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MODES OF SUPPLY: RECENT ANALYSIS AND A WAY FORWARD

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MODES OF SUPPLY: RECENT ANALYSIS AND A WAY FORWARD

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1. Introduction

1. The GATS and other international economic agreements have identified four ways (modes) of supplying services internationally, and negotiations and commitments are made according to these four modes. However, at present, this is done in the absence of data.

2. The first edition of the Manual on Statistics of International Trade in Services (MSITS) released in 2002 included a first proposal for estimating trade in services by modes of supply. However there were a number of issues that still needed to be clarified concerning the statistical exploitation of such a proposal as well as a number of open questions especially for the definition of mode 4. Given the lack of clarity concerning this particular mode, the 2002 edition of the Manual did not provide any recommendation as to the measurement of mode 4. In addition the recommendations on resident-non-resident transactions (detailed type of service and partner) as well as those on foreign affiliates statistics already represented challenges of their own for compilers. This most probably explains why to date there was only little progress or research done on the estimation of the international supply of services by modes. During the drafting of the 2010 edition of MSITS there was a strong demand for a specific chapter on the measurement of the international supply of services by modes, and in a particular for further clarification on mode 4. With a new analytical framework laid down in Chapter V of MSITS 2010, it is now expected that an increasing number of economies will begin estimating services modes of supply.

3. According to the little information available at the time of writing it would appear that globally, commercial presence (mode 3) is by far the largest of the four modes.¹ However, with the increase of trade in services and the development of international sourcing, the supply of services through cross-border trade (mode 1) or temporary movement (presence) of natural persons (mode 4) is believed to have increased significantly in the last 15 years. Due to lack of data, however, it is not possible to assess the respective importance of each mode of supply at the individual country level. The absence of data in particular for mode 4 has often led to misuse of indicators.

¹ Mode 3 is estimated to be as big as the sum of the three other modes in value terms. However such an estimate is built on the currently available data which can bias such estimation as compilation of foreign affiliates statistics (*i.e.* to measure mode 3) is mainly limited to developed countries.

4. The availability of statistical data by mode of supply will greatly help negotiators evaluate and compare liberalisation and commitments in specific service sectors as well as assess market access opportunities. The importance of these statistics arises from the economic and political need to evaluate the specific importance of each type of service traded. In addition, there is also a need to understand how services are provided in the respective economies and to ensure competitive advantages for enterprises in a globalized world.

5. This document outlines the need for statistics on the international supply of services by modes. Although statistical needs go beyond the value of services supplied internationally, this paper concentrates on this aspect. In particular, it presents a phased approach for statistical compilation, which can serve as a reference for producing approximations using balance of payments services and foreign affiliates statistics. This document evaluates to what extent existing statistics, available for the European Union and OECD countries, can match the information needs of trade negotiators, in particular in the context of the General Agreement on Trade in Services (GATS), as well as analysts. It also identifies what would need to be developed in data collection systems to identify and/or capture the requested information. In particular the paper aims at identifying the main conceptual and statistical challenges in measuring the international supply of services by modes and also shows how some compilers have implemented the data collection in practice, either by conducting new surveys or upgrading existing ones. Finally the paper suggests a way forward to begin estimating or gathering information on the international supply of services. It does so by exploring possibilities to improve the current data situation by generating or integrating information from other statistical domains. It also proposes to delegates a number of different approaches for their consideration, taking into account the suitability for their economies and considering differences in data collection methods and compilation systems.

2. Setting the scene: general terms and definitions

6. Statistics play an important role in building business strategies and developing market access strategies for enterprises. However in particular in the field of services trade there is a lack of available and reliable data. To better understand which kind of data is needed this section introduces the most relevant definitions of the GATS and statistical concepts.

Modes of supply

7. Following the WTO General Agreement on Trade in Services (GATS), the international supply of services can take place through four different modes of supply.² The GATS defines four ways of supplying services, which depend on the territorial presence of the supplier and the consumer at the time of the transaction:

- **Mode 1(cross-border trade):** the supply of services from the territory of one Member into the territory of any other Member;
- **Mode 2 (consumption abroad):** the supply of services in the territory of one Member to the service consumer of any other Member;

² The GATS has a definition of supply of services that is broader than the traditional view of trade in services (*i.e.* between residents and non-residents). It also covers the supply of services through the establishments by a country's enterprise of affiliates abroad in order to produce and render services from this base.

- **Mode 3 (commercial presence):** the supply of services by a service supplier of one Member, through commercial presence, in the territory of any other Member; and
- **Mode 4 (presence of natural persons):** the supply of services by a service supplier of one Member, through the presence of natural persons of a Member in the territory of any other Member.³

Residence concept

8. As can be shown above, the GATS is mainly concerned with nationality and/or residence of transactors. Economic statistics, and in particular the balance of payments, provide a number of guidelines to define residence. The ones most relevant to this paper are presented here. Actual or intended location for one year or more is used as an operational criterion for defining residence in an economic territory. While the choice of one year as a specific period is somewhat arbitrary, it is adopted to eliminate uncertainty and facilitate international consistency. Residence of households is in the economic territory in which its members maintain or intend to maintain a dwelling or succession of dwellings, treated and used or to be treated and used by members of the household as their principal dwelling. As a general principle, an enterprise is resident in an economic territory when the enterprise is engaged in significant production of goods and/or services at a location in that territory. An enterprise may have a location that is used as a base from which it delivers services to other locations. Unless the activities at the point of delivery are substantial enough to amount to the operation of a branch, the residence of the enterprise is established by determining its base of operations. For more information see MSITS 2010, paragraphs 3.7-3.26 (which is also consistent with the BPM6 treatment).

