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Compilation Guidance Note on Digital Intermediation Platforms

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Compilation Guidance Note on Digital Intermediation Platforms[1]

The System of National Accounts 2025 (2025 SNA) *and the* Integrated Balance of Payments and International Investment Position Manual, seventh edition (BPM7) *provide guidance on the classification of digital intermediation platforms (DIPs) and the recording of their services in national accounts and external sector statistics. Nevertheless, several compilation challenges remain in comprehensively measuring their output, exports, and imports due to the complexity of their operational models. This compilation guidance note (Note) offers detailed recommendations on data sources and estimation methods for measuring the services of DIPs (see Section IV). In addition, the Note clarifies the recording of specific transactions involving DIPs, including explicit and implicit fees; DIP transactions recorded under travel services; transactions involving four actors; the recording of items other than intermediation fees; employee-type arrangements; cases of negative fees; and situations where households provide accommodation or ride-hailing/rental services through DIPs (see Section IV). The note also provides guidance on the compilation of price and volume measures for DIPs (see Box 1). To support data collection efforts, model survey questionnaires are included in the appendices. BOPCOM and AEG members are invited to provide feedback on the compilation guidance and the issues presented for clarification.*

I. INTRODUCTION

1. The proliferation of digital intermediation platforms (DIPs) such as Uber, Airbnb, Grab, Zomato, Ola, DiDi, and Bolt has fundamentally reshaped economies and consumer behavior worldwide. While intermediation has always existed to connect buyers and sellers, the advent of the internet and mobile technology has enabled these platforms to scale at an unprecedented pace. By leveraging network effects—where the value of a service increases as more people join—these platforms create multi-sided markets that deliver efficiency, convenience, and a wide array of choices. Their reach now extends rapidly across both advanced and emerging economies, embedding themselves in everyday activities such as transport, accommodation, food delivery, and a wide spectrum of life-services.

2. Over the past decade, DIPs have expanded rapidly in scale, users, and geographic reach, generating billions in revenues and fundamentally reshaping global service markets. In the United States alone, rideshare, accommodation, and food delivery platforms contributed at least $31 billion in gross revenue in 2021. At the firm level, Airbnb illustrates this dramatic growth with over 8 million listings across 220 countries serving more than 200 million users worldwide, while Uber has scaled to operations in 70 countries with more than 180 million monthly active users. Comparable trends are evident across other regions, where platforms such as Grab, DiDi, Zomato, Ola, and Bolt have attracted tens to hundreds of millions of users, underscoring both the global and cross-border nature of this transformation as consumers and providers increasingly transact across national boundaries. With worldwide users of these platforms expected to climb further, the statistical challenges posed by these businesses are only set to intensify. **Appendix I** provides a selected list of nonfinancial DIPs. Against this backdrop, this note

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provides compilation guidance in measuring the activities of these platforms in national accounts and external sector statistics following the *BPM7* and the *2025 SNA*.

II. DIGITAL INTERMEDIATION PLATFORMS IN THE *BPM7/2025 SNA*

3. Digital platforms—also known as online platforms—supply a digital service that facilitates interactions between two or more distinct but interdependent sets of users, who interact through the service via the internet. Digital (or online) platforms differ from suppliers of e-commerce margin services (or e-tailers) because they do not take possession of the goods sold on the platform.

4. Some digital platforms are free, while other fee-based platforms facilitate financial transactions or interactions that do not involve a transaction. There are four types of digital platforms.

a) **Nonfinancial digital intermediation platforms** facilitate transactions between multiple buyers and multiple sellers for the ordering and delivery of goods, nonproduced nonfinancial assets and services for a fee or commission without taking ownership of the goods or nonproduced nonfinancial assets or rendering the services, that are being sold (intermediated).

b) **Free online platforms** facilitate noncommercial interactions between users or provide entertainment and information services and are usually funded by advertising and the collection of data on their users.

c) **Financial digital platforms** intermediate funding or payment transactions for a fee.

d) **Other fee-based digital platforms** facilitate interactions between users other than transactions in goods, nonproduced nonfinancial assets and services or financial transactions. Online dating and matrimonial platforms are examples.

5. This paper focuses on categories (a) and (c), which are digital intermediation platforms (DIPs).

6. Nonfinancial digital intermediation services (i.e., services provided by the nonfinancial DIPs) are recorded under nonfinancial intermediation services in *BPM7* (trade-related services in *BPM6*).[2]

7. In Central Product Classification version 3.0 (CPC Ver.3.0), all nonfinancial intermediation services are consolidated under Division 85 “Support services” in four new Groups. Extended Balance of Payments Services (EBOPS) 2026 classification (draft) recommends five sub-categories of nonfinancial intermediation services, including those provided by nonfinancial DIPs (**see Table 1**).

[2] Nonfinancial intermediation services is a first-level standard component of services account in *BPM7.*

Table 1. Nonfinancial Intermediation Services: CPC 3.0 and EBOPS 2026

CPC 3.0	EBOPS 2026
• Group 855 – Intermediation services on goods • Group 856 – Intermediation services for accommodation, food and beverage, transport and electricity, gas and water distribution services • Group 857 – Intermediation for community, social and personal services • Group 858 – Other intermediation services	• Intermediation services for goods • Intermediation services for transport services • Intermediation services for accommodation services • Intermediation services for food and beverage services • Other nonfinancial intermediation services

A. FINANCIAL DIGITAL PLATFORMS AND THEIR SERVICES

8. Financial digital platforms are classified into four main categories:

i) Peer-to-peer and other online lending based crowdfunding platforms

ii) Equity-based crowdfunding platforms,

iii) Philanthropic (or donation-based) crowdfunding platforms, and

iv) Reward-based crowdfunding, in which the donors to a project expect to receive a nonfinancial reward such as a good or service.

Brokerage on financial instruments and fees related to financial digital platforms that intermediate funding or payment transactions are excluded from nonfinancial intermediation services and included in financial services.

B. OUTPUT OF DIGITAL INTERMEDIATION PLATFORM AND CONSUMPTION

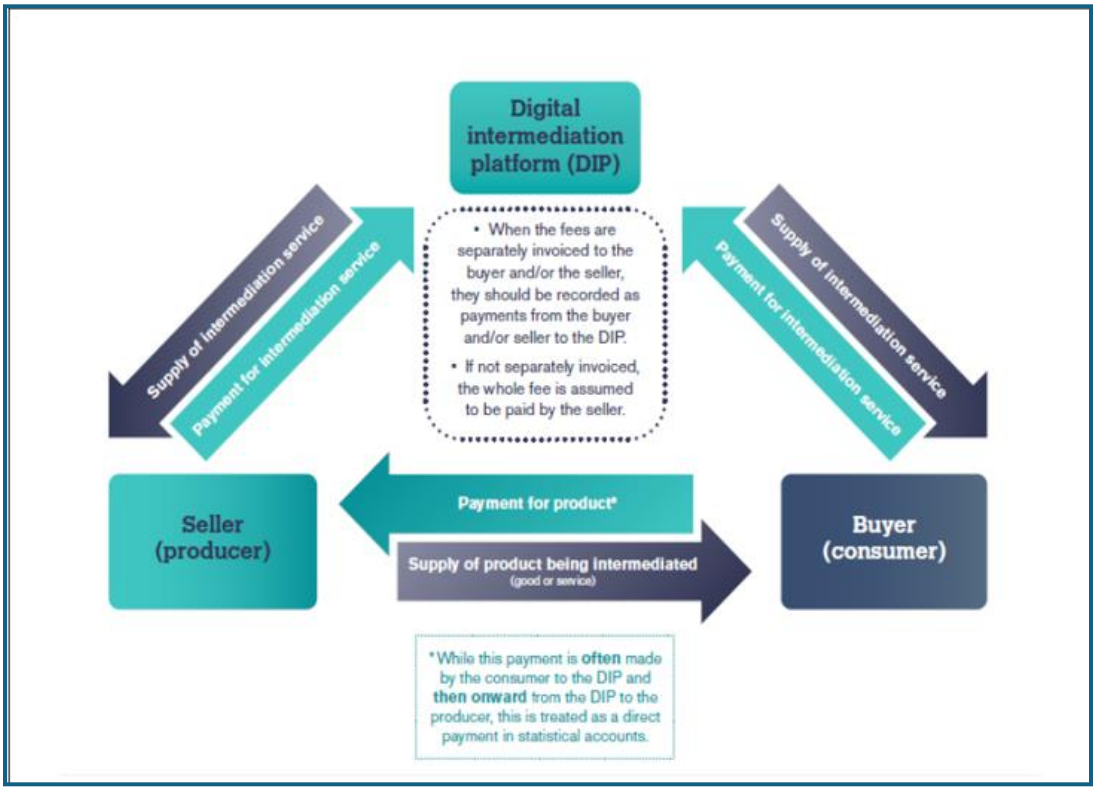
9. The output of a digital intermediation platform (nonfinancial and financial) consists of digital intermediation services, which may be charged via an explicit or an implicit fee.

- The possible consumption of the platform's services by the users on the two sides of the platform is shown on the sides of the triangle in **Figure 1**.
  - ➢ The seller/producer and the buyer/consumer both consume intermediation services in the case where they are separately invoiced for the services supplied by the platform.
  - ➢ In the case where all fees for the platform's services are invoiced to the seller/producer, only the seller/producer is recorded as consuming the intermediation services, and similarly, only the buyer is recorded as consuming the intermediation services in the case where all fees for the platform's services are invoiced to the buyer.

10. When at least one of the actors in **Figure 1** is resident in a different economy than the others, the relevant transactions must be recorded in the external accounts. Therefore, guidance on the data sources and estimation methods for compiling exports and imports of digital intermediation services is relevant for

external sector statistics. For national accounts, compilation guidance focuses on the source data and estimation methods for compiling the output of DIPs and its use.

Figure 1. The Possible Types of Transactions of a Digital Intermediation Platform



Source: *Handbook on Measuring Digital Trade*, second edition and *BPM7/2025 SNA*

C. DEPENDENT CONTRACTORS—FORMAL VS INFORMAL

11. Digitalization facilitates household participation in production activities facilitated by DIPs (such as the provision of accommodation, car rental) that can be informal. Households that receive monetary remuneration for providing goods/services facilitated by DIPs are considered unincorporated household enterprises. If the household is not recognized by government authorities as a distinct market producer and thus is not covered by formal arrangements, then it is regarded as an informal enterprise.

12. For multinational enterprise groups that operate digital platforms in a number of countries, the formal/informal status of the dependent contractors may vary from country to country depending on the legal arrangements in each country. If dependent contractors are registered, participate in social insurance schemes or are regulated by the government in ways that facilitate their work or protect them as workers, they are classified as formal workers. If the government does not require formal economic units to register or provide formal regulations or protections to the dependent contractors with whom they work, then the dependent contractors will be informal workers.

Box 1. Price and Volume Measures of DIPs

ISIC Rev.5 creates new classes for intermediation services within relevant sectors. For example, Section I (Accommodation and food service activities) includes class 5540, Intermediation services for accommodation, and class 5640, Intermediation service activities for food and beverage activities. Similar intermediation activities are included in sections for Retail trade, Transportation, and Rental and leasing, among others. Since these intermediaries do not provide the underlying service or take ownership of goods that are transacted, their nominal output is recorded on a net basis reflecting only the fees and commissions retained by the DIP and not the amounts distributed to the underlying sellers. Intermediaries may also receive some advertising revenues.

