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MEASURING TRADE IN SERVICES IN MODE 4

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MEASURING TRADE IN SERVICES IN MODE 4

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"...though we often deal in aggregates, trends and averages, it is notable how often people are convinced not by the data but by whether the analysis corresponds with what they have seen with their own eyes."

(M. Blastland, Andrew Dilnot, Significance, June 2005)

1. Introduction

1. Today, international labour movements across borders are an integral part of the global economic landscape. These movements can be for leisure, establishment (related or not to investment), employment or for supplying a service. Circumstances such as higher income prospects, employment opportunities, and reduced communication and transportation costs contribute to labour mobility as well as to temporary assignments in the context of services trading. To distinguish labour mobility from trade in services through mode 4 and to measure the respective trade in services flows due to the movement of persons is the subject of this chapter.

2. Examples of labour movements are numerous. In Europe, there is a clear trend of increased mobility from the recently acceding EU members to the older ones. Indian information technology specialists emigrate (in particular to North America and Europe) or travel around the world for short-term assignments contracted between their employer located in India and clients abroad. The delivery of "turnkey projects" in which the vendor delivers whole production facilities abroad (such as nuclear plants) also involve labour movements and the supply of construction services. For example, workers may be deployed around the world on construction sites, whether for projects conducted by host country

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1 This chapter represents the opinion of the authors, it is not meant to represent the position or opinion of the WTO or its Members, nor the official position of any staff member. This paper has been written for the ARTNeT/ADBI conference in Indonesia (11-12 October 2010) and its subsequent conference volume.

2 While the International Labour Organization defines labour mobility as movement of persons within a domestic labour force and labour migration as movement between countries with the objective of employment abroad, this Chapter uses the terminology of labour mobility and/or migration interchangeably in respect of either short-term or long-term employment abroad and analyses temporary labour mobility in contrast to trade in services through movement of persons.

companies or in the context of subcontracting to foreign suppliers. Contractual labour migration in Southern Africa, which was initially developed to ensure a regular supply of workers to the mining centres of the region, was extended in some cases to other sectors such as agriculture, construction, and services.

3. Labour movements can be short-term or long term. Often mentioned in various papers, publications and research work, there is no clear statistical translation of the different categories of temporary movement and up to recently there was no clear distinction between (temporary) labour mobility and trade in services (mode 4)⁴. As presented in Box 1, the confusion around what mode 4 trade is and what are the commonalities and mainly the differences with the concepts of labour mobility (short-term and long-term) adds a difficulty for using appropriate information when focusing on one aspect or the other. The use of inappropriate indicators for measuring mode 4 trade in services (i.e. personal transfers, worker's remittances or compensation of employees data drawn from the balance of payments) is an illustration of confusion around definitions, be it legal or their translation into statistical concepts. In fact, trade in services through presence of natural persons (mode 4) and labour mobility can be distinguished by the type of contracts underpinning the transactions. Employment contracts are related to labour mobility and mode 4 is characterized through a service contract that is agreed upon between the supplier and the consumer of the service.

Box 1: Labour migration and mobility

Key features of labour migration are movements between developing rather than developing to developed countries, due to restrictive immigration policies of the latter ones. Low-skilled workers represent the bulk of this migration (International Organization for Migration, Maurice Schiff, 2006). This migration for economic purposes, institutionalised through the International Labour Organization, the International Organization for Migration, and the United Nations under the aegis of the Global Forum on Migration and Development, is extensively analysed in the literature. However, this is distinct from trade in services through mode 4. There is no role for the World Trade Organization in migration as mode 4 deals only with the provision of services and not migration (Public Forum 2008). Often, both subjects are entangled. Notwithstanding, analysis of mode 4 is often done using labour migration/mobility instruments which attempt to estimate the respective trade in services flows through income-related flows (personal transfers or compensation of employees). However, this entraps "turnover" variables with income variables. In addition, the coverage of the balance of payments indicators used does not correspond to the coverage of population required to measure trade in services (mode 4). A parallel can be seen with the mode 3 supply of services where FATS statistics were developed for measuring the sales of foreign affiliates to compare these with a country's traditional cross-border trade. Statistics to measure mode 4 trade flows (values) can be considered along these lines and some countries are actually beginning to develop mode 4 measures or are looking into the issues of data collection.

4. Reliable and internationally comparable information for short-term labour mobility and trade in services (mode 4) is lacking. A crucial issue is how to draw a boundary between employment and services contracts, in particular for self-employed and for labour services provided via employment agencies. For the latter, an additional difficulty may be to establish the type of services provided (e.g. agricultural services, mining services, accountancy). These considerations may in particular result in faulty measures of labour input and productivity as Box 2 shows, thus on the level of GDP as a value added measure.

⁴ Following recent methodological work conducted within the Inter-agency Task Force on Statistics of International Trade in Services, the General Agreement on Trade in Services (GATS) legal definition of trade in services through the presence of natural persons (mode 4) was translated into statistical concepts, leading to a "statistical" clarification of the scope of mode 4.
5. Realistic estimates of mode 4 trade are virtually non-existent, and the little information available seem to indicate that at the global level it is the least important mode in value terms. However how could we reliably measure mode 4? The central question for measuring mode 4 trade in services is how to get data on international contracting of services involving the movement of workers (workers sent by their foreign employers to the compiling economy in the context of services contracts including hired labour force via employment agencies), foreign self-employed persons as well as intra-corporate transfers.

6. This Chapter describes the measurement issues relating to trade in services through the presence of persons (mode 4), in particular how to analyze its relative importance (i.e. value) compared to other modes of supply (i.e. 1, 2 and 3). Section 2 describes how mode 4 is analysed in statistical and economic literature. Section 3 describes the scope of mode 4 in GATS while Section 4 shows how it is translated into statistical concepts and provides selected examples. Finally section 5 concludes by identifying possible ways forward for improving knowledge on mode 4.

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**Box 2: Labour mobility, trade in services and productivity**

The distinction between what constitutes provision of labour and what is provision of a service is difficult. MSITS 2010 provides further clarification regarding the practice in countries: "It is often the payment of taxes or social security contributions that will determine the perception of individuals involved, along with 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)."

Although in some cases the impact will probably be minor, for some countries where the international labour movement is important, the distinction between them may significantly influence macroeconomic aggregates. Labour productivity measures could be influenced as a consequence of whether transactions in relation to international labour movements are classified as labour input or trade in services (such considerations will also depend on the way productivity is measured). This phenomenon will increase in importance with the opening of services markets and labour markets. The example below is a simple illustration of the influence the classification of transactions may have on a single labour productivity value added based measure: Take an economy with a single firm producing 1000 of output. In the first column we see that the intermediate consumption of this firm is 200 leading to a value added of 800. The labour input (assume half of it is linked to short-term employment from abroad with an employer in the host country) corresponds to 20 hours worked, leading to a single labour productivity of 40 per hour worked. Now imagine that actually there was a misclassification as what had been counted as employment with an employer in the host country is actually trade in services (i.e. service contract with a non resident institutional unit). The value of the service contract of 100 leading to a reduction of value added to 700 in the second column. The consideration of the service contract leads to a reduction of what was counted as employee work in the first column to 10 hours in the second, leading to a much higher level of productivity of 70 per hour worked.

<table>
<thead>
<tr>
<th>Labour mobility</th>
<th>Trade in services</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output</td>
<td>1000</td>
</tr>
<tr>
<td>Intermediate consumption</td>
<td>200</td>
</tr>
<tr>
<td>Value added</td>
<td>600</td>
</tr>
<tr>
<td>Employment hours worked</td>
<td>20</td>
</tr>
<tr>
<td>Labour productivity</td>
<td>40</td>
</tr>
</tbody>
</table>

Of course in reality these relations are not as clear and other factors tend to influence productivity measurement, in particular if we start looking into multifactor productivity, where intermediate inputs may have an important role to play, in particular with the above considerations.