9. The treatment in economic statistics for defining if entities (enterprises or individuals) are part of an economy is different from GATS definitions, *i.e.* residence versus nationality. However it is generally believed that trade in services statistics together with foreign affiliates statistics provide a relatively good correspondence to trade in services as defined by the GATS.

Modes of supply and statistics

10. The concept of *modes of supplying services* goes beyond the scope of international services statistics as measured in the BoP, in particular with respect to mode 3, commercial presence, which is mainly covered by Foreign Affiliates Statistics (FATS). In addition, although the concept of trade in services of the BoP covers modes 1, 2 and 4, for the time being there is no separate identification or estimation of the flows by modes of supply in information currently disseminated by countries.

11. It has often been argued that existing statistical frameworks do not fit very well the GATS information needs. However, recent research has shown that this is not entirely true. For example, once a country has developed foreign affiliates statistics for the services sector, together with BoP services statistics, these will cover the 4 modes of supply of the GATS from a value perspective. However it is when it gets to gathering more detailed information that the problems arise (*e.g.* no available information on the separate modes or by detailed services category etc.).

12. MSITS 2010 develops a phased approach which includes:

For the value of international supply of services:

³ A natural person of a Member is defined as a national of that Member or to a non-national who has the right to permanent residence in that Member. See article XXVIII of the GATS for further information.

- (i) A simplified framework to allocate FATS and BoP services statistics to modes of supply on a broad basis, that can be used in the absence of a collection and compilation of data by modes. The main assumption behind this approach is that (1) some FATS correspond to mode 3 and (2) each service item in the BoP corresponds to only one or two dominant modes of supply. This framework provides an approach for the measurement of statistics by mode of supply at a minimum cost in term of resources. For more information see Section C, Chapter V of MSITS 2010.
- (ii) Compilation of statistics on modes of supply through the establishment of a data collection mechanism. As explained above the main issue is to determine within BoP trade in services statistics the weight or value of modes of supply involved. This can be done either by adapting existing trade in services surveys or by establishing new ones, which can be specifically targeted to these information needs. Actually, determining the share of mode 4 within services transactions would be sufficient to build reliable estimates of the international supply of services by modes, because when there is multiple correspondence between a type of service internationally traded and several modes of supply, mode 4 is generally among the possible options (See MSITS 2010 Table 5.2, pp.132-133 reproduced in annex 1).
- (iii) Although not mentioned in the Manual, establishing model based estimates can also be envisaged.

For other indicators:

- (iv) Develop other (quantitative) indicators, in particular for mode 4 (*i.e.* number of mode 4 persons crossing borders and temporarily abroad in the context of services contracts). However as indicated above these additional indicators are beyond the scope of this paper (although if a survey is used, it could also be used to collect some information on the number of persons).

Mode 4: definition of temporary presence, the length of stay and relation to statistics

13. Although GATS mode 4 covers the temporary movement and presence of natural persons there is no clear definition of the term temporary. The length of stay is generally not aligned with the one-year guideline. The length of stay in GATS schedules of commitments mainly depends on the category of persons involved (contractual service supplier as self-employed or employee, service sellers, etc.) or the level of skills. However, lengths of stay indicated in commitments made by a country should more be considered as a minimum guaranteed treatment a country is ready to consider for foreign service providers, *i.e.* in practice countries are more open and are free to set applied rules for the entry and the stay (including the length) of persons which are more liberal that what they have committed to in their schedules.

14. When it comes to evaluating the value of mode 4 trade, it can be defined as follows: it is the receipt “received by” (or “payment for” from the perspective of the client) a service producer for the rendering of services, where the service producer goes abroad if he is self-employed or sends his/her employees abroad to render the service to the client. In MSITS 2010 this category of persons is named: contractual service suppliers.⁴

⁴ In the case of self-employed, this category may be named "independent service suppliers". GATS negotiators also consider two other main types of mode 4 categories which are not mentioned in this paper, namely:

15. Measuring or estimating the value of mode 4 trade in services can be done using the balance of payments services transactions. In other words most of the value of trade in services through mode 4 is captured within the balance of payments services account. Indeed what matters is the contractual relationship between the service supplier/producer (in most cases the employer of the mode 4 person) and the "consumer" which are located in two different economies, not necessarily the length of stay of the person itself (although as will be shown below that may come into play for self-employed persons).

