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GATS AND STATISTICS ON TRADE IN SERVICES¹

I. INTRODUCTION

1. An improvement in the quality of services statistics is needed to facilitate future negotiations, to monitor implementation of the GATS,² and to assess the benefits of liberalization.³ At the meeting of the Council for Trade in Services held on 30 March 1995, it was noted that "the problems relating to the availability and comparability of statistics were the most serious and required urgent attention."⁴ Accordingly, the Secretariat was asked to prepare a background note on services statistics and classification "as a basis for initiating work in these two areas and to assist delegations in their consideration of the issues involved."

2. The Secretariat has previously prepared three main papers on issues related to services statistics. The first, in June 1988, contained information on work being undertaken in various international fora in the area of services statistics.⁵ The second, in July 1989, discussed the nature of, and the problems with, balance of payments statistics, the only source of information on trade in services available on a global basis.⁶ The third, in February 1990, described the services data base that had been created within GATT, and illustrated what was then available from the Secretariat in machine-retrievable form.⁷

3. This paper will deal only briefly with the material covered in the earlier Secretariat documents. The focus will be primarily on issues related to the creation of a statistical framework to serve GATS needs. In this context, the paper will describe the important developments since the documents mentioned above were written. Thus, balance of payments statistics pertaining to services are being significantly improved and cooperation between international organizations has increased, particularly regarding classification issues. Furthermore, WTO participation in several

¹This paper relies on work done in the Statistics and Information Systems Division (SISD) of the WTO. Greater detail on some of the issues discussed is to be found in the papers prepared by the Division which are referred to in the bibliography.

²Definitions of all the acronyms used in this paper are given in Annex 3.

³ It is stipulated in Article XIX.3 of the GATS that "the Council for Trade in Services shall carry out an assessment of trade in services in overall terms and on a sectoral basis with reference to the objectives of this Agreement" for the purpose of establishing negotiating guidelines for each round of future negotiations. Article XIX.1 states that the next round of negotiations shall begin not later than five years from the date of entry into force of the WTO Agreement.

⁴S/C/M/2, paragraph 29.

⁵MTN.GNS/W/41.

⁶MTN.GNS/W/58.

⁷MTN.GNS/W/94.

international fora has created a greater sensitivity to GATS needs. The paper will also describe the problems that remain unresolved and suggest possible courses of action.

4. The rest of this paper is divided into four sections. The next section takes stock of the statistics that currently exist and summarises the underlying problems. In Section III, there is a discussion of how far existing statistics are able to meet GATS needs. Section IV describes what is being done in various international fora to improve the quality of services statistics and Section V suggests areas for future work.

II. CURRENTLY AVAILABLE STATISTICS

5. Given the ambit of GATS, statistics are required not only on trade flows, but also on production, sales, employment, foreign direct investment and the activities of foreign affiliates. This section briefly reviews currently available statistics and summarises the general problems (see Box 1). The statistical inadequacies in the GATS context are dealt with in the next section.

(a) Trade data

6. The only source of information on trade in services available on a global basis are the IMF balance of payments (BOP) statistics which are reported by governments and reproduced in the IMF Balance of Payments Yearbooks. Most data available until 1994 were reported according to the conceptual framework and the classification system of the 4th edition of the IMF Balance of Payments Manual (1977) (hereafter referred to as IMF-4) but a transition is now being made to the 5th edition of 1993 (referred to as IMF-5 and described below). In IMF-4, there was no explicit identification of what constituted trade in services. Rather, the current account was divided between *merchandise* and *non-merchandise* items, the latter often being referred to as *invisibles*.⁸

7. Box A1 shows the components of the IMF BOP statistics which constitute *commercial services* as defined in previous GATT publications.⁹ Column 2 lists the items that are usually available for individual countries. However, comparability of components across countries is only ensured at the higher level of aggregation shown in Column 1, for reasons that are discussed below. The OECD disseminates more disaggregated information, as reported by member countries, but the figures are not comparable across countries. EUROSTAT currently provides harmonized series for the members of the European Union and EFTA according to the classification given in the third column of Box A1.

⁸The term *invisibles* generally referred to the sum of the following categories: *shipment, other transportation, travel, investment income, other official goods, services and income, other private goods, services and income*, and (optionally) *private and official unrequited transfers*.

⁹The definition of commercial services in GATT (1989) thus included all the components of invisibles except *investment income, other official goods, services and income*, and *private and official unrequited transfers*. Starting with the 1995 issue of the Annual Report, the WTO decided to exclude *labour income*, which consists mainly of wages and salaries paid to seasonal and border workers, from the definition of commercial services. The main reason was that a large part of labour income transactions originate outside the services sector. It was also decided, in the Budget Committee of the WTO, to use trade in commercial services, according to the new definition, along with shares in merchandise trade, to determine Members' financial contributions to the WTO.

Problems

8. The BOP statistics suffer from significant problems which have been described in detail in MTN.GNS/W/58. The basic problem arises because the intangibility of services precludes their registration at the frontier as happens in the case of trade in goods. Transactions are estimated using either foreign exchange records, or surveys of establishments, or a combination of the two. Foreign exchange records often give insufficient information regarding the precise form of the service transaction, while the survey of establishments may not be complete.

9. There are numerous other problems which affect the comparability and reliability of services trade statistics. First of all, the definitions of particular services are not always identical across countries and coverage is often inadequate. For instance, the export of *transport services* reported by one country may include some of what another country reports as *expenditure by travellers*. Moreover, some nations do not report complete information on certain items, such as maritime shipment exports and air transport services, and many types of business services. Annex 1 provides a more detailed discussion of inconsistencies in definition and coverage. Secondly, information on trade by origin and destination is not available on a comparable and detailed basis, and only some countries report information on the direction of trade by geographic region or by major trading partner. Thirdly, the data are only available on a value basis. The lack of volume and quality adjusted data makes it difficult to determine the proportion of growth in a particular year due to inflation as opposed to improvements in quality. Finally, the limited disaggregation of data on trade in services and on domestic production and employment makes it difficult to relate the two sets of statistics. The problem of concordance is made worse because of the inconsistencies referred to above and the existence in trade statistics of items such as *expenditure by travellers* which do not appear in the national accounts.

(b) Production and employment

10. Production and employment statistics are compiled within the System of National Accounts (SNA), in which industries are classified by activity according to the International Standard Industrial Classification. These statistics are reported by countries and international institutions, such as the UN, the World Bank and the OECD. Official National Accounts statistics are published by UNSTAT, and rely entirely on what is reported by countries. UNSTAT also publishes estimated statistics, although at a much higher level of aggregation than the official statistics. The latter is the only source of comprehensive comparable information, including estimates to fill in data gaps.