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5 Measuring GATS mode 4 trade flows, WTO, Staff Working Papers, 2008.
2. Mode 4 in statistical and economical literature

7. Although the 2002 version of the Manual on Statistics of International Trade in Services (MSITS 2002) provided a number of guidelines to develop statistics on mode 4, it is only in the recent revision of the Manual (MSITS 2010) that the coverage of mode 4 could be clarified from a statistical point of view. The literature on mode 4 currently available therefore focuses on the very preliminary discussion that took place when drafting the first version of this manual.

8. The International Organization for Migration (IOM) World Migration Report 2008 considers the movement of workers as labour migration, defining it as "movement of persons from their home state to another state or within their own country of residence for the purpose of employment." It admits that there is some "overlap and confusion as to how to differentiate between labour movements and the General Agreement on Trade in Services mode 4 movements for services." The Organisation for Economic Cooperation and Development (OECD) 2010 edition of the International Migration Outlook SOPEMI identifies a number of issues with respect to the coverage of statistics on temporary worker movements. It states that "some movements, for example those involving cross-border service providers, may not be explicitly identified" and that "in still other cases, work assignments are short and the movements may escape recording entirely." In addition it shows that "in some countries, movements that appear [...] as temporary are classified as permanent because the migrants in question, for example intra-corporate transfers, are granted a status that essentially places them on a permanent migration track."

9. Given the number of issues met to appropriately measure mode 4, both in value terms as well as counting the number of mode 4 service providers, there is little literature specifically focusing on the numerical analysis of mode 4. Rather, various papers and articles in economic literature mainly aim at showing the benefits of mode 4 by analysing labour migration. Computer General Equilibrium (CGE) simulation studies, such as those of Winters and Walmsley state that restrictions on temporary labour migration are inducing costs to developed and developing countries alike in the range of 150 billion US dollars, approximately 1 per cent of world trade in 2006. Other literature uses income measures such as compensation of employees or worker remittances to prove positive effects of temporary movements of natural persons on merchandise trade and services trade under modes 1 and 3. They argue that temporary movements, like permanent movements, would for example reduce transaction costs for merchandise trade and thus create additional trade. Other studies analyse international labor migration highlighting that Asia is the largest supplier of "emigrants to other regions of the world."

10. The beneficial effects mentioned above are mirrored in the developing and least-developed countries' (LDCs) requests for liberalising the movement of persons in the current Doha Development Agenda (DDA) negotiations where they seek improved commitments on market access for their

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6 IOM, World Migration report, 2008, p. 495
7 Handbook of International Trade in Services, Mattoo, A. et al., p. 42.
9 The Impact of Mode 4 on Trade in Goods and Services, Marion Jansen, Roberta Piermartini, WTO Staff Working Paper ERSD-2004-07.
10 The Impact of Mode 4 Liberalization on Bilateral Trade Flows, Marion Jansen, Roberta Piermartini, WTO Staff Working Papers ERSD-2005-06.
11 Hugo (2009), Migration, labour mobility and migration, p. 477.
nationals. For example, the LDCs pointed out that GATS mode 4 is "one of the most important means of supplying services internationally." However, most of the literature analyzes existing data of a "migration" population which does not correspond to the population covered under mode 4. In other words the statistics used in these studies generally do not cover mode 4 persons but look at migrant workers (see MSITS 2010, box 5.6 (http://unstats.un.org/unsd/statcom/doc10/BG-MSITS2010.pdf).

11. While economic literature is attempting to explain the economic impact of liberalising mode 4 using tools applied in migration, statisticians in contrast struggle with the "adequate translation" of GATS mode 4 legal texts into statistical concepts to appropriately measure the size of related trade flows, that is, to determine the relative importance of mode 4 vis-à-vis other modes of supply. Measuring these trade flows would be important for a proper assessment of the international supply of services. The 2009 WTO background sectoral note on the Presence of Natural Persons (Mode 4) briefly presents the measurement challenges of this mode of supply, and also provides a summary of available literature on the potential economic implications of the liberalization of trade in services in mode 4.14

III. Scope of GATS Mode 4 Trade and differences with Labour Mobility

12. This part is mostly drawn from section II of the WTO background sectoral note on the Presence of Natural Persons (Mode 4) S/C/W/301 which was presented to the WTO Council on Trade in Services and discussed during its October 2009 meeting. This section of the background note focuses on the scope of Mode 4, and is consistent with contents of Chapter V "Statistics on the international supply of services by mode" of MSITS 2010.

13. Temporary labour mobility and trade in services through the presence of natural persons (mode 4) is not easy to distinguish. Article I.2(d) of the GATS defines mode 4 trade 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". "Simply put, mode 4 occurs when a natural person of one WTO Member seeks to enter, or is present in, the territory of another Member in relation to the supply of a service. In other words, the GATS covers the movement of people only to the extent that it is for the purpose of supplying a service". Beyond this coverage, it is temporary international labour mobility or labour migration (if long-term).

14 WTO (2010), S/C/W/301, Presence of Natural Persons (Mode 4), Background Note by the Secretariat
15 As this chapter focuses on the scope of mode 4 trade in services as defined in GATS, it is important to note that a number of regional/bilateral agreement go beyond the scope of mode 4 trade in services by covering certain aspects of labour mobility.
16 S/C/W/301, p. 1
14. Mode 4 always involves a natural person, through whose presence services are being traded. However, that natural person is not necessarily the "service supplier". Depending on the nature of the transaction, the service supplier may be another natural person, or a juridical person (see chart 1). In each case it is vital to identify the service supplier, to whom the obligations in the GATS are owed.

15. Further elaboration on the scope of mode 4 is provided in the GATS Annex on the Movement of Natural Persons Supplying Services under the Agreement (hereinafter: the Annex). The Annex specifies two types of natural persons that are covered: (1) those who are (themselves) service suppliers; and (2) those who are employed by a service supplier. The main definitional elements are outlined below.

Type (1) - Natural persons as service suppliers

16. The first type, "natural persons who are service suppliers of a Member", involves only one and the same person, who is present and supplies a service in the territory of another Member. This would cover a self-employed person who is remunerated directly for the supply of a service by customers in the host country.

This case is illustrated in Chart 2.

17. The natural person must be the national (or permanent resident) of a Member other than that in which he or she is present to supply the service, i.e. the natural person must be of foreign origin from the host Member's perspective. For instance, services supplied in the United Kingdom by an Indian national would fall under mode 4, unlike the services supplied by a UK national (who is not a natural person of a Member in the territory of any other Member).

18. The service supplier might operate either from a base in the host country (as per the relevant mode 3 commitments) or from a foreign base. A physician who supplies medical services through an office in the host country might be an example of the former type, a piano artist giving a concert abroad one of the latter.

Type (2) - Natural persons as employees of service suppliers

19. The second type covered according to the Annex are "natural persons of a Member who are employed by a service supplier of a Member". In other words, a distinction is made between the natural person and the service supplier. The service supplier can be a natural person as well, but it will be that person's employee who is present and delivers the service in the host Member. More commonly, however,
the supplier will be a juridical person. The natural person and the service supplier need to be from a WTO Member, but not necessarily from the same Member.

20. According to Article I.2(d), the natural person must be in the territory of another Member, and, as discussed above, the service supplier must also be "of any other Member". Therefore they must be both of foreign origin. As nationally-owned service companies are not service suppliers "of another Member", any foreign natural person they employ is therefore not covered by mode 4.\(^\text{17}\) Thus, host-country firms would not be entitled to claim GATS treatment from their own government regarding measures affecting foreign natural persons they employ or wish to employ. Only foreign juridical persons, or foreign natural persons who are service suppliers would be entitled to this treatment with respect to foreign employees.