Volume measures are ideally obtained by deflating the nominal values of intermediation fee and advertising revenue by separate constant-quality producer price indices (PPIs). For commissions that are set as a percentage of the value of the underlying service, the price index should reflect changes in both the percentage charged and the prices of the underlying services for constant-quality transactions.

Consider the following example of a country with a single accommodation intermediary that earns all of its fees from commissions. This DIP charges a fee of 10% of the value of accommodation. In year 1 the DIP intermediates 100,000 hotel night stays, each with an average value of $100 per night. Their nominal output = 100,000 * $100 * 10% or $1,000,000. In year 2 the DIP again intermediates 100,000 hotel night stays at the same properties under the same conditions and still charges a 10% fee on each transaction. In year 2, however, the average hotel nightly stay is $150. Their nominal output is now 100,000 * $150 * 10% or $1,500,000.

If the PPI were to consider only the percentage fee as the price, the index would not change and the full increase in output would be reflected as a volume change. If the PPI were to consider both the percentage fee and the price of the underlying service the index would rise 50% and volumes would be unchanged. Since the DIP is still intermediating the same number of room nights at the same properties, this result is more consistent with measurement principles.

Since it may be difficult for the DIPs to provide accurate updated prices for the exact same underlying service in each period, an alternative approach would be to collect only the percentage fee from the DIP and then apply it to a nominal value that is adjusted by the changes in a PPI for the underlying service, such as the PPI for accommodation services.

III. OPERATIONAL MODELS OF DIGITAL INTERMEDIATION PLATFORMS AND TREATMENT OF SPECIFIC TRANSACTIONS

A. OPERATIONAL MODELS OF DIPS

13. Three main operational models of Digital Intermediation Platforms (DIPs) can be distinguished: (i) multinational operations with subsidiaries or affiliates in the countries or regions where they are active; (ii) multinational operations with centralized headquarters and only liaison or representative offices in the countries or regions where they are active; and (iii) single-country operations.

Model 1. Multinational with Subsidiaries

14. In this model, the DIP maintains its headquarters in one country but establishes resident subsidiaries or affiliates in the markets or regions where it operates. Well-known examples include Airbnb and Uber. Each subsidiary typically contracts directly with local service providers and customers or with service providers and customers in a set of countries.[3] These subsidiaries report revenues and costs within their economies, making them visible in local business registers and surveys. From a statistical perspective, this model is easier to capture because the local unit can be surveyed directly. The cross-border transactions—such as payments to the headquarters or to other subsidiaries for specific operations, intermediation services provided to nonresidents—are recorded in the balance-of-payments statistics of the countries involved.

Model 2. Centralized Headquarters with Liaison or Marketing Offices

15. In this structure, the DIP maintains its headquarters in a single country and operates in countries or regions through liaison, marketing, or sales offices. Examples include Preply (educational services DIP) and GetYourGuide (travel services related DIP). All contractual, financial, and intermediation activities are centralized at headquarters. Local offices are not legally responsible for contracting with the service providers/customers. For compilers, this model presents challenges because platform fees are recorded abroad even when services are consumed domestically. As a result, alternative compilation methods—such as targeted surveys, the use of payment data, or bilateral data exchanges—are needed to capture the full scale of domestic consumption facilitated by these platforms. Countries from Model 1, with no subsidiary/affiliate in their country, are also included here as the operations in their country are controlled by a subsidiary located in a nearby country.

Model 3. Single-Country Operations

16. A third model consists of platforms that operate only within a single country, without any foreign branches, affiliates, or liaison offices. Examples include Ola Cabs in India and Foodsi in Poland. These DIPs are often smaller in scale and cater exclusively to the domestic market. In such cases, all contractual and financial relationships occur between residents, meaning revenues and costs are entirely domestic. From a statistical perspective, this model is the most straightforward to capture, since all activity is contained within the country's production and consumption accounts. Digital intermediation services provided to non-residents during their visits to the country of DIP are recorded in the balance of payments as exports to the country of the traveler.

17. While nonfinancial DIPs could be organized into any of the above three categories, most financial digital platforms (e.g., GoFundMe) appear to be organized according to Models 2 or 3. Further, in all these cases, these entities could be solely responsible for production of intermediation services, or they could be hybrid.

[3] Establishment of subsidiaries in certain cases is subject to the regulatory requirements in that country.

B. TREATMENT OF GLOBAL TECHNOLOGY/SUPPORT CENTERS IN THE CONTEXT OF DIPS

18. In some cases, multinational DIPs (such as Airbnb, Uber) operate global or regional technology centers in countries different from their headquarters. These centers typically provide functions such as software development, data management, customer support, and IT infrastructure. While these activities are integral to the functioning of the platform, they do not constitute the provision of intermediation services themselves. **Following the *2025 SNA/BPM7* principles, the production of intermediation services should be attributed to the institutional unit that contracts service providers and customers and assumes the associated economic risks.** In most cases, this is the headquarters or the subsidiary legally responsible for the intermediation activity in each operating country. Technology or support centers should instead be recorded as producers of IT services/back-office services, depending on the nature of the transactions and contractual arrangements.

Box 2. DIPs, Aggregators, and Hybrid Platforms

Digital intermediation platforms (DIPs) provide the infrastructure for transactions between service providers and customers. They typically handle bookings or payments and retain a commission or service fee. Their output in BOP/national accounts is the intermediation service, not the full value of the good or service exchanged. Examples include Airbnb, Uber, and Etsy.

By contrast, aggregators and meta-search engines (such as Google Flights, Skyscanner, Trivago, Kayak, Uber car Rentals, CottagesInCanada) primarily provide information services by allowing users to compare prices and options across multiple providers. They generally redirect customers to another platform or provider to complete the transaction. Their revenues typically derive from advertising fees, listing subscriptions, referral fees, or click-through charges, rather than transaction-based commissions. From a statistical perspective, these activities fall under information and advertising services, not intermediation.

A growing number of hybrid platforms combine both functions. For instance, TripAdvisor started as a review and aggregator site but now allows direct booking of hotels and tours, earning both advertising revenue and intermediation fees. Similarly, Booking.com operates both as a DIP (charging commissions on bookings) and as an advertiser for hotels through sponsored listings. For compilers, hybrids pose special challenges: revenue streams should ideally be split by function (e.g., intermediation and advertising) since they map to different service categories in BOP/national accounts. Without careful separation, there is a risk of misclassifying intermediation fees as advertising services or vice versa.

C. CLARIFICATION ON THE RECORDING OF SPECIFIC TRANSACTIONS INVOLVING DIPS

C.1. Explicit and Implicit Intermediation Fee

19. **Figure 1** provides guidance on the recording of intermediation fees, whether these are invoiced separately to the buyer and/or seller, or otherwise.[4] It is necessary to properly identify and attribute the intermediation fees. When the intermediation fees are separately invoiced (explicit), it could be correctly recorded against buyer and/or seller. However, when the fees are not separately invoiced (implicit), two scenarios are envisaged: (a) the amount is not known, but it is known who pays the fees; and (b) the amount is not known and who pays the fees also not known. **Table 2** provides guidance on the recording under these scenarios.

Table 2. Recording of Explicit vs Implicit Intermediation Fees

Description	Type	Recording
The fees are separately invoiced to the buyer and/or seller	Explicit	Record the fees as paid from buyer and/or seller to DIP, according to the invoice
The fees are not separately invoiced (to the buyer and/or seller)		
The amount is not known, but it is known who pays the fees	Implicit	Estimate the fees paid from buyer and/or seller and record it as paid to DIP
The amount is not known and who pays the fees also not known	Implicit	Estimate the total fees paid and record it as paid by the seller to DIP

Source: Table 5.1, *Handbook on Measuring Digital Trade, Second Edition*

20. Estimating the implicit service fee may not be straightforward. National compilers should approximate such fees using assumptions based on applicable benchmarks and the practices observed for different types of DIPs operating in the economy. For example, platforms such as Airbnb and Uber provide information on the intermediation fee they typically charge sellers and buyers in various countries of operation.[5] The following examples in **Box 3** illustrate the estimation of implicit fees under the two scenarios shown in **Table 2.**

[4] Fees can be paid by the buyer and/or seller to the DIP at the time of the transaction, at an earlier or later time. The transaction should be recorded in all cases on an accrual basis. As mentioned in GN DZ.9 (Incorporating Digital Intermediation Platforms into the System of National Accounts), conceptually this is no different to the treatment of other pre-payments that exist in the economy, due to the increasing use of DIPs, compilers should be cognizant of this issue.

[5] In the USA, Airbnb charges sellers a three percent transaction fee on the value of the lodging fees (including any cleaning, pet, extra guest charges, etc.) and buyers a fee of approximately 14 percent on the value of the stay. The fee varies a bit based on the price and length of stay.

Box 3. Examples on the Estimation of Implicit Fee

Example 1. The amount is not known, but it is known who pays the fees

A Canadian resident books a vacation rental in Cancún, Mexico for $700 using a digital platform (which is headquartered in the USA). The amount includes an implicit service fee charged to the traveler. The platform pays $600 to the host after deducting an implicit service fee charged to the host.

The following entries are recorded in the balance of payments current account of Canada:

Current account		-700
	Credit/Revenue	Debit/Expenditure
Services		
Travel (rental to Mexico)		630
Nonfinancial intermediation (implicit fee from traveler—to USA)		70

The following assumptions are made for fee estimation

- Service fee paid by traveler: 10% of total booking value ($700 × 10%) = $70.
- Service fee paid by host: out of $700 received from the traveler, $70 is attributed to the service fee paid by traveler. As $600 paid to host after deducting the implicit service fee, host should be considered as receiving $630 as rental (i.e., for the provision of accommodation services) and paying an implicit fee of $30.

Payment of $30 service fee by the Mexican host to the US digital intermediation platform is recorded as an import of nonfinancial intermediation service (debit/expenditure) in the Mexican BOP and export (credit/revenue) in the USA's BOP.

Example 2. The amount is not known and who pays the fees is also not known

A Canadian resident books a vacation rental in New York City, USA, through a digital intermediation platform (headquartered in the USA) for $600. The platform mentions no further details including who pays the fees (seller and/or buyer).

The following entries are recorded in the balance of payments current account of Canada:

Current account		-600
	Credit/Revenue	Debit/Expenditure
Services		
Travel (rental to USA)		600

The following assumptions are made for fee estimation

- In the absence of information on who pays the fees, it is assumed that the fee is entirely paid by the seller (i.e., host) to the DIP.

- It is assumed that the host pays 12% of booking value as service fee to the platform (600x12%) = $72. As this payment from host to platform is a resident-resident transaction, it is not recorded in the balance of payments.

As $600 paid by the traveler is recorded as import of travel services for Canada, host should be considered as receiving $600 as rental (i.e., for the provision of accommodation services) and paying an implicit fee of $72 to the platform—leaving $528 to the host.

21. **Appendix II provides** a table on the recording of transactions involving DIPs and additional numerical examples to elaborate these recordings under the three scenarios in **Table 2**.