Problems

11. Inconsistencies between national activity classifications and ISIC often lead to substantial classification differences. For example, for the US, *wholesale and retail trade* includes *restaurant services*. Even though series are generally available in both current and constant prices, the latter are not internationally comparable because countries do not generally follow international guidelines, for instance, regarding deflation methods. In other cases, such as the transport sector, the volume of output is measured by quantitative indicators, such as passenger-kilometres or ton-kilometres, some of which do not take account of qualitative factors. As a result, productivity changes are not well reflected. Finally, there is limited sectoral detail in the statistics reported by UNSTAT.

12. Employment data are also not comparable from country to country. Two projects in the ILO have attempted to provide comparable estimates, but the first is now out of date with series only up to 1980 and the second includes only 23 countries (see ILO, 1986 and 1992).

Box 1: Problems with Currently Available Statistics	
Trade (BOP)	<ul style="list-style-type: none"> - inconsistencies in definition and coverage reduce comparability across countries; - lack of partner data for non-OECD countries; - constant price data is not available; - lack of sectoral detail, especially for non-OECD countries.
Production and employment	<ul style="list-style-type: none"> - country deviations from the ISIC limit comparability; - constant price data suffers from methodological problems; - lack of sectoral detail;
Foreign Direct Investment (FDI)	<ul style="list-style-type: none"> - unavailability of data for non-OECD countries; - lack of harmonization between country practices; - country deviations from the ISIC; - lack of sectoral detail;
All domains	<ul style="list-style-type: none"> - problems of linkage between statistical domains : <ul style="list-style-type: none"> (1) problems of compatibility between classifications (2) problems in the level of detail provided.

(c) Foreign Direct Investment (FDI)

13. The capital account of the IMF BOP Statistics contains information on flows and stocks of FDI, but not separately for services. The other sources for FDI statistics are EUROSTAT and OECD, which provide sectoral and geographical information on stocks and flows of FDI, and the UNCTAD Programme on Transnational Corporation, which publishes economic analyses of transnational corporations. Concepts and definitions are found in the IMF BOP manual (IMF, 1993), the SNA, and in OECD (1992). At present, OECD and EUROSTAT publications are based mainly on national BOP statistics.

Problems

14. The first problem arises because there is no uniform definition of ownership. For the IMF and the OECD, enterprises are considered to be *foreign direct investment* if a resident of another economy owns 10 percent or more of the ordinary shares or voting power. This rule may be applied flexibly by countries. The corresponding share is 50 percent in the SNA, although, again, there is room for flexibility in the final determination by individual countries.

15. Disaggregated statistics for services sectors are available only for a limited number of countries. Country comparability is hindered by discrepancies between countries' classifications and the ISIC, as in the case of national accounts statistics. Furthermore, depending on a country's practices, the sectoral allocation may be made on the basis of the activity of the investor, or the activity of the enterprise in which the investment is made. Finally, some countries include reinvested earnings in flows of FDI, while others do not.

(d) Sectoral statistics

The following is meant to be an illustrative, rather than exhaustive, list of the sector-specific statistics that are available.

16. Statistics on air transport are available from the International Civil Aviation Organization (ICAO), and the International Air Transport Association (IATA). Their publications include

information on kilometres and hours flown, passengers carried, general type of activity of passengers, passenger-kilometres flown, tonne-kilometres of freight and mail, indications on fleet composition, as well as information on companies, such as the number of employees, operating revenue, expenses and surplus.

17. UNCTAD reports on maritime transport, with information on fleets, shipbuilding and port development, freight, containers and multimodal transport.

18. The Economic Commission for Europe publishes information by modes of transport (railways, roads, inland waterway, international rivers, and pipelines) for European countries.

19. The World Tourism Organization publishes information on passengers and passenger-kilometres carried, tourists arrivals, payments, nights in hotels, and accommodation capacity.

20. Financial statistics are reported by the Bank for International Settlements in its Annual Reports, and in different publications of the IMF, the World Bank and the OECD.

21. Detailed information on activities of insurance companies is given by UNCTAD for developing countries and OECD for member countries. In the statistical appendix of its annual report, the Swiss reinsurance company SIGMA publishes statistics on premiums in life and non-life insurance, for a selected number of countries (63).

22. Professional organizations, such as the International Federation of Accountants, keep statistics on membership of professional bodies on a country basis.

23. In the telecommunications sector, statistics are available from SIEMENS, on telecommunication lines, countries' capacities, local, long distance and international calls, subscribers by type, and investments in the sector. The OECD publishes a range of information for member countries.

III. GATS NEEDS AND CURRENTLY AVAILABLE STATISTICS

24. In the GATS context, in addition to all the statistical inadequacies described above, we encounter a crucial problem: *the framework of negotiated commitments does not match the existing structure of trade statistics*. This is for three related reasons. First, the GATS definition of trade in services goes beyond the traditional notion of international trade, which refers to products crossing geographical boundaries, or to transactions between residents and non-residents. Thus, trade in services is defined as including local sales by foreign entities who would be considered "residents" by conventional statistical criteria and for whose activities adequate statistics do not exist. Secondly, the scheduled commitments are, in most part, according to the GNS sectoral classification¹⁰ which is based largely, but not entirely, on the UN Central Product Classification (CPC).^{11,12} However, the only services trade statistics available on a global basis follow the IMF

¹⁰MTN.GNS/W/120.

¹¹The GNS Classification deviates from the CPC classification primarily in *telecommunications* and *financial services* and to a lesser extent in *transport services*.

¹²The CPC constitutes a complete product classification covering goods, services and assets. It was developed primarily to enhance harmonization among various fields of economic related statistics.

Balance of Payments Manual classification which is less closely linked to the CPC. The third reason, related to the first, is the distinction made in GATS between four modes of supply: cross border supply, consumption abroad, commercial presence and presence of natural persons. In the country schedules, commitments in each service sector are specifically defined according to each mode of supply. This is a form of disaggregation for which only crude statistical approximations exist. These issues are discussed in greater detail below.

Definitions and classification

25. The most recent IMF BOP Yearbook for 1994 presents statistics according to IMF-4. The large difference in levels of aggregation between IMF-4 and the GNS classification, makes the problems of concordance relatively unimportant. The IMF-5 classification, introduced in 1993, is significantly more disaggregated than IMF-4, and indicates what might reasonably be available in the near future for most countries.¹³ Box A3 presents a juxtaposition, rather than a formal concordance, of the GNS and the IMF-5 classifications. This reveals that the information available on a global basis in the near future will suffer from three types of shortcomings.