16. Within contractual service suppliers, there are therefore two different subcategories that can be identified: the employees of the service suppliers which are sent abroad by their employer to render services (*i.e.* contractual service suppliers- employees) and self-employed persons (*i.e.* self-employed contractual service suppliers). As detailed in MSITS 2010 (paragraphs 5.47 and 3.22-3.23), for the first subcategory related transactions will be covered in the balance of payments services account whether the employee (or group of employees) stays (or intends to stay) abroad for less than a year or more than a year. For self-employed persons, in principle transactions would be included under the services account only if this person stays (or intends to stay) in the host economy for less than a year. If he/she stays or intends to stay abroad for more than a year in principle this will no longer be the case. If the intention of the person is to operate from a base in the host economy (*i.e.* establish or intend to establish himself/herself in the host country) then this will be considered as mode 3. Self-employed persons staying more than a year still in the context of a service contract will in general represent a small proportion of the mode 4 population. In addition for the latter, although in principle the residence of the persons would change, it may be difficult in practice for compilers to identify (or even consider) that the residence has changed if the length of stay is just for a few months more (*e.g.* 2-3 months) and the transactions would still be recorded under the service account.⁵ The table below presents some examples of types of arrangements and how these would be covered in GATS and their relation to the BPM6/MSITS2010/FATS statistical frameworks.

-
- Services sellers/persons responsible for setting up commercial presence (there is no service transaction, *i.e.* they are not actually producing services for consumption by clients in the host country); and
 - Intra-corporate transferees and foreign person directly recruited by a foreign affiliate, where the provision of services to the final client in the host economy is actually done through mode 3 (*i.e.* the mode 4 commitment enables the presence of the person in order for the service supplier to supply the service via mode 3). For intra-corporate transferees if the employer-employee relationship remains with the sending company then from a statistical perspective they can be considered as falling under the category contractual service supplier (*i.e.* intra-firm trade in services),

⁵ If the stay would be longer, this could once again be considered as mode 3 (*i.e.* the person could be seen as establishing in the host country). If deemed important for the compiling economy these self-employed staying on a long-term basis should be identified. However it is important to note that these self-employed considered as becoming resident in the host country would not be covered in the proposal set out in this paper (*i.e.* use balance of payments services statistics and FATS to estimate the international supply of services according to the four modes).

Examples of contracts and their relation to GATS definitions and economic transactions (i.e. services exports/sales)

17. In each of these examples a person or group of persons move from economy A to economy B.⁶ The value of the international supply of services through mode 4 is mainly concerned with the 4th and 5th columns.

Type of contract	Mode 4	Residence of person(s) (A or B)	BoP services transactions	FATS	Other International transactions ⁷
Consultancy provided by a company in A to a client in B for 3 months	Yes	A	Yes	No	No
Consultancy provided by a company in A to a client in B for 15 months (operations not substantial enough for a branch to be identified)	Yes	B	Yes	No	Yes (compensation of employees and personal transfers)
IT specialist sent by his employer of A to work in affiliate in B for 6 months (employer-employee relation remains in A)	Yes	A	Yes	Yes	Yes (direct investment income)
Construction project for 9 months	Yes	A	Yes	No	No
Construction project for 13 months, operations conducted from A (i.e. no site office, no branch can be identified)	Yes	B	Yes	No	Yes (compensation of employees and personal transfers)
Construction project for 13 months, operations conducted from B (i.e. operations substantial for a branch to be identified)	Yes (but transactions recorded as mode 3)	B	No	Yes	Yes (direct investment income and personal transfers)
Agency in A specialised in the placement of agricultural personnel sends personnel to B for 2 months for fruit-picking (employer-employee relationship remains in A)	Yes	A	Yes	No	No

⁶ It is assumed that the person (or group of persons) is a resident of A before moving.

⁷ Note that although not indicated under "Other international transactions" in all cases where the residence of the person does not change, there should be some travel transactions recorded.

Agency in A specialised in the placement of agricultural personnel sends personnel to B for 2 months for fruit-picking (only on a commission basis, employer-employee relationship in B)	No	A	Yes (only for the intermediary service)	No	Yes (compensation of employees between the person and the employer in B)
Self-employed lawyer goes to A for a 7 months mission	Yes	A	Yes	No	No
Self-employed lawyer goes to A for a 18 months mission	Yes	B	No	No	Yes (personal transfers)
Lawyer moves to A for a 2 year contract with a law firm of B (employer-employee relationship in B)	No	B	No	No	Yes (personal transfers)
Maid commutes on a daily basis from country A to B (employer-employee relationship in B)	No	A	No	No	Yes (compensation of employees between the person and the employer in B)

Note: if the person moves for more than 3 months in a host economy and receives a remuneration from within the host economy then he/she will be considered as a migrant (short-term for stays of less than 12 months, long-term if more than 12 months).

3. Data Compilation situation

18. What is the current data situation as to modes of supply? What has happened so far in terms of data estimation based on existing BoP data and FATS? And what is the experience with respect to data collection and compilation?