21. Chart 3 outlines how mode 4 services are traded through natural persons employed by a service supplier of a Member.

**Chart 3. Natural persons as employees of service suppliers**

<table>
<thead>
<tr>
<th>Service supplier (natural person) from Member B</th>
<th>Supplies the service</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employee (from Member B, C, or D) of the natural person is present in A</td>
<td></td>
</tr>
<tr>
<td>Supplies the service</td>
<td></td>
</tr>
<tr>
<td>Service supplier (juridical person) from Member B</td>
<td></td>
</tr>
<tr>
<td>Employee (from Member B, C, or D) of the juridical person is present in A</td>
<td></td>
</tr>
</tbody>
</table>

22. By definition, the natural person is present in the territory where the service is being supplied, whereas the service supplier is not necessarily there. In any case, it needs to be determined that the service supplier is "of another Member" according to the definitions in Article XXVIII.

**Service supply vs. employment**

23. It may not always be straightforward to determine if a person (self-employed or employee of the service supplier) is supplying a service or is employed by the host-country company. As previously mentioned, mode 4 covers foreigners who are themselves the service supplier and foreigners employed by a foreign service supplier, but not foreigners who are employees of a national service company or individual. As a result, a foreigner supplying services to a host-country company on a contractual basis as a

\(^{17}\) These would be covered by the definition of labour mobility/migration. For additional views on this issue, see, for instance, Self and Zutshi (2003), Chaudhuri et al. (2003), OECD (2004), Peng (2006).
self-employed person would be covered by mode 4, whereas the same person would fall outside the scope of mode 4 if they were an employee of that company.

24. The GATS offers no guidance on how to differentiate between an employee and a service supplier. This distinction, however, is frequently drawn under national laws. It is often used to determine a person's entitlement to employment rights, social security and other benefits and fiscal treatment. Box 3 provides a description of how this distinction should be applied in economic statistics.18

IV GATS Mode 4 in Statistical Frameworks19

Mode 4 information can be analysed either in the context of regulatory trade barriers or for trade flows induced by mode 4. Due to the lack of information on the latter, many economic papers concentrate on the first aspect. In contrast, this section develops concepts that allow the quantification of trade flows in relation to mode 4, both, for the value of trade and the flow and stock of persons involved (number of persons).

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**Box 3: 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.9 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 entity and an individual, normally entered into voluntarily by both parties, whereby the individual works for the entity 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 entity and a self-employed person.

It may not always be clear whether an employer-employee relationship exists between the individual and the entity or whether the individual is self-employed and supplying a service to the client entity. Provision of several types of services may pose such problems because entities 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 for the international accounts. If an employer-employee relationship exists between the worker and the entity for which the work is being done, the corresponding payment constitutes compensation of employees. If the individual is self-employed, 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. If the individual is solely responsible for social contributions that would suggest that he/she 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 leave, etc.) that the entity generally provides to its employees, this indicates an employer-employee relationship. Payment of taxes on the provision of services (such as sales taxes or value added tax) by the individual is an indication that the individual is a self-employed service provider.

It is often the payment of taxes or social security contributions that will determine the perception of individuals involved, along with the way accounting systems record their remuneration and as a consequence how the distinction is made in

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18 See also S/C/W/301 box 1 which provides an example of the types of criteria which have been adopted in a jurisdiction.

19 This part of the paper is based on recommendations of chapter 5 of MSITS 2010.
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. For more information on ISCE see http://www.ilo.org/public/english/bureau/stat/class/icse.htm.

25. The introduction of the Extended Balance of Payments (EBOPS) classification and the new statistical framework on Foreign Affiliates Statistics (FATS) in MSITS 2002 have allowed to improve the coverage and refine measures for trade in services, in particular for approximating modes 1, 2 and 3. However, up to date, no reliable estimate exists on the value of mode 4 trade which renders any quantitative assessment difficult.

26. For appropriate indicators to measure GATS mode 4, information needs to concentrate on two basic aspects: first, the value of the service provided for categories of people that fall under the mode 4 regime and, second, the number of natural persons moving (flows) and temporarily present (stocks) in the context of the supply of a service. Chart 4 summarizes which types of statistics will fulfil information needs according to modes of supply.

27. The new MSITS 2010 includes a chapter that discusses the measurement of trade flows by mode of supply, in particular mode 4, and provides new recommendations. It should be stressed however that MSITS 2010 guidelines on the compilation of statistics on the international supply of services are laid out for statistical purposes and that they do not exactly correspond to trade in services as defined in GATS. For instance GATS defines the supply of services as including "the production, distribution, marketing, sale and delivery of services" whereas international statistical guidelines mainly focus on the production and delivery aspects for valuing services trade. Although there are a number of such differences, the concepts and definitions in economic, tourism and migration statistics respond relatively well to GATS information needs. They would only necessitate minor adjustments in some cases.

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

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

22 BPM6 and MSITS 2010 refer to trade in services in the context of economic transactions which are "defined as an interaction between two institutional units by mutual agreement that reflects the creation, transformation, exchange, transfer or extinction of economic value, and involves changes in the volume, composition, or value of an institutional unit’s assets and liabilities. It involves purchases of goods or services, […]"
4.4 The statistical conceptualization of mode 4

28. For developing indicators that allow to identify relevant mode 4 trade in services flows, it is important to translate the GATS coverage as described in Section III into statistical guidelines. This requires the use of specific terminology to bridge the legal and statistical languages. From a statistical/economic point of view, persons falling in the scope of mode 4 can be identified as falling into two main groups: on the one hand those directly involved in the rendering of services through a service contract (contractual service suppliers, either self-employed or employees of foreign service suppliers) and on the other those indirectly involved in the provision of services (e.g. intra-corporate transfers or sales negotiations). Based on this consideration the MSITS 2010 identifies four main groups of persons under mode 4. If the service supplier is defined as being located in member B, and the service consumer is located in A, then mode 4 in statistical terms may be considered as covering the following major categories of natural persons:

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23 These categories are the major groupings of persons moving abroad in the context of mode 4 used in MSITS 2010. 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 and break down information according to the more specific needs identified.
• **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. 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 an employee of the "client" (see box 3). If an employer-employee relationship exists, then the individual would not be included in the 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 information technology services enterprise of B who is sent to A to deliver this service;

• **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. 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 an economy 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. 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. There is no international supply of services in economic terms and consequently no accompanying transaction taking place, at least initially. Their movement, in order to conduct negotiations, is guaranteed by commitments of mode 4. The negotiations will then eventually lead to the future supply of services through either of the modes.

29. 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

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24 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 as per a relevant Mode 3 commitment. Although a Mode 4 commitment can guarantee the right for this person to be present in this territory, it is considered in MSITS 2010 that the supply of the service is carried out through a commercial presence.

25 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.

26 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. In the GATS text the definitions of modes of supply are mutually exclusive and it is through scheduling that these relationships are created.

27 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. These frameworks refer to travellers/visitors who enter in the territory of another economy for any business and professional reasons (i.e. covering, in addition to service sellers, many of those covered under the definition of contractual service suppliers).
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.).

In their commitments, WTO members have in general also indicated the length of stay of natural persons by the respective categories. 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.

30. All these issues make the task of estimating values of trade in services by modes of supply challenging. 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 on the recording (or not) of associated payments and receipts in the balance of payments or in FATS.

4.b What would be an appropriate measure for GATS mode 4 trade?