26. Perhaps most importantly, the divergence in definition of what constitutes an international transaction in services creates a gap in coverage from the GATS point of view. Balance of payments statistics register transactions between residents and non-residents. According to balance of payments conventions, if factors of production move to another country for a period longer than one year (sometimes flexibly interpreted), a change in residency has occurred. The output generated by such factors that is sold in the host market is no longer recorded as trade in the BOP. Thus, transactions involving commercial presence and stay of natural persons for durations of more than one year are not covered by the BOP statistics. The implications for statistical coverage of individual sectors depends on the relative importance of these modes of supply in a particular sector. Sectors like *distribution services* and *financial services* are likely to be among the worst affected.

27. A simple inspection of Box A3 reveals that, despite the improvement in comparison with IMF-4, IMF-5 still contains a relatively limited disaggregation in comparison with the GNS classification. The greatest number of sub-divisions in the GNS classification are in *business* (46), *communication* (21), *financial* (16) and *transport* (33) services. If the IMF supplementary information section is excluded, then the number of subdivisions in the IMF classification for these sectors will be 2, 2, 2 and 9, respectively. The inclusion of supplementary information, which was possibly included in response to GATS needs, raises the number of *business* subdivisions to 8.

28. Finally, there is the problem of lack of concordance. For statistical coverage *educational services* and *health related and social services* must rely on a disaggregation of personal travel expenditures provided only in the supplementary information section, and on non-separated ingredients of *other personal, cultural and recreational services*. The lack of a precise concordance is also a major problem for *computer and related services*, *environmental services*, *tourism and travel related services*, and *recreational, cultural and sporting services*. For example, in the IMF BOP classification, *computer and information services* include *news agencies services* which are part of *recreational and cultural services* in the GNS classification.

¹³ The IMF has formally requested countries to start reporting according to the new classification from 1995 onwards. A few countries are already reporting according to the IMF-5 classification, and a few others in a format close to the IMF-5 classification. It may be noted that *labour income*, dropped from the new WTO definition of *commercial services*, is also not listed as a service in IMF-5.

Modes of supply

29. Since the commitments under the GATS are specified according to the four modes of supply, trade statistics for each service sector should ideally also be available according to each of the modes of supply. Thus, it would be useful to know the precise magnitude of trade between two countries in, for instance, legal services, that takes place through cross-border supply, consumption abroad, commercial presence and presence of natural persons. This would enable an assessment both of the relative importance of different modes of supply in a particular sector and of the impact of measures affecting each mode of supply. Such information would be necessary both to evaluate the results of the implementation of the GATS and to set priorities in future negotiations.

30. *Cross-border supply* of a service implies reliance on a medium of transport, such as a telecommunication link or postal services. Furthermore, in many cases the service is embodied in a good, as for instance, software on a computer diskette. Thus, cross-border supply statistics would need to record the sale of such a service, net of the value of transport service and net of the value of the good in which the service is embodied.¹⁴ Statistics on *consumption abroad* would need to include, not only items such as the repairs of vessels undertaken abroad, but also the purchase by tourists of specific services, ranging from hotels and restaurants to photographic services. Statistics on *commercial presence* would cover, first of all, the capital flows that make such presence possible, and, secondly, the details of the activities of foreign service suppliers. Statistics on the *presence of natural persons* would include, first, those on the movement per se of natural persons, and, secondly, details of their activities. These would cover transactions of independent service suppliers, such as foreign doctors, and information on natural persons who are employed by service suppliers, such as the foreign employees of foreign banks.¹⁵ In the latter case, the service transaction would be attributed to the commercial presence mode, but the data required would presumably include the number of foreign employees and their income.

31. The limitations of the existing statistical domains in providing information on trade by different modes of supply are listed in Box 2. No clear distinction is made in BOP statistics between the modes that are covered, i.e. cross-border supply, consumption abroad, and presence of natural persons or commercial presence for less than one year. Consumption abroad of a service could, in principle, be covered by the BOP category *travel*. However, *travel* consists of all expenditures by travellers abroad, including those on goods, and is not subdivided into the different categories of services acquired by travellers. Furthermore, some elements of consumption abroad which arise when the property of the consumer moves or is situated abroad, as in ship repair services, are not recorded in *travel* but in other BOP categories.

32. Commercial presence could be covered by three kinds of statistics: (i) information on flows and stocks of foreign investment which make commercial presence possible, and are currently recorded in FDI statistics; (ii) information on market size in service sectors, which may be approximated using production statistics, such as gross output or value added; and (iii)

¹⁴The transporting service used must, of course, be recorded separately in the appropriate service category - postal, courier, telecommunication or transport services.

¹⁵The Annex on Movement of Natural Persons Supplying Services Under the Agreement applies to "natural persons who are services suppliers of a Member and natural persons of a Member who are employed by a service supplier of a Member, in respect of the supply of a service."

information on the activity of foreign companies in domestic markets, which is to be recorded under the new statistical domain of foreign affiliates trade (FAT) statistics.¹⁶

Box 2: Inadequacies of Statistical Domains with regard to Modes of Supply		
Mode of Supply	Relevant Statistical Domains	Inadequacies
Cross border supply	BOP service statistics (categories other than <i>travel</i>)	- BOP not distributed between <i>cross border supply</i> and <i>presence of natural persons</i> (individuals)
Consumption abroad	BOP Statistics (mainly the <i>travel</i> category)	- <i>Travel</i> also contains goods, and not subdivided into the different categories of services consumed by travellers - Some transactions related to this mode of supply are also in other BOP categories
Commercial presence	Production, FDI and FAT statistics	- Production statistics do not distinguish between national and foreign firms - FDI statistics do not provide data on output (or sales) - FAT basic concepts and definitions not yet established
Presence of natural persons (individuals)	BOP Statistics (mostly categories other than <i>transport</i> and <i>travel</i>)	- BOP not distributed between <i>cross border supply</i> and <i>presence of natural persons</i> (individuals) - natural persons who are residents are not covered
Movement of natural persons (employees)	Employment data from FAT statistics	- not yet available

33. Current data on FDI do not meet the needs of GATS in several respects. First, the concept of ownership underlying statistical practices in FDI (10 per cent of shares or voting power) do not correspond to the GATS concept ("ownership" of more than 50 per cent of the equity interest or "control", i.e. the power to name a majority of directors or to legally direct actions). Secondly, variables such as output and sales are not included in existing

¹⁶ Until recently, only one country, the United States, compiled data on sales of services abroad by foreign affiliates of resident companies and sales of services in the reporting country by resident affiliates of foreign companies. France, Germany and the Netherlands have now also begun to do so.

questionnaires.¹⁷ Thirdly, the sectoral breakdown is limited. Production statistics are also not adequate since they do not distinguish between national and foreign production. It is intended that FAT statistics should remedy some of these deficiencies, but work in this area is only beginning.

