table xx summarizes links between the coverage of RSIM, Rev. 1 and IRTS 2008 in terms of the purpose and duration of stay. It identifies in bold the purposes of stay that are relevant for mode 4. The list of purposes of stay, which is derived from the categories of RSIM, Rev. 1 and the IRTS 2008 classification of tourism trips according to main purpose has been built to show how these tourism and migration data sources can be used to collect and compile information on the number of persons crossing borders in the context of mode 4 (flows and stocks). Rows presented in italics are not separately available in RSIM, Rev. 1 and IRTS 2008 but are indicated in this table as a possible breakdown that would better serve information needs of GATS. All purposes of stay are covered by RSIM, Rev.1, as it deals with migrant as well as non migrant categories. They are further broken down into non-migrant (white cells, the majority of purposes corresponding to stays of less than three months) and migrant categories (grey cells). In RSIM, Rev. 1 the migrant categories are further broken down into short-term migrant (stays between three and twelve months) and long-term migrant categories (more than 12 months). Visitors as defined by IRTS 2008 are grouped in this table in the box with thick borders. As shown in this table there are two overlapping items between both statistical systems:

personal visits for less than twelve months but more than three, for the purpose of education and training and other personal reasons. "X" and "x" indicate respectively the minimum and complementary mode 4 information requirements as indicated above. Finally the highlighted "X" shows that in the absence of a further disaggregation the category business and professional stays (corresponding to business travelers in RSIM, Rev.1) could be used as a first approximation for total flows and/or stocks of mode 4 persons staying abroad in the context of mode 4 trade in services (but excluding the vast majority of mode 4 movements and presence related to the supply of services through mode 3).

3. *GATS mode 4 and supplementary information from BPM6*

5.86. Although they do not reflect the value of the services contract and hence cannot be used to measure mode 4 trade in services, identifying relevant transactions in relation to mode 4 - presence of natural persons within compensation of employees, personal transfers or travel will provide additional analytical information. Box xx details the relation of GATS mode 4 and remittances statistics.

Box xx: GATS mode 4 and remittances

For many countries, remittances represent an important source of income that exceeds official aid flows or financial inflows from foreign direct investment. The two standard items that relate to remittances in BPM6 are compensation of employees and personal transfers.

Compensation of employees refers to the income of border, seasonal, and other short-term workers who are employed in an economy where they are not resident and of residents employed by nonresident entities. Compensation of employees represents "remuneration in return for the labor input to the production process contributed by an individual in an employer-employee relationship with the enterprise".

Personal transfers consist of all current transfers in cash or in kind made, or received, by resident households to or from other non-resident households. *Personal transfers* thus include all current transfers from resident to non-resident households, independently of (a) the sources of income of the sender (be it wages and salaries, social benefits or any other type of transfers, including transfers from a person receiving no income and running down his/her assets); (b) relationship between the households (be it between related or unrelated persons); (c) purpose for which the transfer is made (be it inheritance, alimony, lottery, etc.). In particular BPM6 recommends the recording of a supplementary item entitled worker's remittances.

Information of BPM6 on compensation of employees and personal transfers for the different categories of persons could provide additional information on mode 4. However these flows will not reflect the value of the service contract and cannot be used to measure trade in services. In addition -- if they were to be used -- this would result in double counting as the value of trade would implicitly be included either within the value of the BPM6 trade in services statistics (for mode 4) or in FATS (for mode 3). In some instances, however, compilers might use this information to extract a mode 4 estimate from appropriate balance of payments services items. While this additional information cannot be tracked to specific transactions, it could probably be used as a reality check.

5.87. For a contractual service supplier, if the person (either as an employee of the service supplier or self-employed) stays less than one year in the host economy, his/her related expenditure will be recorded under the BPM6 item travel. If the employee of the service supplier stays more than one year the compensation received by the employee from his employer will be recorded as compensation of employees and subsequent personal transfer flows and/or increases in assets in the home economy would be recorded in the balance of payments. See box xx for more information. For self-employed persons staying more than one year, personal transfer flows and/or increases in assets in the home economy will be recorded in the balance of payments. The latter is further detailed in Section C.4.