31. The balance of payments items compensation of employees and workers remittances/personal transfers are often used in economic literature as statistical indicators to estimate the size of GATS mode 4 trade. However, compensation of employees and workers remittances are both labour income measures and cannot be used to measure mode 4. 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’. It refers to the income of border, seasonal, and other short-term workers who are in an employer-employee relationship in an economy where they are not resident and of residents in an employer-employee relationship with a non-resident entity. Personal transfers consist of ‘all current transfers in cash or in kind, made or received, by resident households to or from non-resident households’. This includes all current transfers from resident to non-resident households, independent of (a) the sources of income of the sender (be it income from labour, entrepreneurial or property income, social benefits, and any other types of transfers; or disposes assets); (b) relationship between the households (be it between related or unrelated persons) and (c) purpose for which the transfer is made (be it inheritance, alimony, lottery, etc.). BPM6 recommends the recording of a supplementary item entitled worker’s remittances (current transfers made by employees to residents of another economy). Consequently, these indicators provide income flows originating from the movement of people or migration and in the majority of cases do not cover the mode 4 population. As such, they cannot replace BOP indicators which measure trade flows (transactions) that are specified and originating from service contracts between service suppliers and consumers.

32. For comparison, a 2007 estimate for mode 4 is in the magnitude of USD 200 billion in 2007 (based on trade in services exports data, see below), compared to USD 250 billion total compensation of employees and worker's remittances paid (and estimated 385 for remittances received).30

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28 In addition worker's remittances often cover all remittances made by residents as in many cases data collection systems are unable to separately identify the amounts originating from labour income.

29 Residence is a basic concept of the balance of payments framework. It is notably defined in terms of interest and duration (or intention) of stay in the host economy on the basis of a one-year guideline.

30 World Bank, World Development Indicators, 2010.
33. The value of trade in services as measured in the balance of payments refers to the international transactions between residents and non-residents with an underlying contract as the basis for this transaction. As shown in section 4.a, clarifying the coverage of mode 4 in statistical terms shows that the value of services trade is relevant only in the case of contractual service suppliers. The information is not needed for intra-corporate transferees and foreign employees directly recruited by the foreign affiliate, nor for services sellers/persons responsible for setting up commercial presence. For the former the service transaction between the service supplier (i.e. the juridical person) and the consumer is taking place through mode 3 (the mode 4 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).

34. In addition to the value of trade in services for mode 4, information on the number of persons (flows and stocks) would be of interest for all categories of natural persons. Although once again this type of information is not separately available, recommendations of MSITS 2010 show that existing statistical frameworks such as tourism or migration statistics combined with some small adjustments in data sources (e.g. enterprise surveys, border or passenger surveys, administrative sources such as visa records) will help in assessing the size of and monitoring mode 4 movement and presence.

4.c Where and how can GATS mode 4 trade related transactions be found in an economy's trade in services statistics?

35. Following MSITS 2002, a few national agencies attempted to assess the possibility of measuring their total trade in services according to the GATS modes of supply (e.g. Australia or Singapore). For instance, FATS or other relevant indicators were used to estimate mode 3, while balance of payments services transactions were split according to mode 2 (travel and if possible supporting and auxiliary services provided in ports) and grouping all other services transactions under a single heading referring to modes 1 and 4. However such exercises were not conducted or refined since, probably as a consequence of the lack of statistics on commercial presence as well as the absence at the time of clear guidelines for defining mode 4.

36. Chart 5 shows that conducting such a rough estimation for the supply of services to the United States, the relative sizes of modes would be 10.2 per cent (mode 2), 66.7 per cent (mode 3), and 23.1 per cent for grouped services transactions referring to mode 1 and mode 4 under a single heading.
Chart 5. International supply of services to the United States broken down by mode, 2007 (Percentage)

Mode 3 66.7%
Mode 2 10.2%
Mode 1+4 23.1%


37. Again this reveals that international transactions may actually be allocated to a single mode or a single transaction may be composed of several modes of supply including a mode 4 component. For example, a single service contract between a foreign computer services supplier and his client in the United States may cover the design of parts of a specially tailored software offshore and an employee of the foreign computer services company who is sent to the United States to design other parts of the software and coordinate the project on-site (i.e. at the office of the client). In such a case payments for this service contract involve indistinguishably mode 1 and mode 4 components.

38. For a statistical assessment of trade in services by modes, the question is how to allocate in balance of payments services transactions the respective parts that are relevant to different modes. As above example shows, services are delivered through a combination of modes, often involving mode 4. It is therefore important to identify services items where mode 4 will most likely be an important component. These are construction, computer services, other business services (miscellaneous business and professional services such as lawyers, architects, services incidental to agriculture, mining, etc.) or personal, cultural or recreational services (excluding audiovisual).

39. Table 1 shows an estimation of the evolution of world exports in these services sectors since 2000. While mode 4 trade in services may represent only a small portion in these trade flows, they are inevitably included. Over the period 2000-08 exports in all these sectors have presented a higher average growth rate than exports of total commercial services (essentially covering modes 1, 2 and 4), with the exception of other personal, cultural and recreational services. However it is important to note that for the latter for a number of years such as in 2006 and 2007, the annual growth rate was much higher than for total commercial services.
Table 1. World exports of services sectors where mode 4 is deemed to be an important component, 2008
(US$ billion and annual percentage change)

<table>
<thead>
<tr>
<th>Services sectors</th>
<th>Value 2008</th>
<th>Value 2000</th>
<th>Value 2008</th>
<th>Value Share</th>
<th>Annual percentage change</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>2000-08 2006 2007 2008</td>
<td></td>
</tr>
<tr>
<td>Construction</td>
<td>90</td>
<td>1.9</td>
<td>2.4</td>
<td>16 16</td>
<td>25 27</td>
</tr>
<tr>
<td>Computer and information services</td>
<td>200</td>
<td>3.3</td>
<td>5.1</td>
<td>19 21 23</td>
<td>23 23</td>
</tr>
<tr>
<td>Other miscellaneous business, professional and technical services</td>
<td>620</td>
<td>15.2</td>
<td>16.2</td>
<td>14 14</td>
<td>20 14</td>
</tr>
<tr>
<td>Other personal, cultural and recreational services</td>
<td>10</td>
<td>0.3</td>
<td>0.3</td>
<td>12 20 28</td>
<td>11 13</td>
</tr>
<tr>
<td><strong>Total commercial services</strong>*</td>
<td>3830</td>
<td>100</td>
<td>100</td>
<td>13 14</td>
<td>20 13</td>
</tr>
</tbody>
</table>

Services sectors correspond to the Balance of Payments classification.
* As defined in the Balance of Payments, essentially covering modes 1, 2 and 4.
Source: Author's calculations based on WTO data

40. Ideally, each international service transaction as recorded in the balance of payments should be allocated among the different modes. However it may be difficult for data compilers to identify a transaction's full complexity. Building on the simplified approach presented in the 2002 version, the MSITS 2010 goes a step further in providing additional detail as to the allocation of FATS and balance of payments transactions to modes of supply. First it states that FATS provide most of the information regarding mode 3, and second that balance of payments services transactions broadly cover modes 1, 2 and 4. As a second step, it identifies balance of payments services transactions which largely correspond to one dominant mode. Examples are communications services (mode 1) or travel which is allocated to mode 2. Other examples are services incidental to agriculture and mining which are deemed to be provided predominantly through mode 4.31

41. For other types of services, transactions (e.g. computer, legal, architectural, waste treatment services), the picture may be more complex as individual transactions might involve significant elements of different modes. Mode 4 might be relevant for many of these transactions. Chart 6 summarizes the recommended allocation of statistics which can serve as a first guidance to estimate the value of the international supply of services broken down by modes. It identifies the dominant mode(s) of supply used for balance of payments services transactions, the shaded ovals showing the balance of payments items where mode 4 may represent an important proportion of transactions (although probably not dominant).32 More information on the allocation of balance of payments services transactions to modes may be found in the 2010 edition of the Manual on Statistics of International Trade in Services.