34. Presence of natural persons includes, first, those who are present for less than a year in foreign markets and are therefore considered non-resident in the BOP context. If such natural persons are themselves service suppliers, then their sales are recorded under the BOP statistics, mostly in the *other private services* categories. Employees are only covered by the Agreement if they are employed by a service supplier of a Member. The earnings of such natural persons are an unidentifiable ingredient of the BOP category *labour income*, which records the earnings of all natural persons established abroad for less than one year. There is no record in the BOP statistics of the activities of natural persons who are resident for longer than one year, except that *workers' remittances* and *migrants' transfers* record the transfers that they make. Complementary statistics on numbers of natural persons may be found in employment and migration statistics. Employment data from FAT statistics (such as number of employees and compensation of employees) would be relevant, when they become available, especially if they were broken down between "national" and "foreign" employees.

IV. WHAT IS BEING DONE?

35. Significant work is being done on conceptual, methodological and classificatory issues relating to services statistics. This section first describes the work in various international fora, highlighting two significant developments from the GATS point of view: the progress made in introducing harmonized classification schemes which to some extent reflect GATS needs, and in remedying the statistical gap relating to the commercial presence mode of supply. Then the activities of the Secretariat are briefly described.

1. Work in international fora

(a) Overview

36. An Inter-Agency Task Force on Services Statistics has started work under the aegis of the UN.¹⁸ It is chaired by the OECD and includes representatives from EUROSTAT, IMF, OECD, UN, UNCTAD, the World Bank and WTO. Its objectives include strengthening cooperation between organizations working in the areas of services statistics; to promote the development of international standards, systems and classifications; to improve the availability, quality and international comparability of services statistics; and to facilitate the provision of technical assistance to developing countries. The Task Force has given priority in its work programme to the statistical requirements of the GATS.

37. At the third meeting of the Task Force on 30-31 May 1995: (i) The IMF ruled out, for the time being, the possibility of collecting trade-in-services statistics by origin and destination but the OECD agreed to explore the possibility of collecting such information on trading partners. (ii) EUROSTAT agreed to define an activity classification for the collection of FDI and FAT statistics

¹⁷OECD and EUROSTAT have issued a new joint questionnaire, relating to flows, stocks and investment income. However, it is not expected that all information will be reported by countries. It is also not clear when the information will be published. Furthermore, sales are not covered by the questionnaire.

¹⁸It reports to the Administrative Committee on Co-ordination (ACC) Sub-Committee on Statistical Activities, and the UN Statistical Commission.

to match as closely as possible the GNS classification. (iii) The WTO agreed to start an analysis of modes of supply in individual sectors, in order to assess the feasibility of collecting statistics by mode of supply. (iv) Some progress was made towards arriving at a uniform treatment of FAT statistics.

38. The IMF Committee on BOP Statistics addresses issues related to all activities measured in the BOP statistics including international transactions in services. The Committee has undertaken preliminary investigations on the measurement of international transactions in sectors such as financial services and insurance services. Analysis has also begun of bilateral asymmetries in the data on transactions involving international travel, communications, construction and insurance. The IMF's fifth edition of the BOP Manual serves as an international standard for the conceptual framework underlying BOP statistics, including those on services transactions, while the forthcoming BOP Compilation Guide and BOP Textbook provide extended explanations of the standard. The IMF also provides direct technical assistance to its member countries on all aspects of BOP compilation, and in recent years has undertaken on average 40-50 such missions to developing countries.

39. The OECD handles, jointly with EUROSTAT, a Group of Experts of Trade in Services Statistics whose objectives are the improvement and standardization of OECD countries' data. The Group includes national balance of payments compilers and representatives of international institutions. The main results so far include putting together OECD statistics of international service transactions and elaboration of a new joint OECD-EUROSTAT classification.

40. EUROSTAT, in addition to the activities mentioned above, also addresses issues relating to trade in services statistics in its Balance of Payments Working Party, and in three task forces: the Current Account Task Force, the Establishment Trade Task Force and the Travel Task Force. The objectives of the Working Party are the improvement and the harmonization of European Union BOP statistics.

41. The Voorbourg Group on Services Statistics consists of representatives of both national and international statistical organizations which cooperate informally under the auspices of the UN Statistical Office. Its objectives include assisting in the improvement of services statistics. The group has focused more on domestic statistical issues than on trade issues.

42. The World Bank and UNCTAD have created databases based largely on IMF BOP statistics. The World Bank is conducting research, with possible statistical by-products, on the potential for internationalization of services. The work programme of the UNCTAD Standing Committee on Developing Services Sectors includes work related to trade-in-services statistics. This work will involve developing a conceptual framework for the collection and compilation of internationally comparable statistics on all modes of delivery, as well as adapting the CPC to the specific needs of international trade in services. The World Bank and UNCTAD (Programme on Transnational Corporations) provide technical assistance through a joint project on liberalizing service industries. Statistical issues may well be included.

(b) Classification

43. Two key developments have led to significant harmonization in the classification of trade in services. First, as noted above, the Fifth Edition of the IMF Balance of Payments Manual (1993) (IMF-5) introduced a greater disaggregation in the classification of international services transactions than was contained in the Fourth Edition (IMF-4). Secondly, the OECD and EUROSTAT agreed on a joint trade-in-services classification, which is closely linked to, and can be characterised as a disaggregated sub-system of, the IMF-5 classification. In designing the

OECD/EUROSTAT classification, consideration was given to the needs expressed in the GNS classification list.

44. The conceptual frameworks underlying the IMF-5 and the OECD-EUROSTAT systems of classification are identical. The one-digit items of the OECD-EUROSTAT classification are identical to the 11 main service categories of the IMF-5 standard components (see Box A2). The two- and three- digit items are fully compatible with these standard components and the IMF-5 services sub-items. Hence, reporting on the basis of the OECD-EUROSTAT Classification simultaneously satisfies IMF requirements. However, the two systems are less closely linked with the United Nations Central Product Classification (CPC) on which the GNS is based.

45. These developments indicate that the existing statistical "dualism" is going to continue - i.e. fairly disaggregated statistics will be available for OECD countries and relatively aggregated statistics for non-OECD countries. The OECD-EUROSTAT classification may also be seen as the limit of current possibilities for generating services statistics on a global basis.

(c) Foreign Affiliates Trade

46. A new statistical domain is being created in response to the need for information on the activities of foreign affiliates. More countries (including France, Germany and the Netherlands) are beginning to join the United States in collecting foreign affiliates trade (FAT) statistics. However, the absence of international guidelines in this area implies that different concepts are being used, which will hamper future comparability. The establishment of international guidelines will require several issues to be resolved.