C.2. Recording of DIP Transactions Under Travel Services

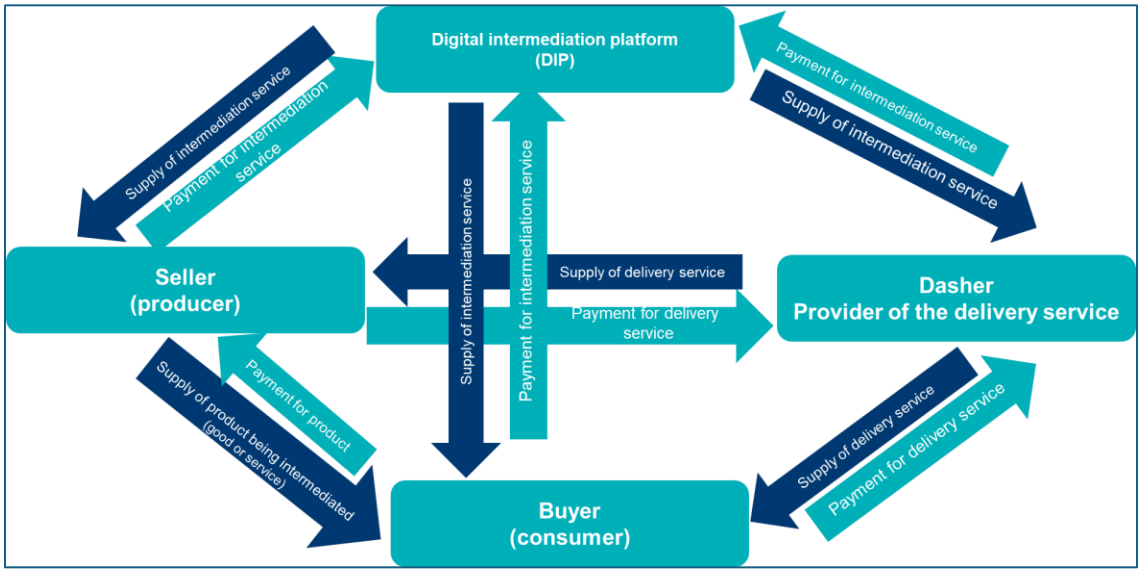
22. Residents may acquire goods and services during their visits to other economies through DIPs that may be resident in the economy they are visiting, in another economy, or in their own economy.

- If the DIP is resident in the economy being visited, the digital intermediation services should be included under travel debits/expenditure of the resident economy, as both the underlying goods and services and the associated intermediation services form part of travel. In addition, any taxes on goods and services acquired should also be included under travel. See example 1, Appendix II and Box 4 for additional information.
- If the DIP is resident in a third economy (i.e., neither the traveler's own economy nor the economy being visited), the digital intermediation service should be recorded as a nonfinancial intermediation services debit/expenditure of the resident economy. See example 2, Appendix II for additional information.
- If the DIP is resident in the traveler's own economy, the digital intermediation service is a resident-to-resident transaction and therefore not recorded in the balance of payments.

C.3. Recording of DIP Transactions with Four Actors (Seller, Buyer, Delivery Person, and DIP)

23. In certain situations, DIPs serve as an intermediary between more than two parties. The most typical examples are food delivery platforms (such as DoorDash, Uber Eats, Deliveroo, etc.) where DIPs are intermediating between three participants: the seller (producer) of the product being intermediated, the buyer (consumer), and the dasher (delivery service provider). In these cases, DIPs are not only intermediating in provision of the product from the producer to the final consumer, but they are also intermediating in provision of the delivery service as well. These DIPs are typically registered locally due to regulatory requirements as well as logistical reasons, since their primary function is the delivery of physical products (such as food, groceries, medicines, etc.).

Figure 2. DIP Transactions with Four Actors



24. Usually in these situations, the role of DIPs is not solely limited to facilitating intermediation services. DIPs can offer marketing services to the provider of the main product, as well as technical support including equipment for both the provider of the main product and the provider of the delivery service (e.g., software, tablets, thermal bags, etc.). In some cases, the delivery service is paid for only by the provider of the main product and does not need to be separately billed to the end customer. Payments are accepted through various methods, with credit cards, Apple/Google Pay, bank transfers, and cash being the most common options.

25. In arrangements involving four actors, intermediation services are typically explicitly charged by DIPs to the provider of the main product (through commission) and the final buyer (through service fees and small order fees). While these charges are not typically applied directly to the dasher, **DIPs are presumed to implicitly charge dashers for intermediation services. The difference between the delivery fee collected by the platform and the base pay disbursed to dashers suggests that part of the total amount is retained by the platform as the implicit intermediation fee.**

26. In general, cross-border elements in intermediation services with four actors are generally absent, particularly in transactions between DIPs and providers of the main product. However, exceptions may arise when the buyer is a nonresident.

C.4. Recording of Specific Items Other than Intermediation Fee

27. In practice, receipts (i.e., the total billed amount) from platforms such as Uber and Airbnb (see **Appendix III** for sample receipts of Airbnb, Uber, and GetYourGuide) often include items such as county or city taxes, airport surcharges, cleaning charges, tips, or driver benefit fees in addition to the intermediation fee payable to DIP, which may be invoiced separately or included in the total price. Whether such items appear as separate lines or as a combined amount in the receipt often depends on the regulatory requirements of the countries concerned. If compilers adjust the total billed amount under the assumption that the only charge beyond the price of the good or service is the intermediation fee, the

fee will be overstated. Appropriate adjustment should therefore be made to other service charges and taxes as well.

28. Taxes that are collected by the platform on behalf of a third party (such as a local government or airport authority) are not part of the output of the DIP. Instead, these amounts should be recorded as taxes on production and on imports (specifically, taxes on goods and services that become payable as a result of production). In national accounts, they should be recorded as direct payments from the seller to the tax authority, with the platform possibly acting as an intermediary for collection purposes only. If such items are included in the total price and not separately identified/invoiced, compilers should make efforts to estimate the relevant items based on consultation with the DIPs and/or tax authorities.

29. The following example in **Box 4** provides further clarification by illustrating how these adjustments should be applied in practice.

Box 4. Numerical Example on the Recording of Specific Items

Example 3. A Canadian resident books a vacation rental in Cancún, Mexico using a DIP for $800 (which is headquartered in the USA with no subsidiaries in Mexico). This amount includes the following charges: $70 DIP service charge, $10 cleaning fee, $40 county taxes, $5 contribution to Mexico platform workers welfare fund (NPISH), and $675 rental. Further, DIP charges $45 service fee to the host.

The following entries are recorded in the balance of payments current account of Canada:

Current account		-800
	Credit/Revenue	Debit/Expenditure
Services		
Travel (rental, cleaning fee, and taxes to Mexico)		725 (675+10+40)
Nonfinancial intermediation (explicit fee—to USA)		70
Transfer income		
Other current transfers/transfers to NPISHs (to Mexico)		5

Payment of $45 service fee is intermediate consumption of the Mexican host to DIP and is recorded as an import of nonfinancial intermediation service (debit/expenditure) in the Mexican BOP and export (credit/revenue) in the USA's BOP. While the county tax is part of the payment for accommodation services and is included in travel, the contribution to the Mexico workers is not considered part of travel which covers only goods and services acquired by nonresidents during visits to another economy.

C.5. Employee-Type Arrangements

30. In some industries and jurisdictions, court rulings have granted sellers certain employee-like rights. A well-known example is Uber's operations in the UK, where Uber London classifies drivers on its platform as workers, providing at least the national minimum wage, holiday pay, and access to a pension scheme.[6]

[6] See Uber London Limited Annual report and Financial Statements, 31 December 2023, P.8.

31. A critical issue in these cases is thus the statistical classification of the relationship between the platform and the seller.

32. If the seller is classified as an employee of the platform, the platform is regarded as directly providing a service or selling goods to the buyer, meaning it would not be considered a DIP. In this case, remuneration paid to the employee is income earned in exchange for their labor contributing to the platform's production process. For Uber, this implies the platform is producing ride services rather than nonfinancial intermediation services.

33. It is therefore important to establish in these cases if an employer-employee relationship (as defined in the *BPM7/2025 SNA*), actually exists between the platform and the seller. In practice distinguishing between employees and self-employed individuals can be complex and requires consideration of multiple factors. *BPM7* paragraphs 12.13–12.16, and *2025 SNA* paragraphs 8.28–8.38 provide guidance on distinguishing between an employer-employee relationship and a service contract relationship between the unit and a self-employed individual. The same criteria can be used to distinguish between an employee of the platform and a self-employed person engaged in market production. Things to be considered are summarized in **Table 3**.

Table 3. Factors Indicating if the Platform is an Employer of the Individual Seller or if the Individual Seller is a Self-Employed Market Producer

Platform is an Employer	Individuals are Self-Employed
• The person is remunerated on the basis of the amount of labor that is contributed as an input into some process of production, irrespective of the value of the output produced or the profitability of the production process.	• The income received by the person is a function of the value of the outputs from some process of production for which that person is responsible, however much or little work was put in.
• The enterprise has effective control on both what shall be done (the result) and how it shall be done.	• The individual can employ and pay others to work for them.
• Payment of social contributions is by the enterprise.	• The individual is responsible for decisions on markets, scale of operations, and finance.
• The individual is entitled to the same kind of benefits (e.g., allowances, holidays, sick leave) that the enterprise generally provides to its employees.	• The individual owns or rents machinery or equipment on which they work.
	• The individual is solely responsible for social contributions.
	• The individual pays a sales tax such as VAT.

34. Regardless of contract language or legislation, compilers should apply these criteria alongside the relevant *BPM7* and *2025 SNA* paragraphs to determine whether an arrangement qualifies as a DIP or an employer-employee relationship according to BPM/SNA standards.

35. An employer-employee relationship between the platform and the worker has important accounting implications. In such a relationship, no intermediation occurs: customers purchase directly from the platform, so no fees flow from the customer to the platform as a DIP, nor are any fees paid or imputed by the individual worker to the platform. In an employer-employee relationship, the payment that the individual receives is from earned income rather than market output. If the platform is non-resident while the worker and customer are resident, transactions that appear domestic are actually cross-border. The full amount paid by the customer would be classified as imports from the economy of the platform, and earned income revenues would be shown in the BOP to the resident worker. This can create asymmetries if the platform's country treats it as a DIP while the host economy treats it as a direct service provider.

C.6. The Case of Negative Fees on Digital Intermediation Services

36. In some cases, suppliers of digital intermediation services may apply promotional terms giving rise to a partial or total waiving or rebate of fees paid by the buyer and/or seller for a given transaction. This does not change the fact that a digital intermediation service was provided, as a fee would otherwise have been paid. However, such promotions may affect the value of trade in digital intermediation services measured in practice (for example, where the DIP offers discounts, this may imply a negative fee paid by customers, in the same way that retail margins realized on some goods may be negative). DIPs may provide services to buyers and sellers without charging fees, either explicitly or implicitly. This strategy is often used to promote the platform, attract users, and build market share. While economically significant, such arrangements pose challenges for measuring output and value added in the national accounts. As the platform continues to incur operational costs such as labor, marketing, and other expenses, in the absence of any service revenue, DIP's output may appear minimal or even negative. This situation is analogous to a retailer or wholesaler experiencing a negative margin, where the cost of goods sold exceeds the revenue from sales. This situation also may pose serious challenges for price indices and volume estimates.