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31 The main source of information for mode 3 is FATS and this mode is generally not covered by balance of payments (BOP) statistics: commercial presence generally relates to transactions between residents of the same economy whereas the BOP refers to transactions between residents and non-residents.

32 If for a compiling economy allocation does not necessitate the separate identification of modes or if it has difficulties in implementing the allocation according to this chart (too burdensome or costly for compilers or reporters), the rules can be simplified by concentrating on the 12 most relevant BPM6 service transaction aggregates, FATS and if possible the estimated value for distribution services associated with cross-border goods trade.
42. Based on these assumptions it is possible to refine the above estimates for the United States.\textsuperscript{34} As shown, services supplied to United States residents through a combination of mode 1 and mode 4 represented 23.1 per cent of the total international supply of services to the United States in 2007 (Chart 5). Chart 7 follows the new MSITS recommendations. It distinguishes transactions which are deemed to be provided predominantly through mode 1 (such as parts of transportation, communication, financial and insurance, etc.: 16.8\%), those which are deemed to be predominantly provided through mode 4 (in the United States statistics this refers to sports and performing arts, services incidental to mining, and

\textsuperscript{33} The allocation may vary from economy to economy (general needs of economy, as well as taking into consideration more specific needs of sectors, data collection systems in place, resources, etc.). Items in italics are not separately available in BPM6/EBOPS.

\textsuperscript{34} Note that the United States classification of services items slightly differs from the EBOPS classification recommended in MSITS 2010.
installation, maintenance and repair services\textsuperscript{35}: 0.5\%), and those where 2 modes (including mode 4) are deemed to be significant elements of the payments (computer services, miscellaneous business, technical and professional services, construction, and personal, cultural and recreational services etc.: 5.8\%).\textsuperscript{36} The issue would then be to identify within the latter group items where a further breakdown for a specific identification of mode 4 elements would be needed (in this example probably computer services, management and consulting services or research and development and testing services could be relevant candidates for further investigation).

Chart 7. International supply of services to the United States broken down by mode, new recommendations, 2007 (Percentage)

\begin{figure}
\centering
\includegraphics[width=\textwidth]{chart7}
\caption{International supply of services to the United States broken down by mode, new recommendations, 2007 (Percentage)}
\end{figure}

\begin{tikzpicture}
\begin{axis}[
legend style={at={(0.5,-0.2)},anchor=north},
legend columns=-1
]
\addplot[fill=white] coordinates {
(0.1,0.0)
(0.2,0.05)
(0.3,0.1)
(0.4,0.16)
(0.5,0.37)
(0.6,0.35)
(0.7,0.3)
(0.8,0.2)
(0.9,0.15)
(1.0,0.05)
};
\addlegendentry{Mode 1}
\addplot[fill=white] coordinates {
(0.1,0.0)
(0.2,0.05)
(0.3,0.1)
(0.4,0.16)
(0.5,0.37)
(0.6,0.35)
(0.7,0.3)
(0.8,0.2)
(0.9,0.15)
(1.0,0.05)
};
\addlegendentry{Mode 2}
\addplot[fill=white] coordinates {
(0.1,0.0)
(0.2,0.05)
(0.3,0.1)
(0.4,0.16)
(0.5,0.37)
(0.6,0.35)
(0.7,0.3)
(0.8,0.2)
(0.9,0.15)
(1.0,0.05)
};
\addlegendentry{Mode 3}
\addplot[fill=white] coordinates {
(0.1,0.0)
(0.2,0.05)
(0.3,0.1)
(0.4,0.16)
(0.5,0.37)
(0.6,0.35)
(0.7,0.3)
(0.8,0.2)
(0.9,0.15)
(1.0,0.05)
};
\addlegendentry{Mode 4}
\addplot[fill=white] coordinates {
(0.1,0.0)
(0.2,0.05)
(0.3,0.1)
(0.4,0.16)
(0.5,0.37)
(0.6,0.35)
(0.7,0.3)
(0.8,0.2)
(0.9,0.15)
(1.0,0.05)
};
\addlegendentry{Other}
\addplot[fill=white] coordinates {
(0.1,0.0)
(0.2,0.05)
(0.3,0.1)
(0.4,0.16)
(0.5,0.37)
(0.6,0.35)
(0.7,0.3)
(0.8,0.2)
(0.9,0.15)
(1.0,0.05)
};
\addlegendentry{Mode 1+4}
\addplot[fill=white] coordinates {
(0.1,0.0)
(0.2,0.05)
(0.3,0.1)
(0.4,0.16)
(0.5,0.37)
(0.6,0.35)
(0.7,0.3)
(0.8,0.2)
(0.9,0.15)
(1.0,0.05)
};
\addlegendentry{Mode 3+4}
\addplot[fill=white] coordinates {
(0.1,0.0)
(0.2,0.05)
(0.3,0.1)
(0.4,0.16)
(0.5,0.37)
(0.6,0.35)
(0.7,0.3)
(0.8,0.2)
(0.9,0.15)
(1.0,0.05)
};
\end{axis}
\end{tikzpicture}

43. Once the balance of payments items where the presence of persons is deemed to be important have been identified, it is interesting to analyze how the value of the services trade is in principle recorded in the balance of payments depending on the category of person:

(a) Contractual service suppliers as employees of the foreign-based service supplier: A service provider 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 a year or more or less than a year. In the majority of cases, 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 \textit{per se}, cannot be considered to constitute a

\textsuperscript{35} MSITS 2010 recommends that although transactions referring to maintenance and repair services n.i.e. where the good to be repaired is sent or is present in the country of the repairer should be allocated to mode 2, those involving the cross-border movement of the repairer should be classified as mode 4.

\textsuperscript{36} And representing 17.4\% of imports of services if FATS are not considered.
branch or representative office (if this was the case the supply would fall under Mode 3, commercial presence).

(b) Self-employed service suppliers: a self-employed person moves abroad in order to supply a service. If the person stays less than a year, 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. However, if he/she stays a year or more, then in principle he/she will qualify as a resident of the host economy and the transaction corresponding to the service contract will not be recorded as a service transaction. This particular issue is further discussed in box 4.

**Box 4: The case of resident foreign self-employed individuals**

Most transactions falling under Mode 4 are covered in balance of payments services components. Self-employed service suppliers staying (or intending to stay) a year or more in the host economy should, according to international statistical guidelines, become residents of this economy. The transactions corresponding to the services contracts will no longer be international transactions. The only transactions that should, in principle, be recorded in the balance of payments for these 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).

However, two categories of self-employed persons need to be distinguished here: those who are present temporarily in the context of a service contract (Mode 4 supply of services) and those who operate from a base in the host economy (as per a relevant Mode 3 commitment). In general the former will represent a small proportion of the Mode 4 contractual service supplier population, and, unless deemed necessary, MSITS 2010 therefore does not recommend to compile information for this specific group. Those who establish themselves in a host country to supply services from this base would in many cases represent a small proportion of the overall commercial presence in the host economy. These will not be captured by FATS as the ultimate controlling institutional unit will be a resident of the host country. However, compiling economies for which the category of self-employed persons established in an economy other than their own (the compiling economy on the ‘inward’ side or abroad for ‘outward’) is believed to be important, may wish to estimate the value of their services sales/output.

4.d How to develop practices to separately identify modes of supply information within balance of payments services transactions?

44. 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 the international supply of services by modes. To collect further information with respect to mode 4, a clear list of questions needs be developed to help survey respondents and/or compilers to identify whether the payment for a service contract or a single payment could be classified as the supply in modes 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. This list should not necessarily strictly be limited to the services items identified in this Chapter.