47. First of all, there is the issue of a statistically useful definition of foreign companies, or in GATS terms, supply through commercial presence. The GATS defines a "juridical person of another Member", in the case of supply through commercial presence, in terms of either foreign ownership (when more than 50% of the equity interest is held by persons of another Member) or foreign control (when controlled by persons of another Member).¹⁹ Most countries find majority ownership easier to measure than control.²⁰ The GATS definition, however, proves inadequate in dealing with companies in which persons of a Member do not beneficially own more than 50 per cent of the equity interest.

48. A second problem arises in establishing the country of origin of a foreign company. The United States uses two definitions in this respect: (i) The foreign parent of a "foreign controlled affiliate" (more than 50% of the voting stock held abroad) is the first person outside the U.S. in a U.S affiliate's ownership chain that has a direct investment interest in the affiliate; and (ii) the Ultimate Beneficial Owner (UBO) is the person, proceeding up a US affiliate's ownership chain, beginning with and including the first foreign parent, who is not owned more than 50 percent by another person. The U.S. produces FAT statistics based on the UBO concept.

¹⁹Control is defined as the power to name the majority of directors (in the board) or otherwise to legally direct the actions of the company.

²⁰At the sixth Joint OECD/EUROSTAT Meeting of Experts of Trade in Services Statistics on 1-2 June 1995, most countries indicated that they would be able to report data only according to the majority ownership criterion. The only country able to identify control for statistical purposes was Canada. The OECD in its statistical work on "Globalization" also uses the majority ownership criterion.

49. It is generally accepted that the UBO concept is the more economically meaningful of the two but is much more difficult to implement than the concept of the first foreign parent. GATS Article XXVIII (m) and (n) seems to define the country of origin in terms of the first foreign parent who is engaged in substantive business operations in the territory of a Member. The "substantive business operations" requirement is designed to avoid the allocation of origin to tax havens or offshore financing countries but creates the need for a precise definition of what the requirement means.

50. Another question relates to which statistical variables are to be collected: production, sales, employment, exports, imports, or others also?^{21,22} A related problem is that FAT statistics would be easier to collect according to an activity classification like ISIC than a product classification like CPC, which raises concordance problems.²³ Then there is the question of how the statistical variables (e.g. sales) relating to a foreign company are to be allocated: entirely to the country of origin, proportioned according to the percentage of voting stock held in the country of origin, proportioned to each foreign country where persons own more than a given level (e.g. 10%) of the voting stock, or some other option? Finally, there is a need to ensure that, with regard to basic concepts and definitions, there is consistency between FAT, FDI, production and other statistics.

2. Work in the WTO

51. The Secretariat maintains contact with other international organizations through its participation in various specialized meetings. In all such contacts, the Secretariat attempts, to the extent possible, to promote an understanding of the GATS and to have its statistical needs reflected in the global effort to improve services statistics and to harmonize economic classifications. To this end, the Secretariat has attempted, first, to identify the inconsistencies between the concepts and definitions embodied in the GATS and those in methodological manuals of other international organizations and national practices. Secondly, the Secretariat has sought to identify statistical needs arising in the GATS context. The results of these activities have been reviewed in the earlier part of this paper. The developments described above suggest that these efforts have borne some fruit.

52. The Secretariat is also improving its access to relevant statistics and organizing the available data. The WTO maintains a data base on commercial services used to compile tables on trade in commercial services included in the yearly publication "International Trade", and for internal use. In addition, the possibility exists of accessing a number of primary data sets in machine retrievable form. Details are given in Annex 2.

²¹Statistics on employment in foreign companies would be useful in assessing the impact of foreign companies on domestic employment. In addition, this would be useful information for the *presence of natural persons* (employees) mode of supply if disaggregated by nationality of workers.

²²U.S. statistics provide a breakdown of worldwide sales of foreign companies between: (i) domestic sales; (ii) sales to the country of origin; and (iii) sales to other countries. At the sixth Joint OECD/EUROSTAT Meeting of Experts of Trade in Services Statistics on 1-2 June 1995, most countries ruled out collecting statistics on variables other than turnover and employment.

²³The EU uses the NACE, a more detailed classification than the ISIC. A concordance table of the NACE and the CPC has already been prepared.

IV. WHAT NEEDS TO BE DONE?

53. The conclusion of a previous Secretariat paper is still valid: "Improving services statistics is a long term process that depends primarily on efforts by national statistical agencies to employ the appropriate methodologies and a willingness on the part of governments to meet the resource costs involved. Without such efforts at the national level, better and more detailed statistics on services will not become available, despite the development of improved classification systems such as the CPC, the revised ISIC, or the OECD/EUROSTAT proposal for international transactions."²⁴ Nevertheless, national efforts will need to be complemented by work in international fora in at least three areas.

54. Harmonization of operational classifications is a priority from the GATS point of view. The difficulties created by variations in national classification schemes must not be compounded by the emergence of different international classifications schemes. No country would find it easy to collect data according to different and incompatible international classifications. Furthermore, given the existing allocation of resources for statistical work, collaboration with other international organizations would be much more fruitful for the WTO than an attempt to fulfil its needs independently.

55. How greater compatibility is achieved between the classification schemes for commitments and for trade statistics depends on the answers to two related questions: (i) How far should the GNS Classification, which emerged primarily as a negotiating list, be treated as immutable? Even though an element of irreversibility in the choice of classification scheme has been introduced because the Uruguay Round commitments have been scheduled according to this classification, could some changes still be considered? (ii) How far can other organizations be expected to respond to GATS needs since, given the current resource allocation, dependence on other organizations will continue?

56. To an extent, OECD and EUROSTAT have taken into account GATS needs, but the IMF, operating under the more severe constraints of global availability, has done so only to a limited extent. In general, the more economically sensible the classification, and the more statistically amenable the distinctions, the more likely it is that GATS needs will be eventually met. *Hence it is essential to determine which regulatory distinctions between product categories are necessary, especially in the negotiating context.* Once this has been done, it can be assessed how far other organizations can be relied on and whether there is a need for the GATS to create certain statistical notification requirements to fulfil its needs directly.

57. A second area of priority is, of course, to remedy the current ignorance on modes of supply not adequately covered by existing statistical domains, i.e. commercial presence and presence of natural persons. In the discussion on FAT statistics, it has already been indicated that certain definitional questions, which are important not only for statistical reasons, need to be addressed soon. For the moment, FAT statistics are only being collected by very few countries. The question of how these efforts can be widened needs to be addressed. Collaboration with the UNCTAD (Programme for Transnational Corporations) may be fruitful in this area. Similarly, the ILO and IMO may help in creating a better statistical picture about the presence of natural persons.