C.7. Households Provision of Accommodation and Ride-Hailing/Rental Car Services

37. In the national accounts, housing services provided by owner-occupiers are captured through an imputation known as owner-occupied rent. This reflects the value of housing services consumed by homeowners, even though no market transaction occurs. The imputed rent is typically estimated under the assumption that owner-occupiers reside in their homes on a full-time basis. However, when homeowners sublet their properties as short-term rentals—often facilitated through digital platforms an adjustment is required. A portion of the imputed rent should be reclassified as paid rent, reflecting the market-based transaction. The extent of this adjustment depends on several factors, including:

- The rental equivalence rate used to estimate imputed rent,
- The duration and frequency of short-term rental activity,
- The additional intermediate costs incurred in renting, such as cleaning services, internet access, service fees, supplies and other expenses.

38. It is essential that compilers ensure housing services are not double counted. The same dwelling should not simultaneously contribute to both imputed rent and accommodation services (short-term rentals) for the same period. Data to identify short-term rental activity is increasingly available in many

jurisdictions, as authorities seek to monitor income reporting and address policy concerns related to housing availability and affordability. Additionally, data from short-term rentals can enhance current estimates of imputed rent by offering insights into rental prices across rural and urban areas, as well as associated intermediate cost.

39. Just as DIPs have transformed the provision of housing services, they have also enabled households to participate in the transportation sector. This includes activities such as offering ride services or renting out personal vehicles via digital platforms. A key challenge for national accounts compilers is determining how to reclassify household-owned vehicles, traditionally recorded as consumer durables into productive assets when they are used for market-based transportation services.

40. When a household uses its vehicle to generate income either by driving or renting it out, the vehicle becomes part of the production process. In such cases, it is necessary to record a split asset, whereby a portion of the vehicle is reclassified from household final consumption to business investment. Imputations and other methodologies may be needed to provide estimates of the split assets. Although this will not impact GDP, it will have implications for an economy's capital stock, and productivity measures. As both the capital stock and consumption of fixed capital need to be accurately reflected in the accounts.

41. Compilers have relied on labor force and household surveys to identify such activities. However, with the rise of platform-based services, administrative data sources such as vehicle registrations, tax filings, and platform-reported earnings can now complement traditional survey methods. These sources offer improved granularity and timeliness, helping compilers better capture the evolving role of households in market production.

IV. DATA SOURCES AND COMPILATION METHODS

A. SCOPING SURVEY TO IDENTIFY DIPS

42. It is not always straightforward to identify DIPs. Different approaches have been followed by countries to prepare the list of DIPs established in their economies so that their activities could be captured through appropriate surveys or other means. For example, the Statistics Netherlands follows the web scrapping approach[7] to develop a register of DIPs (see **Box 5**). A more recent example of a web scraping or big data approach is from Statistics Indonesia (see Box 5.10, *Handbook on Digital Trade*).

[7] Web scraping is a data collection technique that uses automated tools or programs (called “scrapers” or “bots”) to extract information from websites.

Box 5. Identification of Online Platforms by Web Scraping in Netherlands

Statistics Netherlands has derived a register of DIPs in a systematic way using web scraping. The first step was to identify key words that were likely to be present on a DIP website, such as: "register", "login", "platform", "sign up". The key words were found on websites of platforms that had already been manually identified by the staff of Statistics Netherlands. Using a list of companies from the country's business register, the web scraping tool then scraped through websites of businesses with a ".nl" domain. This had the advantage of aligning the register of DIPs with the business register; but it also meant that any new platforms not yet included in the business register would be excluded from the DIP register.

Based on the prevalence of the words on the website, each website was given a score between 0 and 1 based on the possibility of the unit being a DIP. After reviewing over 600,000 websites, it was decided that those with a score of 0.8 or higher would be considered for inclusion in the DIPs survey. A manual review reduced the number of potential units by around half (Table 5.2). This component of the work was resource intense but improved the quality of the register. It should be noted that over the three years that the model has been run, it has produced relatively stable results.

Table 5.2. Identifying DIPs in Netherlands: refinement process

Results	Number of businesses	%
Totally scraped (with text)	629,284	(100)
Probability ≥ 0.5	41,881	(6.6)
Probability ≥ 0.8	9,387	(1.5)
Questionnaire sent	4,385	(0.7)
Response provided	2,997	(0.5)
Considered platform company	537	(~0.1)

Importantly, this approach can be used for identifying other types of businesses, with promising results observed when for example asked to identify "innovative" companies, although a similar exercise for identifying companies using AI proved more problematic.

Source: (Statistics Netherlands, 2022[103])

Source: Box 5.1, *OECD Handbook on Compiling Digital Supply and Use Tables*

43. In the absence of an appropriate decision tree,[8] there is a risk that DIPs may be misclassified under other service categories, such as transportation or accommodation services. A first distinction in identifying DIPs is whether the platform functions primarily as a direct seller of its own goods and services or whether it intermediates between independent parties. Then it is important to determine if the platform actively facilitates the transaction—such as through booking, ordering, or payment. Platforms that do so provide a digital intermediation service (DIS), either as pure DIPs, where all revenue is from intermediation, or as hybrid platforms when additional revenue streams such as advertising, referrals, or direct sales are present. By contrast, platforms that only provide information, comparison, or redirection

[8] The UK Office of National Statistics (ONS) uses a decision tree to identify the sharing economy businesses. The sharing economy was defined by the ONS as *"the sharing of under-used assets through completing peer-to-peer transactions that are only viable through digital intermediation, allowing parties to benefit from usage outside of the primary use of that asset".* This definition is broader that then DIP definition. While DIPs in the framework charge a fee for facilitating the transaction, there is no such requirement for the sharing economy approach.

(e.g., meta-search engines) are classified under advertising or referral services. The decision tree below **(Box 6)** summarizes the steps recommended for identifying DIPs. Nevertheless, countries may adapt or expand these steps to reflect the specific characteristics of digital platforms operating domestically.

Box 6. Decision Tree for Identifying DIPs

1. Does the business have a website or app that is essential to its operations?

- **No → Not a digital platform.**
- **Yes → Go to Step 2.**

2. Does the business connect a direct user (B2C) or another business (B2B) to a service provider or seller?

- **No → The business is a direct seller (e.g., Apple Store). Classify as a direct retailer or service provider.**
- **Yes → Go to Step 3.**

3. Does the platform facilitate the actual transaction, including booking, ordering, or payment, on its platform?

- **Yes → The platform provides a Digital Intermediation Service (DIS). Go to Step 4 to check for hybrid models.**
- **No → The platform provides a different service. Go to Step 5.**

4. Does the platform also generate revenue from other sources, such as advertising, referrals, or direct sales?

- **Yes → The platform is a Hybrid Platform. Its revenue must be disaggregated into:**
  - **o DIS (commission from intermediated transactions)**
  - **o Advertising/information Services (from clicks/referrals)**
  - **o Other services (e.g., direct sales)**
- **No → The platform is a pure Digital Intermediation Platform (DIP) (e.g., Uber, Airbnb). All revenue is classified as DIS.**

5. Does the platform generate revenue by only providing information, comparison, or redirection to external providers?

- **Yes → The platform is an Aggregator/Meta-Search Engine. All revenue is classified as an advertising/information service (e.g., Skyscanner, Google Flights).**
- **No → The platform does not fit into these categories. Further analysis is needed.**

Note: A hybrid platform may be included under DIPs provided that the output from intermediation services is more than 50 percent of the total output of the platform.

B. SURVEY OF DIPS FOR ESTIMATING OUTPUT AND EXPORTS (SUPPLIERS OF SERVICES)

44. Once DIPs are appropriately identified, one of the ways to estimate their output and exports is to conduct targeted surveys. To support conducting survey of DIPs, a set of indicative survey questions are presented in **Appendix IV**. These questions are designed to help compilers separate the intermediation function of DIPs from the underlying services provided by sellers (e.g., cab rides, accommodation, food delivery). They can be incorporated into existing enterprise surveys, international trade in services surveys, or developed as a dedicated survey on digital intermediation.

45. Compilers are encouraged to adapt and refine the questions to reflect country-specific institutional arrangements, business practices, and data requirements, while maintaining consistency with international statistical standards. In doing so, the survey framework can both accommodate national circumstances and contribute to harmonized measurement of digital intermediation services across economies.

46. For example, Statistics Netherlands has implemented the survey approach for collecting the data on DIPs (see **Box 7**).

Box 7. Producing the Estimates of Digital Intermediation Services from Surveys in the Netherlands

Using conventional business surveys to compile estimates of production of DIS based on DIP output

Following the identification of potential DIPs, including those that charge an explicit fee, Statistics Netherlands obtains information from their annual Structural Business Survey. This is used to split the platforms between those where more than 50% of employees work on intermediation and those that fall below this threshold. The former are considered predominately DIPs and are reallocated to the DIP industry. Statistics Netherlands notes that of those units identified as DIPs, "the largest businesses are fully specialised digital intermediary platforms". (Statistics Netherlands, 2021[43])Calculations are undertaken to separate the output from these DIPs that is considered DIS from the production of more traditional products. Those platforms where fewer than 50% of employees work on intermediation are left in their "conventional" industry. A fraction of their output, estimated according to the products that different industries are producing, is considered DIS and is reallocated to the DIS product.

Statistics Netherlands is also able to apply data from their international trade in services survey to estimate what percentage of DIS is being exported. However, because DIS estimates depend on production data from resident businesses, there is no information on the amount of DIS imported.

Source: (Statistics Netherlands, 2021[43]).

Source: Box 4.2, *OECD Handbook on Compiling Digital Supply and Use Tables*

C. USE OF FINANCIAL STATEMENTS DATA TO ESTIMATE OUTPUT AND EXPORTS OF INTERMEDIATION SERVICES OF DIPS

47. Financial statements may serve as a reliable data source for recording transactions involving DIPs. When a DIP is locally registered (Models 1 and 3), statistical agencies/central banks can obtain these statements from the tax authorities, regulators, business registry agencies or directly from DIPs.

48. Revenues and expenditures related to the sale and acquisition of underlying goods and services are typically reflected in the profit and loss statements of DIPs. Accompanying notes to the financial statements may provide detailed breakdowns in revenues by specific types of services rendered. The financial statements indicate that DIPs generally charge certain percentage of the value of the product

intermediated as commission from buyer and/or seller. However, in certain cases, DIPs replaced percentage-based commission to a fixed platform access fee (e.g., Ola cabs in India replaced per-trip commissions with a fixed daily platform access fee from sellers/drivers). Such flat fee also should be included as part of the intermediation services output. Given that the platform is earning from other services as well (i.e., hybrid platform), compilers should carefully include other revenues in respective services.

49. **Table 4** presents the data on commission from intermediation services from the financial statement of a food and beverage services intermediating platform operating in a single country (Glovoapp Technology d.o.o. Beograd).

