

# Research on the Development of International Trade in Services Statistical System

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This article focuses on the development of the international service trade statistics system. The 1994 General Agreement on Trade in Services (GATS) provided a institutional basis for service trade statistics. The 2002 “International Service Trade Statistics Manual” (MSITS 2002) established the international balance of payments statistics paradigm. The revised MSITS 2010 in 2010 introduced the expanded balance of payments service classification (EBOPS 2010), incorporating foreign affiliate service trade statistics (FATS), and constructing a comprehensive statistics system. The update of MSITS 2010 originated from changes in the global economic environment, technological progress leading to diversified forms of service trade, and the demands of international service trade negotiations. This standard has constructed a multi-level classification system. Since the release of MSITS 2010, many countries have implemented the new statistical framework, but some developing countries face challenges. International organizations and developed countries have provided corresponding support for service trade statistics standards.

*Keywords:* international service trade, statistical system, MSITS 2010

## Developmental Context of the Connotation

The connotation of trade in services has undergone a significant evolution from traditional to modern, and from narrow to broad. Early international trade statistics primarily focused on goods trade, while trade in services was regarded as ancillary or secondary, with its statistical system lagging behind the development of actual economic activities for a long time. By the end of the 20th century, with the acceleration of globalization and breakthroughs in information technology, the specific gravity of service activities in the international economy rose rapidly, and the statistical importance of trade in services became increasingly prominent. The signing of the General Agreement on Trade in Services (GATS) in 1994 marked the first systematic regulation of trade in services under a multilateral framework by the international community, providing an institutional foundation for the statistics of trade in services.

The General Agreement on Trade in Services defines trade in services as: (1) The supply of a service from the territory of one (WTO) member into the territory of any other member; (2) The supply of a service in the territory of one (WTO) member to the service consumer of any other member; (3) The supply of a service by a

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service supplier of one (WTO) member, through commercial presence in the territory of any other member; (4) The supply of a service by a service supplier of one (WTO) member, through the presence of natural homo sapiens of a member in the territory of any other member.<sup>1</sup>

Thereafter, the United Nations Statistical Commission, in collaboration with seven major international organizations including the International Monetary Fund (IMF), the Organisation for Economic Co-operation and Development (OECD), Eurostat, the United Nations Conference on Trade and Development (UNCTAD), the World Tourism Organization (UNWTO), and the World Trade Organization (WTO), jointly promoted the standardization of trade in services statistics. In 2002, they published the *Manual on Statistics of International Trade in Services (MSITS 2002)*, which for the first time systematically proposed a statistical framework for transactions between residents and non-residents, establishing a balance-of-payments-based statistical paradigm.

With changes in the global economic environment and technological advancements, particularly the rapid development of information technology and the internet, the forms and scale of trade in services underwent significant transformations, revealing limitations in the original statistical framework. To address this, the United Nations Statistical Commission, together with the IMF, OECD, Eurostat, UNCTAD, UNWTO, and WTO, revised the MSITS between 2006 and 2010. On February 26, 2010, the revised *Manual on Statistics of International Trade in Services 2010 (MSITS 2010)* was officially adopted at the 41st session of the United Nations Statistical Commission in New York. MSITS 2010 not only updated the definitions and classifications of trade in services but also introduced a more detailed statistical classification system—the *Extended Balance of Payments Services Classification (EBOPS 2010)*—to better reflect the diversity and complexity of trade in services.

The 2010 revised edition of the *Manual on Statistics of International Trade in Services (MSITS 2010)* further expanded the statistical scope of trade in services by incorporating elements from the *System of National Accounts 2008 (SNA 2008)*, the *Balance of Payments and International Investment Position Manual, Sixth Edition (BPM6)*, the *International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC Rev.4)*, and the *Central Product Classification, Version 2 (CPC Ver.2)*. It explicitly included *Foreign Affiliates Trade in Services (FATS)* statistics, thereby establishing a comprehensive statistical system for “international supply of services” covering four core channels: cross-border transactions, consumption abroad, commercial presence, and the movement of natural persons.