58. The third area of priority is to be able to distinguish between and to assess the relative importance of different modes of supply in specific sectors. This need can only be addressed by

²⁴Availability of Statistics on Services, MTN.GNS/W/94.

detailed sectoral studies. Data will need to be obtained from national and international sources. The Secretariat could possibly create and manage a data base with detailed information on individual sectors in collaboration with specialized agencies like the International Telecommunications Union and the International Civil Aviation Organization.

59. For most purposes, statistics on trade in services will need to be complemented by information on measures affecting trade. Such information would be needed to facilitate future negotiations, to monitor implementation of the GATS, and to assess the benefits of liberalization. While the subject of this paper are trade statistics, it may be useful to briefly note the importance of work on trade measures. No comprehensive data base exists anywhere on measures affecting trade in services in different countries.²⁵ Work has already begun in the Secretariat on creating a data base for the scheduled commitments. It may also be useful to obtain and compile information on measures which affect trade in services but are not contained in the schedules. Once the appropriate methodology has been developed concerning the quantification of such measures, further statistical analysis can be performed.

²⁵UNCTAD is in the process of trying to create a data base, but this will serve a descriptive rather than analytical function.

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ANNEX 1

Comparability of BOP Statistics

To illustrate the lack of comparability of BOP services series, an analysis of specific country deviations from IMF Guidelines in statistics provided in the IMF Balance of Payments Yearbook has been carried out by the Secretariat. The analysis covers deviations over the 1980-1993 period affecting credits, debits or both, in the following three aggregated service categories: *transport* (shipment, passenger services and other transportation), *travel* and *other private services* (other private services and property income).

The most common deviation for all service categories consists of the inclusion in *other private services* of *labour income*. This deviation was observed for 26 countries including three OECD countries (Canada, Germany and New Zealand). The total or partial inclusion of *official transactions* in *other private services* is the second most common deviation and is found in 19 countries including Australia, Italy, New Zealand, the United States, Switzerland and most Central and Eastern European countries. Deviations leading to an overestimation of *other private services* include the partial inclusion of *FDI income* and/or *transfers* particularly in Africa, but also for Finland, Greece, Sweden and Switzerland.

The most common deviation for *transport* and *travel* is the inclusion of passenger services transactions in the *travel* component. This deviation is found in OECD countries such as the United States, Germany, Canada, Norway, Ireland and Austria as well as in developing countries such as Ethiopia, Haiti, Hungary, Yugoslavia and Saudi Arabia. It is also common among countries to find one or many transport components entirely or partly included in *other private services*. This deviation applies to OECD countries such as Canada, Denmark, Finland, Greece, Italy, Portugal, Sweden and Switzerland as well as to developing economies such as Angola, Hungary, Poland, Saudi Arabia, Singapore, Sri Lanka and Zimbabwe. Another deviation leading to an overestimation of *travel* occurs through the inclusion of items such as *transfers* in Finland, Sweden, Peru and Zimbabwe.

At a more detailed level, the deviations from guidelines, which limit country comparability, are more serious.

ANNEX 2

List of data accessible through electronic media

1) BOP data (International transactions)

Service BOP data from IMF (monthly tapes). Series maintained in SISD Data Bases with adequate software. Data corresponding to the IMF BOP Yearbook.

Service BOP data from EUROSTAT (yearly). Series maintained in SISD Lotus files. Data corresponding to "International Trade in Services" publication of the EUROSTAT.

Service BOP data from OECD (yearly). Series maintained in SISD Lotus files. Data corresponding to "Services: Statistics on International Transactions" publication from OECD.

Service BOP WTO data, created and maintained in SISD Lotus files, available through the network. Corresponds to IMF data plus other sources for countries which does not report to the IMF, such as Chinese Taipei and Hong Kong.

2) National accounts data

Official data corresponding to the publication "National Accounts Statistics : Main Aggregates and Detailed Tables", UNSD .

Estimated data corresponding to the publication "National Accounts Statistics : Analysis of Main Aggregates", UNSD.

Data corresponding to publication "National Accounts, Detailed Tables", OECD.

3) FDI data

The Secretariat can process aggregated series on inflows and outflows from IMF, and has asked the OECD for the diskettes corresponding to International Direct Investment Statistics Yearbook.

ANNEX 3

Abbreviations and Definitions

BOP	. . . .	Balance of Payments
CPC	. . . .	Central Product Classification
Company	.	Any business or professional establishment, such as corporations, representative offices and branches
EU	. . . . .	European Union
EUROSTAT		Statistical Office of the European Communities
FAT	. . . .	Foreign Affiliates Trade
FDI	. . . .	Foreign Direct Investment
GATS	. . .	General Agreement on Trade in Services
ISIC	. . . .	International Standard Industrial Classification
SNA	. . . .	Sytem of National Accounts
Person	. . .	Natural or juridical persons, as referred to in the GATS
Products	.	Output of a process of production, whether a good or service
Production statistics		Refer to NA tables of production activity
NACE		Statistical Classification of Economic Activities in the European Community
SISD		Statistics and Information Systems Division of the WTO
UBO		Ultimate Beneficial Owner
WTO		World Trade Organization

Box A1: BOP statistics currently available from the IMF and Eurostat		
Internationally comparable aggregates derived from the IMF	Available components of BOP from IMF-4	Available components of BOP from Eurostat
Transport	Shipment ¹ Other Transportation Passenger services Port services, etc.	Sea freight, Air Freight Sea passenger, Air passenger Other Transportation
Travel	Travel	Travel
Other private goods, services & income	Labour income Property income Other private goods, services & income	Labour income Property income Transport insurance, Other insurance., Banking, Advertising, Business, Construction, Communication, Films-TV, Trade earnings, Other services and income
¹ Includes transport insurance in IMF, but not in Eurostat		

Box A2: BOP statistics available in the short-term from the IMF and OECD/Eurostat	
IMF-5 components	Additional components in new OECD/Eurostat classification
1. Transportation 1.1 Sea Transport 1.1.1 Passenger 1.1.2 Freight 1.1.3 Other 1.2 Air Transport 1.2.1 Passenger 1.2.2 Freight 1.2.3 Other 1.3 Other Transport. 1.3.1 Passenger 1.3.2 Freight 1.3.3 Other	1) space; 2) rail 3) road 4) internal waterway 5) pipeline 6) other ; with 2) to 4) further sub-divided into passenger, freight, other
2. Travel 2.1 Business 2.2 Personal 2.2.1* Health-related 2.2.2* Education-related 2.2.3* Other	1) expenditures by seasonal and border workers 2) other
3. Communication	1) postal and courier 2) telecommunication.