Table 4. Revenues of the DIP (in thousand Serbian dinars)

	2023	2022
Revenue from sale of products and services on the domestic market:		
Revenue from commissions for platform usage	**1,452,501**	**939,348**
Revenue from promotional service fees	112,606	160,407
Revenue from delivery service usage	74,675	10,701
Other revenue from sale of products and services	115,326	66,875
Revenue from marketing services on the foreign market	14,267	11,465
Total revenue	1,769,375	1,188,795

Source: Serbian Business Registry Agency (https://www.apr.gov.rs/registers/financial-statements.1698.html)

50. An examination of the publicly available financial statements of several other platforms (Models 1, 2, and 3) indicates that separate data on revenues from different product lines including intermediation of services are generally available. For the platforms in Model 1 (e.g., Grab, Uber), financial reports are mostly available at the consolidated group level covering all countries of its operation and the product lines (e.g., deliveries, mobility, and financial services[9]). While consolidated reporting aggregates revenue across the group, local authorities in each operating country may maintain separate records that capture DIPs revenues within their jurisdiction. Engagement with the relevant authorities could provide more detailed insights into intermediation fee by country.

51. Alternately and in the absence of target surveys at country level, country-level estimates of intermediation services (e.g., relating to car rentals) can be derived from the group reports using proxies that reflect the distribution of activity across countries of operation. Suitable indicators include the number of completed trips, gross booking values, or active users by country, as these are closely tied to the scale of platform intermediation.

52. While the revenue from commissions provides a good estimate of the intermediation services output of the platform, no details on the residency of the users of intermediation services are available to estimate the export of these services. Nevertheless, compilers may consider applying certain proxies to derive the shares of output consumed by residents and nonresident clients.

[9] Reflects revenue from Grab's digital payments, microloans, insurance, and other financial products, and should be classified under financial services whereas other two services are recorded under nonfinancial intermediation.

53. A practical way to estimate the resident–nonresident split of intermediation revenue in a given country is to use two platform-based indicators: the country code of the user's registered phone number and the issuing country of the credit/debit card or bank account used. Products (e.g., rides, vacation homes) booked with a local phone number and paid with a domestic card can be reasonably attributed to residents, while those linked to foreign phone numbers or foreign-issued cards can be treated as nonresident usage. Although not perfect—since some residents may retain foreign numbers and visitors may use local phone numbers or cash—these two indicators provide a robust basis for allocating revenue between domestic users and nonresident travelers. Compilers may request aggregate data on these indicators (i.e., percentage of products booked using nonresident phone numbers and payment cards/bank accounts) in enterprise surveys, ICT or similar surveys for collecting data from DIPs.

D. USE OF TAX DATA TO ESTIMATE THE IMPORTS OF DIGITAL INTERMEDIATION SERVICES (USE OF SERVICES) AND OUTPUT OF DIPS

54. In some countries, tax is applicable on the digital intermediation services consumed by resident households from the nonresident digital intermediation platforms. For example, in India, foreign platforms (i.e., Model 2) supplying Online Information and Database Access or Retrieval (OIDAR) services (includes the services of DIPs) to domestic consumers are required to register with the tax authorities and collect the goods and services tax (GST) on their services from consumers and remit it to the tax authorities. Such tax applies only when the consumer is not registered for GST (i.e., B2C transactions) and the service taxed is the digital intermediation or digital content itself, not the underlying service (e.g., the ride, accommodation, or medical consultation).

55. This design makes the tax return submitted by the foreign platform to the domestic tax authorities a direct and reliable data source on the value of imported digital intermediation services. The taxable base is typically the platform's service charge/commission. Numerical example in **Box 8** illustrates the estimation of intermediation services imports using tax data.

Box 8. Derivation of Imported Digital Intermediation Services from Tax Data

Several Indian residents access foreign language instruction (e.g., Spanish, French) through a U.S.-based DIP that connects them with tutors abroad.

- Fees collected by tutors (educational services, tax-exempt) = $2200
- Platform commission (digital service, taxable) = $300
- GST rate applicable on intermediation services = 20%
- DIP charges GST on its own service (GST due) = $300 × 20% = ₹60.
- Total payment by Indian residents to DIP = $2560

DIP declares this amount in its GST return and remits the amount to the Indian tax authorities. For compiling national accounts/BOP, statistical agencies can infer the value of the imported digital intermediation service by dividing the GST paid by the tax rate.

- Imported service value= $60/0.2 = $300.

By aggregating such data across for non-resident platforms, compilers can obtain a robust estimate of the total value of digital intermediation services imported by India.

If the tax is applicable to underlying services, in that case, DIP will be responsible for collecting the GST on that service as well and remit the total amount of GST to the tax authorities.

56. While such tax data provides a valuable and cost-effective source for measuring the imports of digital intermediation services—particularly for countries with limited resources—some important limitations exist. Compliance gaps and registration thresholds may leave certain transactions unrecorded. Moreover, tax reporting is often provided only in aggregate form and may combine digital intermediation services (DIPs such as Preply, Skillshare, GetYourguide) with other digital services like streaming, without distinguishing detailed subcategories such as education, telehealth, or entertainment. This creates classification challenges and the risk of under- or over-recording digital intermediation services imports. The estimation becomes further complex if the tax is also applicable to the underlying services as well. In that case, DIP will be responsible for collecting the tax on that service as well and remit the total amount of tax to the authorities. Nonetheless, the approach remains a practical and low-cost solution. Overall, tax data could be used effectively if statistical agencies establish data-sharing arrangements with tax authorities—who can provide more detailed records than standard returns—and supplement these data with targeted surveys and/or other administrative sources.

57. In some countries, services provided by DIPs are generally subject to VAT and business tax regimes. This enables governments to capture revenue from the digital economy. As such, tax data may serve as a useful source or compliment traditional methods for estimating the output of DIPs. In some jurisdictions, special rules or simplified registration procedures apply specifically to digital intermediation services.

E. SURVEYS OF HOUSEHOLDS AND BUSINESSES

58. The household surveys on DIPs are helpful to collect information on how households interact with platforms such as Uber, Airbnb, DoorDash, and Etsy when buying or selling goods and services. These surveys can cover both household consumption of digital intermediation services (domestic consumption

and imports) and revenue from supplying goods/services via these platforms. The data will help measure household participation in the digital economy, identify spending and earning patterns, and ensure that digital platform transactions are accurately reflected in national accounts and external sector statistics.

59. The surveys of businesses aim to gather information from resident businesses, such as those in accommodation, transport, and food services, on their use of platforms like Booking.com, Uber Eats, and Zomato to reach customers and manage transactions. It collects data on revenues from sales, fees paid to DIPs, and their residency, providing insights into the role of DIPs in supporting business activities. The results will improve the measurement of digital intermediation services consumed by businesses (domestic consumption and imports) in national accounts and external sector statistics. See **Appendices V and VI** for indicative survey questions targeted at households and businesses, respectively. These questionnaires can be incorporated into existing surveys or developed as a dedicated module on digital intermediation.

F. OTHER DATA SOURCES

Use of Data from Credit/Debit Cards, ITRS, and Payment Apps for Estimating the Imports of Digital Intermediation Services

60. Since most payments to DIPs by residents during visits to other countries and to nonresident DIPs operating in the country (Model 2) are made through credit/debit cards and bank accounts, data on these transactions from banks can be an important source on intermediation services. Such data provides information on the cardholder and the counterpart country/DIP and the total value of these transactions. While the intermediation fee itself is not shown separately, estimates can be derived by classifying transactions by DIP and applying appropriate ratios of intermediation services, which are generally available from relevant DIPs. Nonetheless, when data are available directly from platforms (e.g., Uber, Grab, Airbnb), they provide more complete information on both the value of transactions, the intermediation services involved, and counterpart country, and should therefore be prioritized.

61. When payments are routed through wallet-based applications (e.g., Apple Pay, Google Pay), the issuing bank generally records only the transfer to the wallet provider, without identifying the underlying merchant or service. Although Apple or Google may themselves hold this information, they do not generally publish or share such details for statistical purposes. Similarly, data from peer-to-peer or phone number–based applications (e.g., Zelle, Venmo, mobile money) are generally limited in availability and usefulness, for statistical purposes.

62. Transactions between multinational DIPs and their subsidiaries may be recorded in the ITRS. However, in most cases, these payments do not pertain to intermediation services. Instead, they typically relate to computer services, advertising, audiovisual services, and other categories. To enhance the accuracy of reporting, compilers should consider introducing distinct transaction codes within the ITRS to better differentiate these service types.

63. In the case of countries that use ITRS as one of the main data sources for compiling BOP, one possible approach could be to introduce a new BOP item in ITRS to capture the cases where DIP users are charged a separate fee. However, considering the nature of transactions to be intermediated (or reporting threshold of reports), there may not be many cases where individual users report such fees. Further estimation of explicit/implicit fees and counterparties to the intermediated transactions in goods,

services, etc. beyond the ITRS data would require information collected from nonresident service providers, which may not be legally feasible.

V. EXPERIENCE OF SELECTED COUNTRIES IN COMPILING DIGITAL INTERMEDIATION SERVICES

A. MEASURING DIGITAL INTERMEDIATION PLATFORMS IN U.S. INTERNATIONAL ECONOMIC ACCOUNTS AND NATIONAL ACCOUNTS

A.1. DIPs in International Economic Accounts

64. The United States is home to several nonfinancial DIPs. While some of these platforms serve only the domestic market, many operate globally. The Bureau of Economic Analysis (BEA) has taken a multifaceted approach to measuring these firms and the services that they provide. BEA has initiated new data collections to capture the activities of DIPs on two sets of its business surveys: the Activities of Multinational Enterprises (AMNE) surveys and the international trade in services surveys. BEA also maintains a list of active digital intermediation platforms based on public information research; this list is periodically cross-referenced against the companies in BEA's survey universe to identify whether DIPs are being included in BEA sampling frames.

AMNE Surveys

65. BEA's first effort to collect data on DIPs was the introduction of questions on the 2019 Benchmark Survey of United States Direct Investment Abroad. The survey asked for the value of sales or gross operating revenue for digital intermediation services of both U.S. MNE parent companies and their foreign affiliates. Because many major DIPs are MNEs, the parent company data can go a long way to providing information about the activity of DIPs in the U.S. economy broadly. The foreign affiliate data can provide important information about the activities of U.S. DIPs that operate in the host countries and areas that they serve. It is an open research question as to what drives DIPs to provide these digital services across borders from a single country, via presence in local offices, or some other distribution model. Identifying the residency of DIPs involved in transactions, thus, remains a challenge to statistical compilers.

66. BEA has also collected information on digital intermediation services on its 2022 Benchmark Survey of Foreign Direct Investment in the United States.

67. Early data collection on the direct investment surveys faced challenges in capturing data on DIPs. First, BEA has faced a lack of responses, despite outreach efforts before and during the survey collection period. Always a challenge for survey data collection, a lack of responses is typically more prevalent when a specialized segment of economic activity is targeted, such as the operation of digital intermediation platforms. Another challenge was effectively communicating the concept of digital intermediation services to survey respondents. Some companies misinterpreted the question and reported sales for activities in which they directly provide services or goods to customers. Another common reporting issue was in isolating fee-based DIPs from online platforms that are data- or advertising-driven and would be properly classified as "other online operators."