45. There are various options which would help determine whether a transaction should be allocated to Mode 4 or not:

- Indicate if the supply of the service involved the physical presence of foreign individual(s), whether as self-employed or as employee(s), sent to the compiling economy by their non-resident company (this question 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 supplied (e.g. time and/or resources involved)? That is, if most of the service was supplied 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, but if the embodied knowledge went with the person(s) and was
transmitted directly to the client, it is mostly Mode 4. Such an option has been tested by the Census and Statistics Department of the Hong Kong Special Administrative Region, by including in its annual survey of imports and exports of services a question on the payments and receipts corresponding to the supply of services through the presence of persons. This is applied for a number of selected relevant services items.

- Another option would be to define modes of supply in surveys and ask respondents to allocate transactions themselves. If it involves various modes of supply, the questionnaire should 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. The Reserve Bank of India developed this type of collection for information on its software and information technology services exports, however not suggesting any allocation to the most important mode:

**Extract of the Indian Survey of Computer Software & IT Services Exports: 2008-09**

<table>
<thead>
<tr>
<th>6. Exports - Modes of Supply</th>
<th>Amount (Rupees)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>0</td>
</tr>
</tbody>
</table>

| (i) Services provided/ rendered to foreign entities/persons from Indian office (Cross border supply) |
| (ii) Services provided/ rendered to foreign entities/persons while they are on visit to India |
| (iii) On-site services provided by deputing employees abroad |

Source: Reserve Bank of India, 2010.

- Another possibility would be to add a question related to the estimated share of the inputs for the related services trade.

46. The choice of modes for which questions are sought for the two last options needs to be clearly determined according to the balance of payments services item for which information is being sought, e.g. for construction it would be relevant to only refer to Modes 3 and 4, whereas for computer services Mode 1 and 4 would be more appropriate or for waste treatment and depollution, modes 2 and 4.

47. Given its interest in the international supply of computer services, the Reserve Bank of India (RBI) has been collecting since 2005 data on computer software and information technology enabled services international supply according to the four modes. According to available figures, it is estimated that mode 4 exports represent 26.8 per cent (approximately USD 11.7 billion) of India's total international supply of computer and information technology enabled services (see table 2). However, for the companies which have international transactions of a value of at least USD 22 million, the share is around 28.4%. These results provide the Indian government with a first approximation of the size of its Mode 4 computer and information technology enabled services exports\(^{37}\), and shows that although it is estimated that it is the smallest mode of supply, it still represents a significant share of the balance of payments transactions for this sector: mode 4 represents almost a third of mode 1+4 computer services transactions. Of course this information should be interpreted with caution and should be improved through future surveys.

\(^{37}\) At the time of writing it is not clear if this would only cover services provided by contractual service suppliers or if intra-corporate transferees are also covered.
Table 2. Indian international supply of computer software and Information Technology enabled services by mode, 2008-09

<table>
<thead>
<tr>
<th>Size of Transactions (million USD)</th>
<th>Amount (million USD)</th>
<th>Per cent Share in Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mode 1</td>
<td>Mode 2</td>
</tr>
<tr>
<td>&lt; 0.2</td>
<td>37</td>
<td>0</td>
</tr>
<tr>
<td>0.2-2.2</td>
<td>447</td>
<td>5</td>
</tr>
<tr>
<td>2-22</td>
<td>1930</td>
<td>0</td>
</tr>
<tr>
<td>&gt; 22</td>
<td>22194</td>
<td>28</td>
</tr>
<tr>
<td>Total</td>
<td>24607</td>
<td>32</td>
</tr>
</tbody>
</table>

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

48. The simplifying assumptions for the allocation by mode of supply set out above should be regarded as a guide to first steps in the estimation process and be subjected to periodic review and empirical testing of their validity and appropriateness. This allocation may vary from economy to economy and should be adapted to each compiling economy's specific situation and information needs. For particular important services sectors of an economy compilers may invest further to improve the estimation of these items by mode of supply, and this is particularly true for mode 4. The estimation by mode could also be initiated or improved over time according to the information obtained by compilers, notably on the way service sectors operate. For instance the use of partial or anecdotal information on a number of specific sectors could be used as a starting point. Box 5 provides an example of recent achievements of the Australian International Legal Services Advisory Council in the field of the international supply of legal services. This agency is in particular sharing the information they obtain with the Australian Bureau of Statistics.

Box 5. ILSAC Survey of Australian Export Market for Legal Services

Although not entirely consistent with statistical guidelines and the GATS definitions of modes of supply, the Australian International Legal Services Advisory Council (ILSAC) developed a survey on the Australian Export Market for Legal Services for financial years 2004-05 and 2006-07. The latest results, which also cover the revenues generated through commercial presence of Australian legal firms abroad, showed that a bit less than a fifth (approximately 93 million USD) of its international supply of services was supplied "Fly in-fly out", which could be considered as an approximation for mode 4 trade. According to reports, ILSAC is aiming to re-conduct the Survey of Australian Export Market for Legal Services for the 2008-09 financial year. ILSAC is planning to collaborate further with the Australian Bureau of Statistics in order to better align definitions used and improve the quality of the data published for legal services.


4e. GATS, tourism and migration statistical systems

49. For a more global analysis of services industries or market opportunities there exist a number of additional useful statistics that can be drawn from various statistical frameworks. With respect to mode 4, information on the number of persons moving and present abroad will be found in tourism or migration statistics. Information on flows and stocks of natural persons could be derived from the definitions used in these frameworks, that is the International Recommendations on Tourism Statistics – IRTS 2008; Tourism Satellite Accounts: Recommended Methodological Framework – TSA-RMF 2008; and the
Recommendations on Statistics on International Migration, Revision 1 – RSIM, Rev. 1. While rough aggregated mode 4 information may be drawn from these statistical systems, a more complete picture will require additional breakdowns in relevant categories. Such statistics will not perfectly mirror the definitions of GATS, but such indicators could provide a reasonable indication of the number of mode 4 persons crossing borders and present abroad in the context of trade in services.\textsuperscript{38}


50. The IRTS 2008 is a comprehensive methodological framework for the collection and compilation of tourism statistics. 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 mainly be a useful complement for an in-depth analysis of the tourism sector from a trade perspective, covering all modes of supply. However these frameworks also provide for the possibility to compile information on the flows of persons entering an economy other than their own for short periods of time in order to supply services.

51. Tourism statistics identify international visitors as being characterized by the fact that they are on a tourism trip, traveling in an economy other than in the one in which they usually reside and that they must not be in an employer-employee relationship with an entity resident in the visited economy. The number of international visitors can be broken down according to the main purpose of the trip: personal (holidays, leisure and recreation, education and training, health and medical care, etc.) and business and professional purposes.\textsuperscript{39} Although very aggregated, collecting data on the latter 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 economy visited, as well as those of investors, businessmen, and any other type of professional purposes (participating in conferences, etc.).

52. Table 3 shows the number of "mode 4 arrivals" (i.e. inflows) for a selection of economies. This information could serve as a rough estimation as this indicator may on the one hand underestimate the mode 4 flows of persons by not including arrivals for the purpose of being employed within the economy visited (i.e. those in an employer-employee relation with a foreign affiliate established in the visited economy) and on the other hand over estimate these flows by including some persons on trips where the purpose is not covered by mode 4.\textsuperscript{40} In addition these figures should be taken with caution as many economies do not entirely follow international recommendations in terms of the coverage of visitors.

\textsuperscript{38} Although not detailed in this paper, data on foreigners employed in foreign affiliated firms could also be compiled through the FATS framework.

\textsuperscript{39} Business visitors as defined in a GATS context are not the same as business visitors or travellers as defined in international statistical frameworks. The latter goes beyond the term generally used in a GATS context by including in particular contractual service suppliers.