4. Construction	1) abroad 2) in the compiling economy
5. Insurance services	1) life and pension 2) freight 3) other direct insurance 4) reinsurance 5) auxiliary services
6. Financial services	
7. Computer and information services	1) computer 2) information
8. Royalties and licence fees	
9. Other business services 9.1 Merchanting & other trade rel. 9.2 Operational leasing 9.3 Misc. business, prof. and technical services 9.3.1* Legal, accounting, management consulting and public relations 9.3.2* Advertising, market research, and public opinion polling 9.3.3* Research and development 9.3.4* Architectural, engineering and other technical 9.3.5* Agricultural, mining and on-site processing 9.3.6* Other	1) merchanting 2) other trade related 1) legal 2) accounting, auditing, book-keeping and tax consulting 3) business & management consultancy and public relations 1) waste treatment and depollution 2) other 1) services between affiliated enterprises, n.i.e. 2) other
10. Personal, cultural and recreational 10.1 Audiovisual and related 10.2 Other	

Note: Services sectors denoted by an * are not standard components of the IMF BOP classification, but are included in selected supplementary information.

Box A3: Comparison of the GNS and IMF-5 BOP Classifications	
GNS Services Sectoral Classification List	IMF-5 BOP Standard components and selected supplementary information
1. BUSINESS SERVICES	(See footnote 1 below)
A. <u>Professional Services</u>	
a. Legal Services	9.3.1 Legal, accounting, management consulting, and public relations ²
b. Accounting, auditing and bookkeeping services	
c. Taxation Services	
d. Architectural services	9.3.4 Architectural, engineering and other technical services ²
e. Engineering services	
f. Integrated engineering services	
g. Urban planning and landscape architectural services	
h. Medical and dental services	
i. Veterinary services	
j. Services provided by midwives, nurses, physiotherapists and para-medical personnel	
k. Other	
B. <u>Computer and Related Services</u>	7. Computer and information services (Excluding: news agency services)
a. Consultancy services related to the installation of computer hardware	
b. Software implementation services	
c. Data processing services	
d. Data base services	
e. Other	
C. <u>Research and Development Services</u>	9.3.2 Research and development ²
a. R & D services on natural sciences	
b. R & D services on social sciences and humanities	
c. Interdisciplinary R & D services	
D. <u>Real Estate Services</u>	
a. Involving own or leased property	
b. On a fee or contract basis	
E. <u>Rental/Leasing Services without Operators</u>	9.2 Operational leasing services
a. Relating to ships	
b. Relating to aircraft	
c. Relating to other transport equipment	
d. Relating to other machinery and equipment	
e. Other	

Box A3: Comparison of the GNS and IMF-5 BOP Classifications			
F. <u>Other Business Services</u>			
a.	Advertising services	9.3.2	Advertising, market research, and public opinion polling ²
b.	Market research and public opinion polling services		
c.	Management consulting service		
d.	Services related to man. consulting		
e.	Technical testing and analysis services.		
f.	Services incidental to agriculture, hunting and forestry	9.3.5	Agricultural, mining and on-site processing ²
g.	Services incidental to fishing		
h.	Services incidental to mining		
i.	Services incidental to manufacturing		
j.	Services incidental to energy distribution		
k.	Placement and supply services of Personnel		
l.	Investigation and security		
m.	Related scientific and technical consulting services		
n.	Maintenance and repair of equipment (not including maritime vessels, aircraft or other transport equipment)		
o.	Building-cleaning services		
p.	Photographic services		
q.	Packaging services		
r.	Printing, publishing		
s.	Convention services		
t.	Other		
2.	COMMUNICATION SERVICES	3.	Communications services
A.	<u>Postal Services</u>		
B.	<u>Courier Services</u>		
C.	<u>Telecommunication Services</u>		
a.	Voice telephone services		
b.	Packet-switched data transmission services		
c.	Circuit-switched data transmission services		
d.	Telex services		
e.	Telegraph services		
f.	Facsimile services		
g.	Private leased circuit services		
h.	Electronic mail		
i.	Voice mail		
j.	On-line information and data base retrieval		
k.	Electronic data interchange (EDI)		
l.	Enhanced/value-added facsimile services, incl. store and forward, store and retrieve		
m.	Code and protocol conversion		
n.	On-line information and/or data processing (incl.transaction processing)		
o.	Other		

Box A3: Comparison of the GNS and IMF-5 BOP Classifications	
<p>D. <u>Audiovisual Services</u></p> <p>a. Motion picture and video tape production and distribution services</p> <p>b. Motion picture projection service</p> <p>c. Radio and television services</p> <p>d. Radio and television transmission services</p> <p>e. Sound recording</p> <p>f. Other</p> <p>E. <u>Other</u></p>	<p>10.1 Audiovisual and related services</p>
<p>3. CONSTRUCTION AND RELATED ENGINEERING SERVICES</p> <p>A. <u>General Construction Work for Buildings</u></p> <p>B. <u>General Construction Work for Civil Engineering</u></p> <p>C. <u>Installation and Assembly Work</u></p> <p>D. <u>Building Completion and Finishing Work</u></p> <p>E. <u>Other</u></p>	<p>4. Construction services</p>
<p>4. DISTRIBUTION SERVICES</p> <p>A. <u>Commission Agents' Services</u></p> <p>B. <u>Wholesale trade services</u></p> <p>C. <u>Retailing Services</u></p> <p>D. <u>Franchising</u></p> <p>E. <u>Other</u></p>	<p>9.1 Merchanting and other trade-related services</p> <p>8. Royalties and license fees³ (Part relating to: franchise fees)</p>
<p>5. EDUCATIONAL SERVICES</p> <p>A. <u>Primary Education Services</u></p> <p>B. <u>Secondary Education Services</u></p> <p>C. <u>Higher Education Services</u></p> <p>D. <u>Adult Education</u></p> <p>E. <u>Other Education Services</u></p>	<p>2.2.2 Education-related personal travel</p> <p>10.2 Other personal, cultural and recreational services (Part relating to: educational services)</p>