19. MSITS 2002 already included some guidelines ("the simplified approach") as to how to make a first rough estimation of the value of the international supply of services by modes, but unfortunately, to the knowledge of the authors, only Australia (2003) and Singapore (2002) attempted to build some first estimates. Of course compilers first had to respond to more urgent data needs *e.g.* detailed trade in services statistics as well as in more recent years the implementation of BPM6. The fact that the estimation of modes of supply was rarely conducted, is probably also linked to the lack of clarity concerning mode 4. In addition some economies believed that such an exercise could be done by data users or international organisations. However, to guarantee a high quality and assurance of such data it is necessary that national compilers make such estimations as they are aware of the structure and the nature of the services in their own economy. Furthermore, obtaining such information by discussing with big players or associations of services industries as well as taking institutional arrangements in the national economies could be more difficult for international organizations than for national compilers.

20. MSITS 2010 includes a recommendation concerning the estimation of the value of the supply of services by GATS modes. It is part of the "Other recommended elements", *i.e.* it is not part of the list of "Recommended core elements". It states: "Allocate the services transactions between residents and non-residents and FATS sales (or output) of services over the GATS modes of supply. The simplified procedure set out in chapter V (table V.2) may be used as a starting point in compiling this allocation."

21. Although no country has produced estimates using the simplified approach, some have engaged in actual data collection through surveys. Some OECD member countries (Australia, New Zealand) have developed some expertise in recent years. Hong Kong-China, Malaysia and India are also engaged in some modes of supply data collection, be it at the overall level or some specific services sectors of interest to their economies. However none of these five countries have adopted the same approach, which is why each experience is briefly described in this paper.

India

22. Given the interest of India in computer and information technology services exports (representing approximately two-thirds of their resident- non-resident services transactions), the Reserve Bank of India (RBI) has been conducting for the past six years a regular and detailed survey on these. The survey includes on the one hand questions relating to resident-non-resident services transactions (*i.e.* covering modes 1, 2 and 4) and on the other hand, services delivered through affiliates abroad. For determining the proportion of each mode of supply within the services transactions, survey respondents are asked to report the estimated value of services provided through modes 1, 2 and 4 as shown below. As can be seen this information is sought both on a fiscal year basis as well as on a quarterly basis. To the knowledge of the authors no treatment different to what is applied to other results of this very detailed survey (*i.e.* for non-response etc.) are applied for modes of supply.

Extract of the Indian Survey of Computer Software & IT Services Exports: 2009-10

6. Exports - Modes of Supply

Total invoice on software and IT services exports as per the Modes of Supply during the reference period

Exports - Modes of Supply	Amount (₹)
(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) Onsite services provided by deputing employees abroad	
Total	0

4. Exports - Modes of Supply

Total invoice on software and IT services exports as per the Modes of Supply during the reference period

Exports - Modes of Supply	April-June 2009 Invoice Value (Rupees)	July-Sep 2009 Invoice Value (Rupees)	Oct-Dec 2009 Invoice Value (Rupees)
(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) Onsite services provided by deputing employees abroad			
Total	0	0	0

Source: Reserve Bank of India, 2011.

Hong Kong-China

23. Hong Kong-China has adopted a more comprehensive approach by including in its annual survey of imports and exports of services questions on the share of mode 4 for each services item where the MSITS 2002 had identified that this mode of supply was deemed relevant (legal, accounting, computer, audiovisual, real estate services etc.). This follows the idea that estimating mode 4 is the key to develop statistics on the international supply of services by mode. This is done for exports and imports for 18 services items (+3 "other" where respondents can specify services not covered in the standard list of the form). The question asked is on the value of receipts/payments included in each relevant item that are charged for sending/receiving responsible person(s) outside/in Hong Kong-China for a short period to provide services. As for each service item, a breakdown into the five main partner countries/territories is asked (in percentage terms). The information on the services payments and receipts which corresponded to charges for sending responsible persons for delivering the service is obtained for the Hong Kong Census and Statistics Department's internal study on the feasibility of compiling Hong Kong-China's trade in services analysed by mode of supply.

New Zealand

24. Statistics New Zealand is conducting this year a census of international trade in services and royalties (for the year ending on 30 June 2011). This census is actually a joint collection undertaken with the New Zealand Ministry of Foreign Affairs and Trade (MFAT). The form contains questions on modes of supply covered in the BoP services items (*i.e.* modes 1, 2 and 4). Respondents are asked relevant questions on respective contribution of modes (in percentage terms) for 7 aggregate groupings of services (*e.g.* Information & communication technology services, Business services etc.) and for five partners. The idea was to keep the (paper) form as simple as possible. The questions were formulated as follows:

How were your services delivered? (of the services stated, for each country, provide a percentage estimate for how the services were delivered to the client):

1. Delivered from New Zealand to a customer overseas *e.g.* by internet, phone, mail.
2. Delivered to an overseas customer, temporarily in New Zealand.
3. Delivered to an overseas customer by a New Zealand employee, temporarily working abroad.

25. The form was tested early 2011 on potential respondents. When it came to modes of supply questions, they informed Statistics New Zealand that, although they did not keep records which would allow them to calculate the shares precisely, they were prepared to make a guess based on their knowledge of how the company operates. In some cases they would talk to a sales team etc. Actually according to the first information received at the time of writing, it seemed that the mode of supply question had been comprehended very well. Most of the respondents that returned the survey were able to indicate what category their business fell into. In most cases it was not an exact science but more a general indication on how the majority of the business was performed. Some respondents did indicate that their service types were delivered via a multi-mode approach, however this depended on the type of service they provided.