\textsuperscript{40} The general definition currently used for visitors is that they are " any persons travelling to a place other than that of his/her usual environment and whose main purpose of trip is other than the exercise of an activity remunerated from within the place visited". This may raise a number of ambiguities with respect to the status of self-employed, the employee-employer relationship etc.
Table 3. Destinations for arrivals of international visitors travelling for business and professional purposes, selected major economies, 2005-2008 (Thousands)

<table>
<thead>
<tr>
<th>Available EU(27) a</th>
<th>2005</th>
<th>2006</th>
<th>2007</th>
<th>2008</th>
</tr>
</thead>
<tbody>
<tr>
<td>Of which</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td>9190</td>
<td>10833</td>
<td>11992</td>
<td>12392</td>
</tr>
<tr>
<td>France b</td>
<td>11010</td>
<td>10565</td>
<td>10566</td>
<td>11479</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>8773</td>
<td>9717</td>
<td>9496</td>
<td>8683</td>
</tr>
<tr>
<td>Spain</td>
<td>5940</td>
<td>4915</td>
<td>5275</td>
<td>5271</td>
</tr>
<tr>
<td>Poland</td>
<td>4240</td>
<td>4240</td>
<td>4085</td>
<td>3590</td>
</tr>
<tr>
<td>China d</td>
<td>4598</td>
<td>5548</td>
<td>6961</td>
<td>5678</td>
</tr>
<tr>
<td>Russian Federation</td>
<td>3226</td>
<td>3233</td>
<td>3270</td>
<td>4112</td>
</tr>
<tr>
<td>Saudi Arabia</td>
<td>1951</td>
<td>1603</td>
<td>2659</td>
<td>3660</td>
</tr>
<tr>
<td>Hong Kong, China b</td>
<td>3572</td>
<td>3862</td>
<td>3516</td>
<td>3630</td>
</tr>
<tr>
<td>Singapore</td>
<td>2549</td>
<td>2886</td>
<td>3168</td>
<td>3166</td>
</tr>
<tr>
<td>Malaysia c</td>
<td>2283</td>
<td>2304</td>
<td>2987</td>
<td>3131</td>
</tr>
<tr>
<td>Canada f</td>
<td>2622</td>
<td>2651</td>
<td>2587</td>
<td>2666</td>
</tr>
<tr>
<td>Macao, China</td>
<td>2994</td>
<td>2860</td>
<td>2969</td>
<td></td>
</tr>
<tr>
<td>Indonesia</td>
<td>2063</td>
<td>2011</td>
<td>2161</td>
<td>2433</td>
</tr>
<tr>
<td>Turkey</td>
<td>1972</td>
<td>2316</td>
<td>2228</td>
<td>2291</td>
</tr>
<tr>
<td>Nigeria</td>
<td>1527</td>
<td>1872</td>
<td>2131</td>
<td></td>
</tr>
<tr>
<td>Thailand g</td>
<td>1545</td>
<td>1976</td>
<td>1817</td>
<td></td>
</tr>
<tr>
<td>India g</td>
<td></td>
<td></td>
<td></td>
<td>1558</td>
</tr>
<tr>
<td>Japan g</td>
<td>1477</td>
<td>1523</td>
<td>1576</td>
<td>1455</td>
</tr>
<tr>
<td>Kazakhstan</td>
<td>893</td>
<td>1023</td>
<td>1260</td>
<td>1300</td>
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<tr>
<td>Brazil</td>
<td>1559</td>
<td>1410</td>
<td>1437</td>
<td>1222</td>
</tr>
<tr>
<td>Norway</td>
<td>911</td>
<td>970</td>
<td>1082</td>
<td>1173</td>
</tr>
<tr>
<td>Ukraine</td>
<td>1040</td>
<td>1056</td>
<td>958</td>
<td>1114</td>
</tr>
<tr>
<td>Taipei, Chinese</td>
<td>1033</td>
<td>1041</td>
<td>1031</td>
<td>986</td>
</tr>
<tr>
<td>Viet Nam</td>
<td>493</td>
<td>976</td>
<td>652</td>
<td>845</td>
</tr>
</tbody>
</table>


b Business and pleasure.

c Overseas only, excluding arrivals from Mexico.

d Excluding arrivals from Hong Kong, China; Chinese Taipei; Macao, China; and overseas Chinese.

e Peninsular Malaysia only up to 2006. 2008 estimated.

f Including convention.

g Excluding nationals residing abroad.


53. These figures show that European Union members tend to have a high number of visits for business and professional reasons in particular when compared to economies such as the United States and China, which could be an indication of the degree of liberalization of the movement of such types of persons and the services market amongst European Union members. It is also interesting to note the high number of arrivals for business reasons in a number of developing economies such as Hong Kong, China, Macao, China, Saudi Arabia, Indonesia, Thailand, Malaysia etc.

54. If relevant for the compiling economy, compilers could further disaggregate the category business and professional into contractual service supplies (of which self-employed); intracorporate transfers (only...
those for which the employer-employee relationship remains with the parent company) and other foreign staff; and services salespersons and investors. However, unless supplementary information is considered, in principle statistics resulting from this framework will not cover cases where there is a change of usual residence (from one economy to another) and intra-corporate transfer and direct recruitments by the foreign affiliate where the employer-employee relationship is with a producer resident in the host economy.

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

55. The statistical framework for the compilation of migration statistics (RSIM, Rev. 1) defines two main groups of internationally mobile persons: non-migrants, and international migrants, of which short-term migrants (more than three months and less than 12) and long-term migrants (a year or more). It also provides a framework for the compilation of statistics on inflows and outflows of these groups of persons.

56. Although some of these categories cover persons of interest in the context of trade in services, a one-to-one correspondence is not possible. Identifying persons falling under mode 4 within categories proposed in the RSIM Rev.1 (foreign migrant workers, migrants for settlement, for free establishment etc.) is a difficult task. These definitions were not destined for trade in services purposes. However, 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 tourism statistics). 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, 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 economy fall largely under the migrant categories. In other words,

- 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 relation with an enterprise resident in the host country exists), should be broken down as follows: contractual service suppliers (further broken down into self-employed and employees), services sales persons or responsible for the establishment of commercial presence and other business travelers. If necessary, supplementary statistics (i.e. beyond the RSIM Rev.1 guidelines) could be compiled to include, for the same categories identified, persons who have changed their economy of usual residence (i.e. staying for one year or more) but for whom the employer-employee relationship remains with an enterprise located outside the host economy or who are self-employed (and not established in the host economy);

- For migrants, identify within short-term and long-term migrants employed in the host economy, 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 that 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).

41 For those intra-corporate transferees where the employment contract remains with the home enterprise, it would correspond to intra-firm contractual service supply (i.e. intra.firm trade in services).

42 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 economy visited."
57. 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 relation between the employer and the client (i.e. intra-firm trade or not), the occupation/skills of the persons moving and their length of stay in the host economy. 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.

58. Although considered the supply of services through commercial presence, it could be interesting to also collect information on self-employed persons established in a host economy who are intending to provide services from this base. These are covered indistinguishably in the category entrepreneurs and investors.

59. Table 4 summarizes links between the coverage of RSIM, Rev. 1 and IRTS 2008 in terms of the purpose of a trip or migration, and duration of stay. It identifies, in bold, the purposes that are relevant for Mode 4. The list of purposes is derived from the categories of RSIM, Rev. 1 and the IRTS 2008 classification of tourism trips according to main purpose and should not be considered as an exhaustive list reflecting accurately the categories as defined in both these frameworks. It 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).