Box A3: Comparison of the GNS and IMF-5 BOP Classifications	
<p>6. ENVIRONMENTAL SERVICES</p> <p>A. <u>Sewage Services</u></p> <p>B. <u>Refuse Disposal Services</u></p> <p>C. <u>Sanitation and Similar Services</u></p> <p>D. <u>Other</u></p>	<p>9.3 Miscellaneous business, professional and technical services (Part relating to: waste treatment and depollution services)</p>
<p>7. FINANCIAL SERVICES</p> <p>A. <u>All Insurance and Insurance-related Services</u></p> <p>a. Life, accident and health insurance services</p> <p>b. Non-life insurance services</p> <p>c. Reinsurance and retrocession</p> <p>d. Services auxiliary to insurance (including broking and agency services)</p>	<p>5. Insurance services⁴</p>
<p>B. <u>Banking and Other Financial Services (excl. insurance)</u></p> <p>a. Acceptance of deposits and other repayable funds from the public</p> <p>b. Lending of all types, incl., inter alia, consumer credit, mortgage credit, factoring and financing of commercial transaction</p> <p>c. Financial leasing</p> <p>d. All payment and money transmission services</p> <p>e. Guarantees and commitments</p> <p>f. Trading for own account or for account of customers, whether on an exchange, in an over-the-counter market or otherwise, the following:</p> <ul style="list-style-type: none"> - money market instruments (cheques, bills, certificate of deposits, etc.) - foreign exchange - derivative products incl., but not limited to, futures and options - exchange rate and interest rate instruments, inclu. products such as swaps, forward rate agreements, etc. - transferable securities 	<p>6. Financial services</p>

Box A3: Comparison of the GNS and IMF-5 BOP Classifications		
	<ul style="list-style-type: none"> - other negotiable instruments and financial assets, incl. bullion g. Participation in issues of all kinds of securities, incl. under-writing and placement as agent (whether publicly or privately) and provision of service related to such issues h. Money broking i. Asset management, such as cash or portfolio management, all forms of collective investment management, pension fund management, custodial depository and trust services j. Settlement and clearing services for financial assets, incl. securities, derivative products, and other negotiable instruments k. Advisory and other auxiliary financial services on all the activities listed in Article 1B of MTN.TNC/W/50, incl. credit reference and analysis, investment and portfolio research and advice, advice on acquisitions and on corporate restructuring strategy l. Provision and transfer of financial information, and financial data processing and related software by providers of other financial services l. Provision and transfer of financial information, and financial data processing and related software by providers of other financial services 	
C.	<u>Other</u>	
8.	HEALTH RELATED AND SOCIAL SERVICES (other than those listed under 1.A.h-j.)	2.2.1 Health-related personal travel
A.	<u>Hospital Services</u>	10.2 Other personal, cultural and recreational services (Part relating to: health services)
B.	<u>Other Human Health Services</u> (other than 93191)	
C.	<u>Social Services</u>	
D.	<u>Other</u>	

Box A3: Comparison of the GNS and IMF-5 BOP Classifications	
<p>9. TOURISM AND TRAVEL RELATED SERVICES</p> <p>A. <u>Hotels and Restaurants (incl. catering)</u></p> <p>B. <u>Travel Agencies and Tour Operators Services</u></p> <p>C. <u>Tourist Guides Services</u></p> <p>D. <u>Other</u></p>	<p>2. TRAVEL⁵</p> <p>2.1 Business</p> <p>2.2 Personal</p> <p>2.2.2 Other than health-related and education related</p>
<p>10. RECREATIONAL, CULTURAL AND SPORTING SERVICES (other than audiovisual services)</p> <p>A. <u>Entertainment Services (including theatre, live bands and circus services)</u></p> <p>B. <u>News Agency Services</u></p> <p>C. <u>Libraries, Archives, Museums and Other Cultural Services</u></p> <p>D. <u>Sporting and Other Recreational Services</u></p> <p>E. <u>Other</u></p>	<p>10.2 Other personal, cultural and recreational services (Excluding: Health and education services rendered abroad)</p> <p>7. Computer and information services (Part relating to: News agency services)</p>
<p>11. TRANSPORT SERVICES</p> <p>A. <u>Maritime Transport Services</u></p> <p>a. Passenger transportation</p> <p>b. Freight transportation</p> <p>c. Rental of vessels with crew</p> <p>d. Maintenance and repair of vessels</p> <p>e. Pushing and towing services</p> <p>f. Supporting services for maritime transport</p>	<p>1. TRANSPORTATION^{6 and 7}</p> <p>1.1 Sea Transport</p> <p>1.1.1 Passenger</p> <p>1.1.2 Freight</p> <p>1.1.3 Other</p>
<p>B. <u>Internal Waterways Transport</u></p> <p>a. Passenger transportation</p> <p>b. Freight transportation</p> <p>c. Rental of vessels with crew</p> <p>d. Maintenance and repair of vessels</p> <p>e. Pushing and towing services</p> <p>f. Supporting services for internal waterway transport</p>	
<p>C. <u>Air Transport Services</u></p> <p>a. Passenger transportation</p> <p>b. Freight transportation</p> <p>c. Rental of aircraft with crew</p> <p>d. Maintenance and repair of aircraft</p> <p>e. Supporting services for air transport</p>	<p>1.2 Air transport</p> <p>1.2.1 Passenger</p> <p>1.2.2 Freight</p> <p>1.2.3 Other</p>

Box A3: Comparison of the GNS and IMF-5 BOP Classifications	
<p>D. <u>Space Transport</u></p> <p>E. <u>Rail Transport Services</u></p> <ul style="list-style-type: none"> a. Passenger transportation b. Freight transportation c. Pushing and towing services d. Maintenance and repair of rail transport equipment e. Supporting services for rail transport services 	
<p>F. <u>Road Transport Services</u></p> <ul style="list-style-type: none"> a. Passenger transportation b. Freight transportation c. Rental of commercial vehicles with operator d. Maintenance and repair of road transport equipment e. Supporting services for road transport services <p>G. <u>Pipeline Transport</u></p> <ul style="list-style-type: none"> a. Transportation of fuels b. Transportation of other goods <p>H. <u>Services auxiliary to all modes of transport</u></p> <ul style="list-style-type: none"> a. Cargo-handling services b. Storage and warehouse services c. Freight transport agency services d. Other <p>I. <u>Other Transport Services</u></p>	
12. OTHER SERVICES NOT INCLUDED ELSEWHERE	

Notes:

1. *Business services* not explicitly mentioned are included in the IMF BOP classification under *other miscellaneous business, professional and technical services*.
2. Not a standard component of the IMF BOP classification but included in selected supplementary information.
3. According to IMF-5, "Inclusion of royalties and license fees under *services*, rather than under *income*, is in accordance with the SNA treatment of such items as payments for production of services for intermediate consumption or receipts from sales of output used as intermediate inputs." In the GNS sectoral list, *distribution services* include *franchising* but no other sector explicitly includes sub-sectors or activities related to *royalties or license fees*.
4. In the IMF BOP classification, *insurance services* are included separately and not as a subdivision of *financial services* as in the GNS classification.
5. *Travel* may include expenditure by travellers on goods and services other than *tourism and travel related services*.
6. *Transport services* not explicitly mentioned are included in the IMF BOP classification under *other transport*.
7. In the IMF BOP classification, *maintenance and repair of transport equipment* are included in merchandise trade.