### **Service Classification Expansion**

The motivations for updating MSITS 2010 primarily stemmed from three aspects: first, changes in the global economic environment; second, the diversification of trade in services driven by technological advancements; and third, the needs of international trade in services negotiations.

The classification system for trade in services continues to expand and refine alongside the increasing complexity of economic structures. Early classifications were relatively broad and failed to meet the needs of policy analysis and market research. The MSITS 2010 established a multi-tiered classification system to address statistical requirements at different levels. At its core is EBOPS 2010, which significantly expanded upon the 12 major categories of BPM6 by adding two new categories: “manufacturing services on physical inputs owned by

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<sup>1</sup> *Manual on Statistics of International Trade in Services 2010*, pp. 14-16.

others” and “maintenance and other services,” while relocating “entrepot trade” from the original “other business services” category to better align with modern economic activities. EBOPS 2010 comprises 56 subcategories, offering a more detailed statistical framework than BPM6 for in-depth analysis of trade conditions in specific service sectors.

To align service trade statistics with other economic statistics, MSITS 2010 emphasizes activity-based classification standards. It recommends using the International Standard Industrial Classification of All Economic Activities, Revision 4 (ISIC, Rev.4) as the classification basis for FATS data and specifically developed the International Classification of Foreign Affiliates’ Service Activities (ICFA, Rev.1), which consolidates and refines service-related divisions (G-S) within ISIC. This dual-track “industry-product” classification method enables statistical agencies to analyze the overall activities of foreign affiliates by industry while also comparing specific service products with cross-border trade data. For example, cross-border transaction volumes in communication services (EBOPS 7) can be compared with sales of foreign affiliates in telecommunications enterprises (ISIC 61) to comprehensively assess a country’s international competitiveness in this field.

### **Definition of Statistical Scope**

#### **Principle of Boundary Determination**

The definition of the statistical scope of international trade in services primarily relies on clear boundary determination principles, which are mainly based on the resident and non-resident transaction framework established in the “Statistical Manual of International Trade in Services 2010” (MSITS 2010) and the “Balance of Payments and International Investment Positions Manual, Sixth Edition” (BPM6). According to BPM6 (International Monetary Fund, 2019), the statistical scope of international trade in services covers all service transactions occurring between residents and non-residents, including four models: cross-border transactions, overseas consumption, commercial presence, and the movement of natural persons. The definition of residents follows the principle of economic ownership, that is, a unit has a central economic interest in a certain economy, regardless of its legal place of registration or nationality. For instance, a company registered in the United States but operating in Japan for a long time, if its main economic activities and decision-making centers are located in Japan, should be regarded as a resident unit of Japan. This “economic center” principle ensures the consistency of statistical standards and avoids duplicate or omitted statistics due to differences in legal registration locations or sources of capital.

The MSITS 2010 emphasizes that the statistics of trade in services must strictly distinguish services from goods. Although in reality the two are often intertwined, such as the service fees for installation and maintenance included in the export of goods, according to the “change of economic ownership” principle of SNA 2008 and BPM6, only when the provision of services is separated from the physical movement of goods should it be recorded separately as a service transaction. For instance, in a case of industrial equipment imported from Germany, the customs value includes freight and insurance fees. These fees should be separated from the goods trade in the balance of payments and classified under “transport” and “insurance services”. The application of this principle requires close collaboration between customs and statistical departments of various countries to ensure accurate data separation. The United Nations Statistics Division (UNSD) further detailed the handling methods for such mixed transactions in the “International Merchandise Trade Statistics Guide” released in 2020, providing operational guidance for countries’ practices (Department of Economic and Social Affairs Statistics Division, 2020).