26. The main driver behind the request on modes of supply information was MFAT (primarily interested in the partner country aspect). A more detailed approach (*i.e.* modes for more detailed services

categories) may be implemented in the future, but for this to be developed, the policy need should be identified.⁸

Malaysia

27. The Department of Statistics Malaysia (DoSM) has recently developed some very detailed sectoral trade in services surveys, which cover all aspects recommended in BPM6 and MSITS 2010 as well as additional information. The survey forms in particular cover detailed questions on mode 4. However it seems the DoSM is currently reviewing its data collection strategy, in particular with respect to mode 4.

28. As for foreign affiliates statistics, DoSM is engaged in its first data collection of outward FATS and is looking into its existing business statistics to derive inward FATS information.

Australia

29. The Australian International Legal Services Advisory Council (ILSAC) has been conducting for a number of years its own survey covering the international supply of legal services to non-residents. The survey has been established by ILSAC in collaboration with a private partner (FMRC Pty Ltd who authored the survey form) and with assistance from the Large Law Firm Group and the Australian Bureau of Statistics (in particular commenting on the approach and providing input as to the comparability issues with international statistical concepts). The survey form collects data on the international supply of legal services by Australian law firms, according to the four modes of supply, by line of business and partners. Such collaboration has highlighted the desirability, from ILSAC's point of view, of increasing the focus on collecting data that is more closely aligned to the specific modes of service delivery recognised by economies in trade negotiations, and although it does not mention it, to ensure that the data collected will be following as closely as possible international standards. This experience can also be seen as an example of positive collaboration of the body in charge of compiling trade in services statistics and an institution which has a strong interest in collecting sector specific data. Although from the statistical compilers perspective it would seem difficult to replicate for all services sectors, such experience can prove useful for improving the quality of trade in services statistics as well as providing some first estimates according to the four modes.

30. As can be shown in the experiences above, a lot of the focus of the current data collection is on firms, *i.e.* self-employed persons are not considered (or not specifically targeted). However we must not forget this category of persons which could also be important in certain economies and specific services sectors when it comes to looking at mode 4.

31. Looking into these approaches for preparing data by mode of supply, it has to be admitted that the compilation or the estimation of these data could be done in different ways. The respective size of an economy, the structure of the service sector or the importance of specific services could be indicators that could be used for focussing on one approach or the other, or adopting a combination of several approaches.

⁸ FATS are no yet compiled in New Zealand, meaning that they are lacking information on mode 3.

4. A way forward- approaches for compiling the international supply of services by modes.

32. Modes of supply are not always easy to observe and consequently data compilers have not yet collected data. A complete compilation of statistics on international supply of services by mode will necessarily cause a higher response burden and additional costs for compiling economies. Which is why a phased approach could be adopted based on what is proposed in MSITS 2010.

33. This section enables compilers to choose between different approaches suitable for their economies and considering differences in data collection methods and compilation systems. Additionally, this part aims at opening the discussion on a way forward which could do the balancing act between conducting reliable high quality statistics by mode of supply and the restrictions in financial matters. To evaluate the feasibility of the approaches presented below national expertise is strongly needed. Statisticians (both national and international) also need to have a more profound knowledge of how different services sectors operate in various economies. The authors therefore would like to emphasize that the involvement of national compilers in the evaluation of the case studies detailed below is of utmost importance to be able in the future to develop reliable modes of supply statistics and implement appropriate data collection/estimation mechanisms to achieve this development.

Case study I: using existing BoP services surveys (or business surveys)

34. Using existing surveys could be a way forward. Indeed as presented in the previous section a number of compilers have adopted such an approach. Therefore new statistics should be available without additional data collection but still with a good quality in output. This would not necessarily mean that a full-fledged approach should be adopted, but work could be targeted towards a couple of relevant services sectors. Existing surveys could be amended for one or two relevant sectors to include a question stating:

"Was this service transaction (or part of it) fulfilled through the presence of one of your employees?
(YES/NO)".
If YES part of it: ...%

35. However such an approach would necessitate some knowledge building from the compilers side for instance by conducting a one of "screening" survey to identify the sectors and actors that should be targeted.⁹

36. The move from BPM5 to BPM6 could be an appropriate starting point for such modifications in the existing BoP services surveys (business surveys). Since the burden for respondents would still be high, an option could be to random sample enterprises which should reply to questions estimating or allocating

⁹ A qualitative analysis based on a selection of service contracts could also be conducted. Identifying mode 4 within service transactions is often the key to build first estimates of trade in services by modes of supply. However, it is necessary to evaluate correctly where a service contract involves mode 4. As discussed, even the nature of the contract is relevant for a proper identification of relevant service contracts which may involve various modes of supply. This could in particular be used to look into the more specific case of self-employed persons. How well do we know how they trade services? Do they trade mainly cross-border or by moving physically to the economic territory of their client? It would therefore be useful to conduct some analysis of specific contracts for specific groups of persons to understand better how they operate in the context of trade in services.

services by modes of supply. Business registers could give relevant information about the reference populations *e.g.* demographic or economic characteristics (economic activities, turnover etc.).