5.88. BPM6 statistics could also provide supplementary information of interest for analyzing the transactions associated with the movement of intra-corporate transferees working for service suppliers which have established a commercial presence abroad:

- If the employer-employee relationship is with the affiliate, and the intra-corporate transferee stays less than one year then wages etc. will be recorded under the BPM6 item compensation of employees. If he/she stays more than one year, then personal transfer flows and/or increases in assets in the home economy may be associated;
- If the employer-employee relationship remains with the parent company and the intra-corporate transferee stays less than one year, then the affiliate will pay for the service rendered by the parent company. If he/she stays more than one year, then wages etc. paid by the parent company will be recorded under the BPM6 item compensation of employees and subsequently there may be personal transfer flows and/or increases in assets in the home economy associated;
- Whatever the employee-employer relationship, if the intra-corporate transferee stays less than one year then his/her related expenditure will be recorded under the item travel.

5.89. For services sellers/persons responsible for setting up commercial presence, unless they become residents of the host economy, their related expenditure will be recorded under the item travel.

4. *Other indicators*

5.90. To complement trade information for a more global analysis of services industries and/or an assessment of individual services sectors or market opportunities, there exists a number of additional useful statistics that can be drawn from various frameworks. These include indicators on production and employment, for example national accounts, business and employment statistics, or performance indicators which trace the quantitative development of a service sector. National accounts statistics provide information on an industry's activity (ISIC) such as output, value added, capital formation or employment. These aggregates are particularly useful as they are available in both current and constant prices. 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. While these indicators allow analyzing the sector's developments over time, they are not suitable for cross-sector comparisons.

5.91. Recent developments in linking trade and business registers are an interesting addition to statistical information at a microeconomic level. Such a linkage would improve the compatibility of trade and business statistics to analyze trade flows characteristics of enterprises, for example, by economic sector, between enterprise groups (intra-firm trade), size class (employment), or at a country's regional disaggregation.

E. Summary of recommendations

5.92. Following simplification criteria and rules, Section C describes the allocation of service transactions in BPM6/EBOPS statistics and FATS by mode of supply. This recommended allocation needs to be regarded as a guide that compilers may adapt according to their economy's information needs, situation of data collection systems and resource constraints.

5.93. The simplified statistical approach to modes of supply does not strictly adhere to GATS provisions, rather. It has been designed as a first guidance to provide relevant information for GATS while ensuring feasibility and consistency with statistical frameworks. Table xx summarises the recommended simplified allocation according to the dominant mode of transactions. A full breakdown of statistics by modes of supply is considered a low priority. Countries may choose the provision of such statistics as a longer-term objective. If compilers meet difficulties in implementing such an allocation, they may simplify the implementation by allocating EBOPS service transactions at a higher level of aggregation (e.g using BPM6 standard services items). The following breakdown is recommended in particular (see table xx):

- (a) As a general rule, FATS sales/output statistics provide information on mode 3. Balance of payments services statistics generally correspond to modes 1, 2 and 4. The exception is that the balance of payments construction component may be allocated to mode 3 or broken down between modes 3 and 4;
- (b) Each EBOPS component should be allocated either to one dominant mode or, where there is no single dominant mode, to the most significant mode(s) of supply:
 - i. *transport* (excluding supporting and auxiliary services provided to domestic carriers in foreign ports), *telecommunication, information services, insurance and pension services, financial services, franchise fees, operational leasing services* and *trade related services* may be allocated to mode 1;
 - ii. *manufacturing services on physical inputs owned by others, maintenance and repair services n.i.e.*, supporting and

auxiliary services provided to domestic carriers in foreign ports (or vice-versa) and *travel* (excluding travellers' expenditure on goods) are allocated to mode 2;

- iii. *services incidental to agriculture and services incidental to mining* are deemed to be provided through mode 4;
 - iv. *computer services, research and development services, professional and management consulting services, architectural, engineering, scientific and other technical services, other business services, n.i.e.*, and *personal, cultural and recreational services* may be allocated to mode 1 and/or mode 4;
 - v. *waste treatment and de-pollution* may be allocated to mode 2 and/or mode 4; and
 - vi. *construction* may be provided through mode 3 or mode 4.
- (c) although included within the value of goods traded, estimating trade in distribution (i.e. wholesaling and retailing) services would improve the estimation of trade through mode 1; and
 - (d) where relevant for compiling economies, practices to separately identify modes of supply information within BPM6/EBOPS services components could be developed as shown in Section C.

5.94. Section D identifies additional indicators drawn from various statistical frameworks to provide a more complete picture of international trade in services. If compilers collected this additional information, it would considerably improve the knowledge of trade in services beyond the financial transactions involved when trading. The chapter notably identified frameworks such as tourism and migration statistics that could be used to collect more detailed information on the number of persons crossing borders and staying abroad in the context of mode 4, with possible extensions of these frameworks if deemed necessary.