International Trade in Services Surveys

68. When BEA added questions about digital intermediation services to its 2022 benchmark survey of transactions in selected services and intellectual property, it adjusted the language to more clearly define DIPs and added a screener question to help companies more accurately self-identify as DIPs. Companies that affirmatively answered that they operate a DIP were then asked to report the value of the intermediation service and the types of services in which the intermediation services are included (for example, education). The relevant questions are provided in **Box 9**.

A.2. DIPs in National Accounts

69. Currently, BEA's digital economy satellite account statistics do not fully capture production of digital intermediation services, resulting in an incomplete picture of the digital economy. A recent BEA working paper demonstrates possible options for measuring digital intermediation services for three selected areas of interest: rideshare, travel services, and food/grocery delivery services. The paper starts with a review of current research related to defining, identifying, and estimating nonfinancial digital intermediation services across industries, focusing on work done in North America under the North American Industry Classification System (NAICS). This follows with the methodology for two measurement approaches. The first option, a top-down approach, starts with overall gross output for the relevant industry, such as the taxi services industry (NAICS 48531) for rideshare. Continuing with the rideshare example, the next step is to remove the amount of output attributable to drivers by using data on non-employers from the U.S. Census Bureau. From the remaining output, the portion attributable to digital orders is isolated using Census data showing revenue from electronic sources. Finally, output from digital orders originating from a taxi company's website or app is estimated and removed, resulting in just the digital intermediation services output remaining. The second option is a more straightforward bottom-up approach that uses revenue from mandatory public financial reports for publicly owned companies. The second approach was determined to be preferable when digital intermediation services are provided by only a few large, public firms (such as rideshare), but will underestimate services provided by smaller companies that do not have financial reports online (such as business-related travel services). Using these approaches, gross output for digital intermediation services for rideshare, travel services, and food/grocery delivery services was estimated to be around $31 billion in 2021 or about 1 percent of the overall value of the digital economy in 2021.

Box 9. Questions on Digital Intermediation Services in International Trade in Services Surveys

12. Does your company operate a digital intermediary platform(s)?

Yes – Continue to the next question.

No – Skip to the next page.

13. Report the value of sales of digital intermediation services to foreign persons reported [on the main sales schedule] that were earned from operating a digital intermediary platform. Reported sales should include fees and commissions only, and not the value of the goods or services sold on the platform. $ _____

14. Which of the service types listed in [the main sales schedule] include sales of digital intermediation services reported in Question 13.

_____ (drop-down option that includes all service types covered by the survey)

B. MEASURING DIGITAL INTERMEDIATION PLATFORMS IN EUROPEAN COUNTRIES

70. The measurement of DIPs within Europe has garnered significant attention as these platforms play an increasingly pivotal role in the digital and real economy covering a significant part of transactions related to transport, accommodation and recreation as well as other activities. Eurostat, the statistical office of the European Union (EU), is committed to improving their measurement and understanding various business models of DIPs across EU Member States. This effort aims to achieve a harmonized recording in BOP among all countries. Acknowledging the complexities involved in accurately capturing the economic activities of DIPs, in September 2025, Eurostat conducted a comprehensive survey among its Member States to gather insights into the current practices, available data sources, challenges, and opportunities encountered by central banks and national statistical institutes in identifying these platforms and measuring their economic activity.[10]

71. The survey responses revealed a proactive and multifaceted approach by European countries to compile the BOP statistics involving digital intermediation platforms, highlighting some positive outcomes alongside the acknowledged challenges.

72. The survey's structure addressed data compilation from three different perspectives: the country of the DIP's residence, the country of the seller of the good or service, and the country of the buyer. Across all three cases, the most common approaches involve the use of direct surveys, administrative data and estimates/models. For instance, some countries compile data on transactions related to DIPs that are resident in their economy utilizing administrative sources such as VAT returns or financial statements of DIPs; in contrast for transactions where the country is the buyer or seller of goods or services, compilers may rely on direct surveys of businesses, households, or individuals. The frequency

[10] A total of 13 out of 27 EU countries replied to the survey conducted in September 2025. One-third of the respondents do not yet compile data on transactions related to DIPs; however, they are in the process of developing a methodology and/or exploring new data sources to do so.

of data collection for these transactions can vary, with compilation being done monthly, quarterly, or annually.

73. The majority of the respondents highlighted that currently, the information on DIPs is primary collected through more general instruments, such as the International Trade in Services Statistics (ITSS) survey, rather than a specific, dedicated survey for DIPs. Despite this, the data coverage, defined as the approximate percentage of known turnover of all DIPs resident in a country, is generally high (around 99 percent). Furthermore, for each major data source or method, most countries are able to distinguish between different types of underlying transaction categories, such as goods, services, and nonproduced nonfinancial assets, by analyzing the business model and the industry in which each DIP operates.

74. One significant outcome of the survey was the recognition of the diverse challenges in accurately capturing the DIP-related data across European countries. The primary obstacles include the lack of specific, dedicated data sources for DIP transactions, difficulties in applying residency rules for these global platforms, and the challenge of separating service fees from other types of transactions, especially when fees are implicitly charged. The survey also indicates a strong commitment among Member States to enhance their compilation practices. Many reported implementing checks and adjustments to address potential double-counting and exploring and applying various estimation and modeling techniques to overcome the data gaps. The specific approaches depend on the country's role in the transaction, whether as the resident DIP, the seller, or the buyer. For instance, some may use detailed reports from major platforms, while others rely on linking seller surveys with commission rates, exports, and partner data. These methodologies also incorporate proxy indicators like average commission rates, card payment data, and platform fees to produce approximate estimates, signaling a proactive stance to improve data quality and comprehensiveness.

75. Overall, there is a demand for a centralized framework to standardize the collection of intermediation fees from major platforms, which could enhance data accuracy and comparability across Member States. Eurostat will continue to address the activities of DIPs in their various working groups like the Balance of Payments Working Group (BOPWG) and International Trade in Services Statistics Working Group (ITSS WG), provide methodological guidance if needed, encourage Member States to present best practices how to compile the relevant transactions correctly based on *BPM7* standards and ask countries that host important DIPs to share their information and data with the relevant counterpart economies.

VI. CHALLENGES AND WAY FORWARD

76. As discussed in the previous sections, compiling statistics on DIPs in national accounts and ESS involves several challenges that arise from their business models, cross-border operations, and the availability of data. Key challenges include:

- Difficulties in determining the residency of DIP involved in the transactions. Some of the DIPs have subsidiaries to conduct operations in specific countries/regions, whereas some operate fully from one location. In some cases, it is not clear if the local offices are enough to consider them as resident platforms operating in a particular country. Therefore, determining the residency status of platforms can be challenging in some cases.

- Survey respondents may not know/remember the value of the fee (even if the fee is explicit) and other items (even if they are separately available).
- Rerouting the payments collected, and fees retained by DIPs may require data that are unavailable, making assumptions necessary.
- Using financial statements of DIPs, the identification of geographic perspectives of transactions would likely be difficult, if not impossible.
- Selling opportunities created by DIPs have led to growing activity by informal household enterprises, which are likely to be missing from business registers and other standard sources of statistical information. They have also contributed to the rapid growth of small external transactions in goods and services that may be below the minimum thresholds for customs duties and documentation requirements.
- Another common compilation challenge from digital intermediation platforms providing cross-border intermediation services is that source data on DIPs with no local presence is not easily available—compilers may need to rely on tax data and information sharing between NSOs/central banks at the firm level.
- Data sharing can be challenging due to national legislation that may prohibit it.

77. Nevertheless, strengthened cooperation among statistical offices, regulators, and tax authorities can help close data gaps, while surveys of households, businesses, and DIPs enhance the measurement of digital intermediation services. International collaboration remains key to harmonizing methods, sharing best practices, and effectively capturing DIPs operations.

Questions for the AEG/BOPCOM:

1. *Do AEG/BOPCOM members agree with the proposed recommendations for recording specific transactions involving DIPs as outlined in Section III? Are there any additional issues related to the treatment of DIPs in external sector and national accounts statistics that require further clarification?*
2. *Do AEG/BOPCOM members agree with the guidance on price and volume measures of DIPs as outlined in Box 1?*
3. *Do AEG/BOPCOM members agree with the recommended data sources and compilation methods in Section IV (e.g., targeted surveys, financial statements, tax data) for measuring the output of DIPs and associated cross-border transactions? Are there any other alternative sources or methods that should also be considered?*
4. *Do AEG/BOPCOM members suggest including further examples of country practices in this note?*
5. *Do AEG/BOPCOM members agree that the updated note incorporating the comments from members be posted for global consultation?*

References

Integrated Balance of Payments and International Investment Position Manual, seventh edition (BPM7) White Cover (Pre-Edited) Version

System of National Accounts 2025 (2025 SNA) White Cover (Pre-Edited) Version

Handbook on Measuring Digital Trade-2nd edition

Handbook on Compiling Digital supply and Use Tables

GN DZ.9 Digital Intermediation Platforms

Appendix I. Selected List of Nonfinancial Intermediation Platforms

Category	Platform	Description	Headquarters
Goods	eBay	An online auction and shopping website where people and businesses buy and sell goods.	San Jose, California, USA
Transport Services	Uber	A ride-hailing platform connecting passengers with drivers of vehicles for hire.	San Francisco, California, USA
Transport Services	Lyft	A transportation network company offering ride-sharing services.	San Francisco, California, USA
Transport Services	Grab	A Southeast Asian technology company offering ride-hailing transport services.	Singapore
Transport Services	Didi Chuxing	A Chinese ride-sharing company providing transportation services.	Beijing, China
Transport Services	BlaBlaCar	A long-distance carpooling service connecting drivers with empty seats to passengers.	Paris, France
Accommodation Services	Airbnb	An online marketplace for lodging, primarily homestays for vacation rentals.	San Francisco, California, USA
Accommodation Services	Booking.com	A travel fare aggregator website and travel metasearch engine for lodging reservations.	Amsterdam, Netherlands
Accommodation Services	Vrbo	A vacation rental online marketplace.	Austin, Texas, USA
Accommodation Services	Agoda	An online travel agency for hotels, vacation rentals, flights, and airport transfers.	Singapore
Accommodation Services	Couchsurfing	A hospitality exchange service offering free lodging.	San Francisco, California, USA

Food & Beverage Services	Uber Eats	A food delivery platform connecting users with local restaurants.	San Francisco, California, USA
Food & Beverage Services	DoorDash	An on-demand food delivery service.	San Francisco, California, USA
Food & Beverage Services	Grubhub	An online and mobile food ordering and delivery marketplace.	Chicago, Illinois, USA
Food & Beverage Services	Deliveroo	A British online food delivery company.	London, England
Food & Beverage Services	Zomato	An Indian multinational restaurant aggregator and food delivery company.	Gurgaon, Haryana, India
Other Services (e.g., Education)	Skillshare	An online learning community with thousands of classes in design, business, and more.	New York City, New York, USA

Appendix II. Recording of International Trade Transactions Involving DIPs

Seller	DIP	Buyer	Treatment of transacted product	Treatment of intermediation services
If the seller pays the intermediation fee OR it is unknown who pays the intermediation fee				
Country A	Country A	Country B	Import by country B from country A	None (domestic transaction)
Country A	Country B	Country B	Import by country B from country A	Import by country A from country B
Country A	Country B	Country A	None (domestic transaction)	Import by country A from country B
Country A	Country B	Country C	Import by country C from country A	Import by country A from country B
If the buyer pays the intermediation fee				
Country A	Country A	Country B	Import by country B from country A	Import by country B from country A
Country A	Country B	Country B	Import by country B from country A	None (domestic transaction)
Country A	Country B	Country A	None (domestic transaction)	Import by country A from country B
Country A	Country B	Country C	Import by country C from country A	Import by country C from country B
If both the seller and the buyer pay the intermediation fee				
Country A	Country A	Country B	Import by country B from country A	Import by country B (of *part of* the intermediation services) from country A (the remainder of the intermediation services reflect a domestic transaction)
Country A	Country B	Country B	Import by country B from country A	Import by country A (of *part of* the intermediation services) from country B (the remainder of the intermediation services reflect a domestic transaction)
Country A	Country B	Country A	None (domestic transaction)	Import by country A from country B
Country A	Country B	Country C	Import by country C from country A	Import by country C (of *part of* the intermediation services) from country B and import by country A (of the remainder of the intermediation services) from country B

Source: Table 5.3, Handbook on Measuring Digital Trade, Second Edition

1. The fees paid by the buyer and/or seller are known

(i) A Canadian resident books a vacation rental in New York City, USA using a DIP for $600 (which is headquartered in the USA). The DIP charges $60 service fee to the traveler in addition to rental and charges $30 service fee to the host.