37. Only at a later stage, modes of supply could be integrated in the existing questionnaires as a mandatory data element.

Case study 2: developing a (sector) specific survey.

38. Developing more specific surveys could also be a possible way forward if considered necessary, although a main difficulty could be a higher burden for compilers and probably a more costly investigation than the option proposed above. A sector specific survey could be developed together with the relevant public body which has interest in knowing more of the international aspects of an activity in which its economy is specialised (ministry of justice for legal services, using the Australian example, computer services, construction, consultancy etc.). Large employment agencies that could possibly have important cross border activities could also be approached (*e.g.* working with persons from new EU members for instance). Once an analysis on the types of contracts has been conducted it would be possible to identify those services relevant for measuring mode 4 for example.

39. Specific surveys could then be developed on a broader basis taking economic, political-economic and socio-economic issues into account; therefore mode 4 would be integrated in a broader concept of cross-border movements in globalization theories. A pluralistic-integrated approach can provide relevant statistical information for different statistical stakeholders. Focussing on different user interests, specific sector studies would serve several purposes *e.g.* policy makers could also be interested in specific studies such as for services incidental to agriculture or environment services.

40. *Case study 3: developing model based estimates, in particular using existing data from other frameworks (from migration/tourism statistics; household surveys; enterprise surveys etc.)*

41. Some model-based estimates could be developed, using existing trade in services data, travel information as well as existing data from tourism, migration, employment statistics etc. All this information could be used for building an estimation of mode 4. Model-based estimates are an un-costly way of using existing data. Some theoretical assumptions would need to be developed. For such an approach to be efficient it would of course be necessary for compilers to analyze existing metadata and familiarize themselves with the methodology behind data from other statistical frameworks.¹⁰ Probably, some adjustments to the data or data collection tools could be needed.

42. For example tourism data sources could be used for collecting further information on mode 4 and subsequently derive an estimation of the value of mode 4 trade. Information on flows (and stocks) of mode 4 persons could be obtained by adding supplementary detail to the existing questionnaires such as border surveys or administrative data collected for immigration purposes or for establishing work permits that already provide a lot of useful information.¹¹ Of course some further research would be needed in that direction and some adjustments on different concepts and terminology in both statistical domains would certainly be necessary.

¹⁰ Actually, defining services contracts versus employment relationships is something that would better serve the compilation of tourism statistics as well as migration statistics.

¹¹ If available, using the number of "mode 4" visas issued, where those exist, would be a very good starting point. However it would be necessary to identify how these fit to the definitions identified in MSITS 2010.

43. The United Kingdom air arrival form is given as an illustration below. The question on the length of stay in the United Kingdom, combined with questions on the main reason for the visit and further information regarding business reasons could be useful to provide an indication of the size of mode 4.

Extracts of the United Kingdom air arrival questionnaire

11. How long do you intend to stay in the UK?

- Under 12 months
- Up to 2 years
- Up to 4 years
- Permanently > 4 years
- Not sure how many years
- DK, possibly 12 months

30. What was the main reason for your visit abroad?

- Was it...
- Holiday/pleasure
- Visiting family
- Visiting friends
- Getting married
- Business/work**
- Study Child, party
- Other
- or Something else?
- (c) Play amateur sport**
- Watch sport
- Personal shopping
- Cruise UK ship
- Foreign ship
- Au pair
- Medical treatment
- Overnight transit
- Same day transit
- Other (inc voluntary work)
- Unacc. Schoolchild

Business/work

- 31. Are you...**
- military or embassy personnel
 - merchant navy
 - or airline crew?
 - None of these

- 32. Are you...**
- directly employed from UK
 - an international commuter *
 - or directly employed elsewhere? .

44. The above questionnaire already includes information concerning business and personal travel. The breakdown for business work identifies the relevant populations for compiling tourism statistics. Adding a small number of relevant response options in these questionnaires would not drastically increase the response burden. For example a few additional options could be added to questions 31 (for occupations relevant to the compiling economy, *e.g.* installation and maintenance, agricultural labourer, IT specialist, sales negotiations) as well as question 32 (being more precise on the business/work purpose, *e.g.* attending a conference, contracted self-employed). Even if this proposal seems very promising, the authors are aware about country specific deviations from International Recommendations for Tourism Statistics 2008 (ITRS

2008) and Tourism Satellite Accounts (TSA), as well as from BPM5 in this domain.¹² Authors are also aware that such a proposal could only offer a limited amount of information in terms of breakdowns. However they strongly believe that this approach could already provide a useful set of information, without significantly increasing the burden on compilers and respondents.

45. Although this section has mainly focused on the use of traditional sources for tourism statistics, a similar approach could be adopted for other types of sources such as labour force surveys, household surveys or even business surveys. Once again the issue would be to clearly identify mode 4 persons as outlined above, *i.e.* self-employed, employees in country A travelling to country B on behalf of their employer. This could be done by adding similar types of options in the questions asked to respondents.