60. 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 (12 months or more). 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 these statistical systems. The first covers personal visits for less than twelve months but more than three, for the purpose of education and training and the second other personal reasons. ‘X’ indicates the minimum Mode 4 information requirements. The highlighted ‘X’ shows that, in the absence of a further disaggregation, the category business and professional stays (corresponding to business travellers in RSIM, Rev.1) could be used as a first approximation for total flows and/or stocks of persons staying abroad in the context of Mode 4 supply of services (but excluding most of Mode 4 movements and presence related to the supply of services through Mode 3).

61. Various sources exist for collecting tourism and migration statistics on the number of persons, 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 economy 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 4. Links between RSIM Rev. 1, IRTS 2008 and GATS mode 4: classification of persons by purpose of trip or migration

<table>
<thead>
<tr>
<th>Purpose of trip or migration</th>
<th>Length of stay</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Less than 3 months</td>
<td>3 to less than 12 months</td>
</tr>
<tr>
<td><strong>RSIM Rev.1 categories</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>IRTS 2008 categories</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visits / trips</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Personal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Holiday, leisure and recreation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Visiting friends and relatives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Education and training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Health and medical care</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religion/pilgrimages</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shopping</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transit entering eco./legal territory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business and professional (no employer-employee relationship with an entity established in compiling economy)</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>• Contractual service supply:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- by self-employed</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- by employees</td>
<td></td>
<td></td>
</tr>
<tr>
<td>of which intra-corporate</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Service sales/ commercial presence negotiations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- service sales/ commercial presence of service producing company negotiations</td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>- commercial presence of goods producing company negotiations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Other (incl. attending meetings, conferences, etc)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Migrant work and employment-based settlement (employer-employee relationship with an entity established in compiling economy)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Intra corporate transfer:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- in services producing company</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Direct recruitment by a foreign established:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- services producing company</td>
<td></td>
<td></td>
</tr>
<tr>
<td>- other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• International civil service</td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Other</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Training</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family reunification/formation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family based settlement; ancestry based settlement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Retiree settlement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneurship and investment settlement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Humanitarian reasons (refugees, etc.)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Border work; Frequent border crossing; Nomads</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transit not entering economic/legal territory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Diplomatic/consular; Military</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a Only in the services sector</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-migrant categories</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Migrant categories

**BOLD** = Mode 4 purpose.

*Italics* = Not available in RSIM/IRTS; additional breakdowns possible.

‘X’ First rough approximation of Mode 4

‘X’ Mode 4 information requirements


62. The table below presents the number of intra-company transfers for 2000-08 for a selection of OECD countries. Please note that these concern persons employed in both services and goods producing companies, the latter not being covered by the definition of mode 4. Despite its overestimation it provides an idea of the levels involved with respect to mode 4 intra-corporate transferees. However given the paucity of existing information, it is difficult to draw any conclusions or identify any clear patterns.

| Table 5. Entries of intra-corporate transferees in selected OECD countries, 2000-2008 (Thousands) |
|---------------------------------|------------------|------------------|------------------|------------------|
| Intra-corporate transferees      | 2000  | 2007  | 2008  | Average 2003-08 |
| Austria                         | 0.16  | 0.15  | 0.15  | 0.17            |
| Canada                          | 3.90  | 8.20  | 10.22 | 7.15            |
| France                          | 2.16  | 1.06  | 1.03  | 1.26            |
| Germany                         | 1.30  | 5.42  | 5.66  | 3.98            |
| Japan                           | 3.88  | 7.17  | 7.31  | 5.20            |
| Norway                          | 0.17  | 0.64  | ...   | ...             |
| Spain                           | ...   | 1.40  | 1.34  | 1.14            |
| Switzerland                     | ...   | 6.23  | 7.32  | 6.87            |
| United States                   | 54.96 | 84.53 | 84.08 | 71.10           |

Source: OECD (2010)).

V The way forward

63. As outlined in this chapter, the lack of appropriate statistics is leading to a confusion as to the importance of GATS mode 4 trade flows. As a result of this lack of relevant information, many papers analyze only measures that affect mode 4 trade,\(^{43}\) Others, studies use inappropriate indicators, that is labour income related flows (compensation of employees or remittances), to provide a measure of the importance of mode 4 trade.

64. An increasing number of trade in services experts outline in international fora the fact that no proper statistics are available to assess trade in services, in particular with respect to the presence of natural persons. The MSITS 2002 attempted to set out the ways in which some information could be drawn from existing statistical frameworks. However, it also recognized that further work was necessary to improve the

\(^{43}\) ICTSD, Issue Paper No.9, p.5
understanding of mode 4 and to develop appropriate statistics. This explains partially the reasons for currently not having appropriate data available to assess this mode of supply.

65. Further work was conducted during the revision process of the Manual on Statistics of International Trade in Services. A new chapter was included, which provides details as to how to analyze the international supply of services by modes of supply, with a particular focus on mode 4. This chapter aims at translating the GATS legal text regarding mode 4 into statistical terms and also identifies which appropriate frameworks could be used and how they should be used to collect appropriate mode 4 information.

What to expect in the (near) future?

66. Now that the revised statistical guidelines surrounding trade in services statistics have been approved, it is expected that compilers start implementing the new recommendations according to a phased approach. In particular the identification of balance of payments services transactions where mode 4 is believed to be an important component. Estimating trade broken down by modes of supply should be conducted according to the economy's specific situation. This could be a starting point on the simplified allocation of FATS and balance of payments services data to modes of supply recommended in the manual, and illustrated in chart 6 of this paper. This could in particular be established by focusing on particular service sectors as done by a number of economies in the Asian and Pacific region and developing appropriate questions in existing surveys or develop specific ones.

67. While it is important to build such studies across countries and individual service sectors, it is nevertheless interesting to identify the size of global mode 4 trade flows. An approximation could be built on the basis of the new recommendations included in the revised manual. Applying as a starting point an approximate share of 25 per cent of mode 4-related trade flows in relevant balance of payments transactions (based on available anecdotal data), combined with other balance of payments and mode 3 estimates, this results in an approximation of the relative importance of modes of supply showing that, based on 2007 data, mode 4 represents less than 5 per cent of total international supply of services (see table 6).

<table>
<thead>
<tr>
<th>Table 6 Statistical approximation of modes of supply, 2007 (percentage)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mode 1 Cross-border supply</td>
</tr>
<tr>
<td>Mode 2 Consumption abroad</td>
</tr>
<tr>
<td>Mode 3 Commercial presence</td>
</tr>
<tr>
<td>Mode 4 Presence of natural persons</td>
</tr>
</tbody>
</table>

68. Besides the development of statistics reflecting the value of mode 4 trade, there is also the need to have a fuller picture of the movement of mode 4 persons. Developing statistics on the number of persons moving and present in a host country are an important complement. Again, although some data are available on the movement of persons for business and professional reasons, there is a clear need to refine such measures by adapting existing data sources or developing new ones in order to identify the population of interest. In order to comply with overriding statistical rules and as a matter of consistency with other statistics, this should be developed according to the existing tourism and migration statistical frameworks, by defining further breakdowns than the ones currently identified in these guidelines.
69. Finally given the high political and economic interest of governments and analysts in monitoring and studying the movement and the presence of foreign persons from a more general perspective (that is beyond mode 4), statisticians within the work of the UNECE-Eurostat-OECD Working Group on the Impact of Globalisation in National Accounts are proposing a detailed presentation of data with extended classification of labour input and with links between labour statistics, and the national accounts at the industry level. The analytical framework often used for such a presentation is social accounting matrices. Such a presentation could be prepared in a satellite account or as a labour account integrated in the national accounts, and with added details to the core national accounts. However in order to be complete this proposal should be extended to cover mode 4 aspects (i.e. by also covering trade in services). Such an exercise seems promising. It would enable a complete analysis of the economic and social impacts of labour mobility and trade in services through the movement of persons on countries, and enable comparisons between both aspects, in particular in terms of impact on productivity, etc.