The following entries are recorded in the balance of payments current account of Canada:

Current account		-660
	Credit/Revenue	Debit/Expenditure
Services		
Travel (rental to USA+ explicit intermediation fee to USA)		660 (600+60)

As the payment of $30 service fee by the host to DIP is a resident-resident transaction, it is not recorded in the balance of payments of Canada and USA.

(ii) A Canadian resident books a vacation rental in Cancún, Mexico using a DIP for $700 (which is headquartered in the USA with no subsidiaries in Mexico). The DIP charges $70 service fee to the traveler in addition to rental and charges $35 service fee to the host.

The following entries are recorded in the balance of payments current account of Canada:

Current account		-770
	Credit/Revenue	Debit/Expenditure
Services		
Travel (rental to Mexico)		700
Nonfinancial intermediation (explicit fee—to USA)		70

Payment of $35 service fee by the Mexican host to DIP is recorded as an import of nonfinancial intermediation service (debit/expenditure) in the Mexican BOP and export (credit/revenue) in the USA's BOP.

(iii) A Canadian resident books a vacation rental in Toronto, Canada using a DIP for $1000 (which is headquartered in the USA with no subsidiaries in Canada). The DIP charges $100 service fee to the traveler in addition to rental and charges $50 service fee to host

The following entries are recorded in the balance of payments current account of Canada:

Current account		-150
	Credit/Revenue	Debit/Expenditure
Services		
Nonfinancial intermediation (explicit fee from traveler—to USA)		100
Nonfinancial intermediation (explicit fee from host—to USA)		50

As the payment of $1000 rental is a resident-resident transaction, it is not recorded in the balance of payments of Canada but recorded in the national accounts.

(iv) A Canadian resident books a vacation rental in Orlando, USA using a DIP for $4000 (which is headquartered in the Netherlands with no subsidiaries in the USA or Canada). The DIP charges $400 service fee to the traveler in addition to rental and charges $200 service fee to the host.

The following entries are recorded in the balance of payments current account of Canada:

Current account		-4400
	Credit/Revenue	Debit/Expenditure
Services		
Travel (rental to USA)		4000
Nonfinancial intermediation (explicit fee from traveler—to Netherlands)		400

The payment of $200 service from the host to DIP should be recorded in the balance of payments of USA and Netherlands.

(v) A resident of USA books a vacation rental in Niagara Falls, USA using a DIP for $700 (which is headquartered in the USA). The DIP charges $70 service fee to the traveler in addition to rental and charges $35 service fee to the host.

As the payment of $35 service fee by the host to DIP and $70 service fee by the traveler to DIP as well as the rental payment of $700 are resident-resident transactions, the entries are recorded in the national accounts of USA.

2. The amount is not known, but it is known who pays the fees

(i) A Canadian resident books a vacation rental in New York City, USA, through a DIP (headquartered in the USA) for $600. The amount includes an implicit service fee charged to the traveler. The DIP pays $500 to the host after deducting an implicit service fee charged to the host.

The following entries are recorded in the balance of payments current account of Canada:

Current account		-600
	Credit/Revenue	Debit/Expenditure
Services		
Travel (rental to USA+ implicit fee from traveler to USA)		600 (540+60)

The following assumptions are made for fee estimation

- Service fee paid by traveler: 10% of total booking value ($600 × 10%) = $60.
- Service fee paid by host: out of $600 received from the traveler, $60 is attributed to the service fee paid by traveler. As $500 paid to host after deducting the implicit service fee, host should be considered as receiving $540 as rental and paying an implicit fee of $40.

As the payment of $40 service fee from host to the platform is a resident-resident transaction, it is not recorded in the balance of payments of Canada but recorded in the national accounts of USA.

(ii) A Canadian resident books a vacation rental in Cancún, Mexico using a digital platform for $700 (which is headquartered in the USA). The amount includes an implicit service fee charged to the traveler. The platform pays $600 to the host after deducting an implicit service fee charged to the host.

The following entries are recorded in the balance of payments current account of Canada:

Current account		-700
	Credit/Revenue	Debit/Expenditure
Services		
Travel (rental to Mexico)		630
Nonfinancial intermediation (implicit fee from traveler—to USA)		70

The following assumptions are made for fee estimation

- Service fee paid by traveler: 10% of total booking value ($700 × 10%) = $70.
- Service fee paid by host: out of $700 received from the traveler, $70 is attributed to the service fee paid by traveler. As $600 paid to host after deducting the implicit service fee, host should be considered as receiving $630 as rental and paying an implicit fee of $30.

Payment of $30 service fee by the Mexican host to the US digital intermediation platform is recorded as an import of nonfinancial intermediation service (debit/expenditure) in the Mexican BOP and export (credit/revenue) in the USA's BOP.

3. **The amount is not known and who pays the fees is also not known**

(i) A Canadian resident books a vacation rental in New York City, USA, through a digital intermediation platform (headquartered in the USA) for $600. The platform mentions that this amount includes all fees but provides no further details including who pays the fees (seller and/or buyer).

The following entries are recorded in the balance of payments current account of Canada:

Current account		-600
	Credit/Revenue	Debit/Expenditure
Services		
Travel (rental to USA)		600

The following assumptions are made for fee estimation

- In the absence of information on who pays the fees, it is assumed that the fee is entirely paid by the seller (i.e., host) to the DIP.
- Host pays 12% of booking value as service fee to the platform (600x12%) = $72. As this payment from host to platform is a resident-resident transaction, it is not recorded in the balance of payments.

As $600 paid by the traveler is recorded as import of travel services for Canada, host should be considered as receiving $600 as rental and paying an implicit fee of $72 to the platform—leaving $528 to the host.

(ii) A Canadian resident books a vacation rental in Cancún, Mexico using a DIP for $700 (which is headquartered in the USA with no subsidiaries in Mexico). No additional details are available from the platform.

The following entries are recorded in the balance of payments current account of Canada:

Current account		-700
	Credit/Revenue	Debit/Expenditure
Services		
Travel (rental to Mexico)		700

The following assumptions are made for fee estimation

- In the absence of information on who pays the fees, it is assumed that the fee is entirely paid by the seller (i.e., Mexican host) to the DIP.
- Host pays 10% of booking value as service fee to the platform (700x10%) = $70. This payment (implicit fee) from host to platform is recorded in Mexico's BOP as import of Nonfinancial intermediation services from USA.

As $700 paid by the traveler is recorded as import of travel services for Canada, Mexican host should be considered as receiving $700 as rental and paying an implicit fee of $70 to the platform—leaving $630 to the host.

(iii) A Canadian resident books a vacation rental in Toronto, Canada using a DIP for $1000 (which is headquartered in the USA with no subsidiary in Canada).

The following entries are recorded in the balance of payments current account of Canada:

Current account	-100	
	Credit/Revenue	Debit/Expenditure
Services		
Nonfinancial intermediation (implicit fee from host—to USA)		100

As the payment of $1000 rental is a resident-resident transaction, it is not recorded in the balance of payments of Canada but recorded in the national accounts.

The following assumptions are made for fee estimation

- In the absence of information on who pays the fees, it is assumed that the fee is entirely paid by the seller (i.e., Canadian host) to the DIP.
- Host pays 10% of booking value as service fee to the platform (1000x10%) = $100. This payment (implicit fee) from host to platform is recorded in Canada's BOP as import of nonfinancial intermediation services from USA.

(iv) A Canadian resident books a vacation rental in Orlando, USA using a DIP for $4000 (which is headquartered in the Netherlands with no subsidiary in the USA and Canada). The platform mentions that this amount includes all fees but provides no further details including who pays the fees (seller and/or buyer).

The following entries are recorded in the balance of payments current account of Canada:

Current account	-4000	
	Credit/Revenue	Debit/Expenditure
Services		
Travel (rental to USA)		4000

The following assumptions are made for fee estimation

- In the absence of information on who pays the fees, it is assumed that the fee is entirely paid by the seller (i.e., US host) to the DIP.
- Host pays 10% of booking value as service fee to the platform (4000x10%) = $400. This payment (implicit fee) from US host to Netherland's platform is recorded in USA's BOP as import of nonfinancial intermediation services from Netherlands.

As $4000 paid by the traveler is recorded as import of travel services for Canada, US host should be considered as receiving $4000 as rental (export of travel services) and paying an implicit fee of $400 to the platform—leaving $3600 to the host.