46. An illustration of the possibility offered by these other sources is the European Working Conditions Survey which provides an overview of working conditions in Europe using different indicators like working conditions of both employees and the self employed across Europe on a harmonized basis. The employment status which is included in this survey (see box below) as well demographic indicators once combined seem to also offer the potential to collect mode 4 information.

Q6 Are you mainly... ?

- 1 – Self-employed without employees -----
- 2 – Self-employed with employees
- 3 – Employed
- 4 – Other
- 8 – DK/no opinion (spontaneous)
- 9 – Refusal

Source: <http://www.eurofound.europa.eu/surveys/ewcs/index.htm>

47. So far, the results from different labour force survey could be a starting point for future linkage of data.

48. Besides using such information for establishing model-based estimates, the data obtained from these other sources could also be used for cross-checking the data collected in trade in services surveys or other BoP services sources, as well as reply to the other information need identified in MSIST 2010 for mode 4, that is collecting data on the number of mode 4 persons. Integration of different sources and re-using surveys for several purposes has the potential to reduce the burden for compilers. Furthermore, linking data on a micro-level could allow broader types of analysis. The potential of the approach of using information from other frameworks (migration, tourism, household surveys or even tax related information) therefore deserves further exploration.

49. *Case study 4*: developing more detailed estimates of mode 2 supply of services, breaking down travel by type of product consumed and linking to tourism statistics (tourism-related consumption/expenditure)

50. As presented in MSITS 2010 some balance of payments items are strongly linked to the supply of services through mode 2 (manufacturing services, maintenance and repair services, travel, waste treatment etc.). Travel is the BoP service item which has the strongest and clearest link with mode 2 supply of services. Currently this item is hardly detailed in terms of what is consumed by residents while abroad or

¹² Moreover, since in many cases the data collected and compiled for tourism are relatively new (in particular the TSA) and the available information differs from one country to the other compilers should carefully check the quality and comparability of the information collected.

by non-residents while in the compiling economy. In this case study, the authors propose to work on this particular aspect.

51. BPM6 and MSITS 2010 propose an alternative breakdown of travel into: goods, local transport services, accommodation services, food-serving services and other services. Other services are further broken down into education services and health services. Actually in the two latter cases, some economies collect and compile such information, but rarely make them available.¹³

52. Actually, although the international standard is limited to the list under the alternative breakdown, some compilers may identify needs for other types of services such as those related to the consumption of cultural or recreational services. For the specific cases of education and health services, on the receipts side providers of such services (or relevant ministries) would most probably be an interesting source. Embassies and consulates may also be approached to seek such information. Such an approach could also be taken for other types of services such as cultural services.

53. Some tourism/travel surveys include a number of questions on the amount spent by type of product consumed, or on what tourists have been doing during their trip. This is generally not very detailed, but responds partly to the breakdown by product recommended in BPM6/MSITS 2010, or such results could be exploited to respond to these needs. However these data are rarely published and this is something that should be encouraged or further developed.¹⁴

54. In this context a possibility to collect a breakdown by type of product would naturally be to work more closely with tourism statisticians who also have an interest in the collection of data on the types of goods and services acquired by international tourists. Common data sources could be used such as surveys of tourism related enterprises/entities, border/traveller surveys or using household surveys. Once again caution should be taken as to the quality of the data collected as well as the existing differences between both concepts, as outlined in the previous section. Such a data collection should be made in such a way that it takes into account these differences in order to fully respond to the information needs of both balance of payments/trade in services and tourism statistics compilers.

55. A first stage in this case study would be to see what type of information is available within a country and how this information could be used and then made available to users. This would be un-costly as it would use existing data. A second stage would be to see how such an approach could be further developed to collect or estimate more detailed information of interest within a compiling economy (e.g. health services, cultural services etc.).

56. *Case study 5*: performing a conceptual allocation of trade in services by modes, using table 5.2 of MSITS 2010

57. For countries willing to follow a step by step approach, a “conceptual” allocation of trade in services could be done as a first stage, using the table 5.2 of MSITS (see Annex 1). This would most probably not be so costly: the compiler just has to decide how a specific service item is most probably supplied by exporters (or to importers) of his economy. Secondly, compilers have to evaluate if the allocation as proposed in table 5.2 is relevant for their domestic economy. Some additional information (by

¹³ However it is important to note that there are a few exceptions such as Australia for example. Given its interest in such services provision the Australian Bureau of Statistics publishes a breakdown of education travel data by type of expenditure (education fees and other expenditure) and type of institution.

¹⁴ Publication of such data could be encouraged if it was included by international organisations in their data requests to countries.

conducting qualitative interviews to one or two relevant players in a specific service sector) will validate and endorse the assumptions made by statisticians. According to what is presented in this table, the proposal would be in this case to concentrate on items where mode 4 is deemed to be important for the compiling economy.

58. However, there are also some shortcomings to be considered. MSITS 2010 proposed the allocation of the dominant or the most significant mode of supply. How reliable are these figures regarding the different service items? How is the most significant mode allocated? Regarding enterprises which report their main economic activity, how should secondary economic activities be treated? Even if this framework provides an approach for the measurement of statistics by modes of supply with a minimum use of resources, the relevant variables might be difficult to obtain (breakdown by product, breakdown by type of activity and by partner).