### **Cross-border Service Scope**

Cross-border services (Mode 1 of GATS) is the most intuitive form of service trade in the traditional sense. It refers to the situation where the provider and the consumer of services are located in different countries, and the services are delivered across borders through electronic or physical means. According to the “Extended International Balance of Payments Service Classification” (EBOPS 2010) of MSITS 2010, cross-border services cover a wide range, including telecommunications, computer and information services, financial services, intellectual property usage fees, and some professional and technical services. For example, a British company provides software subscription services to Australian customers via the Internet, and this transaction is recorded as “computer information services” exported from the UK to Australia. With the rise of the digital economy, the scale of such transactions has grown rapidly.

However, the statistics of cross-border services face many challenges. First, the intangibility of services leads to the lack of customs documents similar to those in goods trade as a data source. Mainly, it relies on enterprise sample surveys and administrative records, with limited data coverage and timeliness. Second, the definition of “electronic delivery” is ambiguous. For example, cloud services and streaming media content, the determination of the consumption location often relies on technical means such as IP addresses, which may lead to errors.

### **Overseas Consumption Covered**

Overseas consumption (GATS Mode 2) refers to the situation where service consumers temporarily move to the country where the service provider is located in order to obtain services. The core of this mode is “cross-border movement of consumers”, and the most typical example is tourism. According to MSITS 2010, service expenditures related to tourism are uniformly classified under the “travel” account, including accommodation, dining, transportation, entertainment, and medical expenses of individuals in the destination country. For instance, the hotel accommodation and shopping expenses of a Chinese tourist during their trip in Japan are considered as “travel” services imported by Japan. The World Tourism Organization (UNWTO) released the “2008 International Tourism Statistics Recommendations” (IRTS 2008), providing a detailed framework for tourism statistics, which is highly coordinated with the “travel” classification in MSITS 2010 and ensures the comparability of data.<sup>2</sup>

It is worth noting that not all residents’ consumption abroad falls under the category of service trade. According to BPM6 (International Monetary Fund, 2019), the purchase of real estate by residents abroad is classified as a capital transaction, while the purchase of physical goods (such as luxury items) for personal consumption and not for commercial purposes is included in “goods trade”. This distinction is crucial to avoid duplication with commodity trade statistics. The MSITS 2010 specifically states that the consumption of students studying abroad and medical patients should also be included in the “travel” category, as their main purpose is to obtain education or medical services.<sup>3</sup>

### **Mobility of Natural Persons**

Natural person mobility (Mode 4 of GATS) refers to the situation where a service provider temporarily enters another country’s territory as a natural person to provide services. This includes two scenarios: one is when

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<sup>2</sup> Manual on Statistics of International Trade in Services 2010, pp. 18-19.

<sup>3</sup> Manual on Statistics of International Trade in Services 2010, p. 53.

an independent service provider (such as a self-employed architect or consultant) directly goes abroad to provide services; the other is when an employee of a service enterprise is dispatched abroad to carry out tasks (such as IT experts providing technical support for overseas projects). MSITS 2010 emphasizes that the focus of statistics is on “cross-border provision of services”, rather than the immigration status of individuals. Therefore, short-term business trips, contract fulfillment, etc., are regarded as typical activities of Mode 4, while long-term immigration for employment falls within the scope of the labor market and is not directly included in the statistics of service trade.<sup>4</sup>

The statistics of this model are particularly complex, with the main difficulty lying in the dispersion of data sources. It relies on various channels such as immigration and exit-entry management, visa records, enterprise dispatch reports, and labor force surveys. For instance, the United Nations’ “International Migration Statistical Recommendations” (RSIM, Rev.1) provides classification criteria (usually based on one year as the boundary) to distinguish short-term business travelers from long-term immigrants, providing a reference for national statistical practices. Although there is currently no unified global data, the OECD and WTO are promoting the establishment of a more systematic framework, aiming to incorporate the activities of Model 4 more accurately into the macro-statistical system of service trade.

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<sup>4</sup> Manual on Statistics of International Trade in Services 2010, pp. 124-125.