Appendix III. Sample Receipts of DIPs

UBER receipts

United States

Total	$12.96
Trip fare	$9.81
Subtotal	$9.81
Booking Fee	$2.90
Montgomery County Surcharge	$0.25

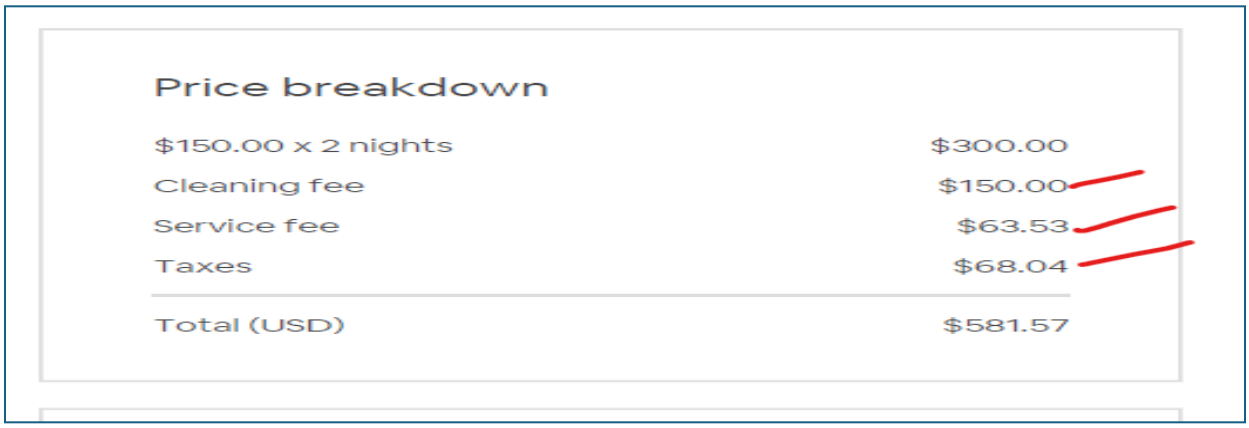
Total	$19.93
Trip fare	$8.93
Subtotal	$8.93
Booking Fee	$1.00
IAD Airport Surcharge	$5.00
Tip	$5.00

India

Total	₹349.93
Trip Charge	₹349.93
Subtotal	₹349.93

Airbnb receipts

United States

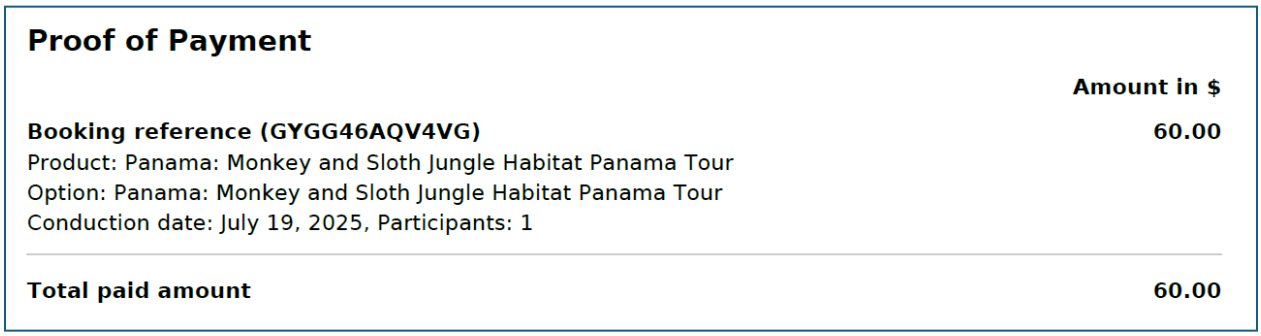


Price breakdown

$150.00 x 2 nights	$300.00
Cleaning fee	$150.00
Service fee	$63.53
Taxes	$68.04
Total (USD)	$581.57

Get Your Guide receipts

Panama



Proof of Payment

	Amount in $
Booking reference (GYGG46AQV4VG) Product: Panama: Monkey and Sloth Jungle Habitat Panama Tour Option: Panama: Monkey and Sloth Jungle Habitat Panama Tour Conduction date: July 19, 2025, Participants: 1	**60.00**
Total paid amount	**60.00**

Appendix IV. Survey of DIPs Resident in the Domestic Economy (Indicative Questions)

Screening

1. Name of the DIP:

2. Select the category of DIP (select all that apply)

Intermediation services for goods	Intermediation services for transport
Intermediation services for accommodation	Intermediation services for food/beverages
Other nonfinancial intermediation	Financial digital platform services

3. Type: Model 1 Model 3

4. Besides intermediation, is the DIP providing any additional services? (i.e., hybrid type)

YES NO

For each DIP, ask the following questions.

5.1 Type of intermediation service provided (ride-hailing, food delivery, short-term rentals, other – please specify).

5.2 Types of participants on the platform:

- Sellers (cab owners, restaurants, hotels, vacation-home owners, etc.)
- Buyers (customers/households)

5.3 Total intermediation fees collected during the reporting period (Year t):

Amount (local currency): _____

5.4 If the intermediation fee is not reported, total revenue may be reported:[11]

Amount (local currency): _____

- Intermediation fee as a percentage of total revenue:

[11] Assuming that the DIP is not of hybrid type.

5.5 Breakdown of intermediation fees (in question 5.3) by sellers and buyers:

- From sellers (cab owners, restaurants, property owners, etc.): Amount (local currency): _____
- From buyers (customers): Amount (local currency): _____
  - If exact amounts by sellers/buyers are not available, percentage of fee received from these categories may be reported:

5.6 Breakdown of intermediation fees (in question 5.3) by residence of counterparties:

- Domestic (resident) sellers and buyers: Amount (local currency): _____
- Foreign (nonresident) sellers and buyers: Amount (local currency): _____
  - If exact amounts by sellers/buyers are not available, percentage of fee received from residents/nonresident may be reported:

5.7 Other sources of revenue (advertising, promotions, etc.) – please specify approximate share of total revenue **(report this if DIP is of hybrid nature).** Amount (local currency): _____

Appendix V. Household Survey: Digital Intermediation Platforms (DIPs) Services

(these questions may be included in the existing household surveys)

SECTION A. HOUSEHOLDS AS THE BUYERS OF GOODS/SERVICES THROUGH DIPS

Collect all items for the household as a whole (not per-person). If respondent cannot recall totals for year *t*, use best estimates and probes (receipts, bank/card statements). If amounts are unknown, capture frequency and typical spending.

Screening

1. During the year *t*, did any household member use a DIP (e.g., Uber, Lyft, Grab, Airbnb, Flipkey, Doordash, Zomato, Etsy) to buy goods/services?

   YES NO

If the answer is YES, select the category of DIP (select all that apply)

Intermediation services for goods	Intermediation services for transport
Intermediation services for accommodation	Intermediation services for food/beverages
Other nonfinancial intermediation	Financial digital platform services

For each selected category above, ask the following block (repeat block for each checked category)

2. A) Category (write category name):

   B) Is the DIP **resident**: Model 1 Model 3

   Name of the DIP (optional—to confirm the residency):

   C) **Nonresident:** **Model 2** **or** **DIP from another country used during visits**

   Name of the DIP (optional—to confirm the residency by stats office/central bank):

3. During year *t*, what was the total amount your household spent on this category through DIPs?

   - Amount (local currency): _____
   - If respondent gives frequency instead of amount, record frequency and typical spend: Frequency: _____; Typical spend per use: _____.

4. For the spending recorded/estimated in question 3, how much of that total was paid to the platform as a commission, service fee, or booking fee (not the amount retained by the supplier)?
    - Respondent can provide actual amount → Amount (local currency): _____
    - Respondent provides percentage → Percentage of amount in question 3: _____% → (compute amount if possible; otherwise record percentage.)
    - Don't know / cannot separate
5. How did you pay for most of these transactions? (select main method)
    - Credit/debit card
    - Mobile/digital wallet (PayPal, Apple Pay, Google Pay, Alipay, Paytm, etc.)
    - Bank transfer
    - Cash on delivery / pay supplier in cash
    - Other: _____
6. Any additional fees/taxes associated with these platform bookings (cleaning fees, airport fee, taxes, driver welfare fund, etc.)? If yes, please list and give amounts (if possible) or percentage of amount in question 3.
7. Optional: Do you have receipts or card statements that could confirm these amounts?
    - Yes
    - No

SECTION B. HOUSEHOLDS AS THE SELLERS/DASHERS OF GOODS/SERVICES THROUGH DIPS

1. During the year *t*, did any household member use a DIP (e.g., Uber, Lyft, Grab, Airbnb, Flipkey, Doordash, Zomato, Etsy) to supply goods/services?

YES	NO

If the answer is YES, select the category of DIP (three main categories are only listed)

1. Intermediation services for transport (offer ride/car rental
2. Intermediation services for accommodation (home rental)
3. Intermediation services for food/beverages (dasher)

For categories 1 and 2 above, ask the following block (repeat block for each category)

2. During year *t*, what was the total amount your household received on this category through DIPs?
    a. Amount (local currency): _____
    b. If respondent gives frequency (e.g., number of rides) instead of amount, record frequency and typical earning: Frequency: _____; Typical revenue per each transaction: _____.
3. For the earning recorded/estimated in question 3, how much of that total was paid to the platform as a commission?
    a. Respondent can provide actual amount → Amount (local currency): _____
    b. Respondent provides percentage → Percentage of amount in question 3: _____% → (compute amount if possible; otherwise record percentage.)
    c. Don't know / cannot separate

4. For Category 1: What share of your car's use is for rides or rentals (e.g., for ride-hailing or car-rental services)? You may estimate this as the percentage of miles driven for rides/rentals compared with your total miles driven.

5. For Category 2: What share of your home's total use is for rentals (e.g., for home rental services)? You may estimate this as the percentage of number of days on rentals compared with your personal use.

For category 3 above (if selected), ask the following question:

6. During year t, total delivery fee received from DIP?
    a. Amount (local currency): _____
    b. If respondent gives frequency (e.g., number of deliveries) instead of amount, record frequency and typical earning: Frequency: _____; Typical revenue per each delivery:

Appendix VI. Business Survey: Digital Intermediation Platforms (DIPs) services

(these questions may be included in the existing business or other relevant surveys)

This questionnaire may be used (or questions may be included in a relevant survey) to collect information from resident businesses (e.g., accommodation, transport, food and beverage) on how they use online platforms (e.g., Airbnb, Booking.com, Uber, Uber Eats, Doordash) to reach customers.

SECTION A. BUSINESSES AS THE USERS OF DIP SERVICES

If respondent cannot recall totals for year *t*, use best estimates and probes (receipts, bank/card statements). If amounts are unknown, capture frequency and typical spending.

Screening

1. During the year *t*, did your business receive booking/orders or payments via a DIP (e.g., Airbnb, Uber[12], Flipkey, Doordash, Zomato, Etsy)?

YES	NO

2. If the answer is YES, select the category of DIP

Intermediation services for goods	Intermediation services for transport
Intermediation services for accommodation	Intermediation services for food/beverages
Other nonfinancial intermediation	Financial digital platform services

For each selected category above, ask the following questions (repeat questions for each selected category)

3. During year *t*, what was the total revenue from sales (e.g., room rentals charged to customers in the case of a hotel) facilitated via DIPs?

Amount (local currency): _____

If total amount is not provided, ask: number of transactions (e.g., number of rooms):---------- Typical revenue per transaction (e.g., average rental of room): _____.

For the revenue recorded/estimated in question 3, how much of that total was paid to the DIP as a commission, service fee, or booking fee?

4. Respondent can provide actual amount → Amount (local currency): _____

[12] For example, Uber partners with car rental companies (e.g., Hertz, Avis, local leasing firms in USA). They may get orders through Uber and pay commission/fee to Uber.

5. Respondent provides percentage → Percentage of amount in question 3: _____% → (compute amount if possible; otherwise record percentage.)

6. Don't know / cannot separate

7. Regarding the platform in question 3, answer the following:

   A) Is the DIP **resident**: Model 1 Model 3

   Name of the DIP (optional—to confirm the residency):

   B) **Nonresident:** **Model 2**

   Name of the DIP (optional—to confirm the residency by stats office/central bank):

   C) in a selected category, if booking/orders are received through resident and nonresident DIPs, indicate the split for the amount in question 3.

   Orders/booking through resident DIPs (%)

8. Any additional fees (e.g., listing fee, subscription) paid by the business to DIP? If yes, please list and give amounts (if possible) or percentage of amount in question 3.

9. Optional: Do you have financial statements that could confirm these amounts?

   - Yes
   - No