59. A second stage in this approach would be to evaluate how well the compilers of the economy engaged in such an exercise know how their service sector operates. Contacts could in particular be established with major services actors or trade (or consumer?) associations or relevant ministries in particular sectors where the internationalisation is known to be important (*e.g.* legal services, computer services, consultancy, construction services etc.). Then it would be necessary to identify how this knowledge building could be used to refine the first estimates produced using table 5.2.

60. The further co-ordination of this proposal could be put into place in collaboration with Eurostat, the OECD and WTO Secretariats. It would be necessary to have a group of countries ready to start working on this approach.

Conclusions, next steps and questions

61. The note sets out the concepts developed in the new chapter five of the revised Manual on Statistics of International Trade in Services relating to the provision of international trade in services by modes. It describes the different approaches currently adopted by a still limited number of countries that have engaged in compiling trade in services by modes. Partly building on these practical experiences the paper presents a number of possible “case studies” that would allow the development of a set of statistics on trade in services by modes and consequently the better understanding for countries on how they supply their services internationally, and in which mode they have comparative advantages. It must be underlined that the compilation of service trade by modes of supply is and will remain a challenge for statisticians. However, as these service flows are becoming more and more important both for developing and developed economies and given the policy demand for this type of statistical information, this policy need should progressively be met by statistical compilers.

62. Consequently, the international organisations authoring the present paper are seeking country compilers that would volunteer to do some work in the area by choosing one of the approaches described in the case studies or by choosing any method which would be relevant for their policy need and would fit with the data collection system. This work could be done in collaboration with the authors. Once again involvement of national compilers would be of great importance to assess the different options proposed in this paper to build first estimates on the value of the international supply of services by modes.

63. The deadline for volunteering is the end of year 2011. Meanwhile, Eurostat, WTO and OECD would prepare a revised version of this paper that would also be presented to the Eurostat Balance of

Payments Working Group in spring to take advantage of the dynamics between the Eurostat events¹⁵ and the OECD meeting in fall.

Questions to delegates

1. Which approach (as mentioned above) could be appropriate for your country?
2. How feasible are the above mentioned approaches?
3. Are there volunteers for pilot study/case study (response by the end of 2011)?

¹⁵ The paper will be also discussed with tourism statistics compilers.

ANNEX 1

Table V.2
Simplified allocation of FATS and balance of payments data to modes of supply^a

	FATS (sales or output) ^b	Balance of payments trade in services					
		Mode(s)					
		Mode 3	1	2	4	1 and 4	2 and 4
Manufacturing services on physical inputs owned by others	X		X				
Maintenance and repair services n.i.e.	X		X				
Transport	X	X					
Passenger	X	X					
Freight	X	X					
Other	X						
– Postal and courier services	X	X					
– Service to domestic carriers in foreign ports (and vice versa)	X		X				
– Other	X	X					
Travel			X				
Goods							
Local transport services	X		X				
Accommodation services	X		X				
Food-serving services	X		X				
Other services	X		X				
Construction	X						X
Goods							
Services	X						X
Insurance and pension services	X	X					
Financial services	X	X					
Charges for the use of intellectual property n.i.e. ^c	X	X					
Telecommunications, computer, and information services	X				X		
Telecommunications services	X	X					
Computer services	X				X		
Information services	X	X					
Other business services	X				X		
Research and development services	X				X		
Professional and management consulting services	X				X		
Technical, trade-related and other business services	X						
– Architectural, engineering, scientific and other technical services	X				X		
– Waste treatment and de-pollution, agricultural and mining services	X						
• Waste treatment and de-pollution	X					X	
• Services incidental to agriculture, forestry and fishing	X			X			
• Services incidental to mining, and oil and gas extraction	X			X			
– Operating leasing services	X	X					
– Trade-related services	X	X					
– Other business services n.i.e.	X				X		

	FATS (sales or output) ^b	Balance of payments trade in services					
		Mode(s)					
		Mode 3	1	2	4	1 and 4	2 and 4
Personal, cultural and recreational services	X						X
Government goods and services n.i.e.							
<i>Government goods n.i.e., credits and debits</i>							
<i>Government services n.i.e. credits</i>							
<i>Government services n.i.e. debits</i>							
– <i>Commercial services purchased in host economies</i>							
• <i>Government units in diplomatic and similar enclaves</i>							X
• <i>Personnel from home economy and dependents</i>				X			
– <i>Other commercial services n.i.e. purchased by government</i>							X
– <i>Non-commercial services acquired by government</i>							
<i>Distribution (wholesale, retail trade) services</i>	X	X					

^a The allocation may vary from country to country (in respect of general needs as well as for specific sectors, data-collection system, resources, etc.).

^b In the economic territory where the affiliate is established. If it is not possible to break down sales or output by product using EBOPS 2010, then provide sales or output of services, broken down by activity using ICFA, Rev.1.

^c There is a certain degree of uncertainty with respect to the coverage of certain *charges for the use of intellectual property n.i.e.* (see para. 5.43).