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Guidelines and recommendations on measuring the value of e-commerce and related online transactions

Final draft (not formally edited)

November 2026

This non-paper presents the final draft of the UN Trade and Development *Guidelines and recommendations on measuring the value of e-commerce and related online transactions*. The guidelines and recommendations result from the work of the Task Group on Measuring E-commerce Value (TG-eCOM) which was established in 2023 following its establishment being recommended by the WG-ECDE and endorsed by its parent Intergovernmental Group of Experts on the Digital Economy. They have been prepared by the UN Trade and Development Secretariat with valuable input from Member States.

Financial support from the Kingdom of Saudi Arabia, which enabled UN Trade and Development convene the TG-eCOM and produce these guidelines and recommendations, is gratefully acknowledged.

This final draft has not been formally edited. Final editing will be undertaken as UN Trade and Development conducts final preparations for their publication.

The working group is invited to:

1. Endorse the Guidelines and recommendations on measuring the value of e-commerce and related online transactions

2. Recommend that UN Trade and Development should, in partnership with relevant regional and international organisations, develop and deliver capacity building and technical assistance on measuring e-commerce and related online transactions.

Guidelines and recommendations on measuring the value of e-commerce and related online transactions

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Foreword

When the Task Group on measuring e-commerce value began its work, we started from a shared recognition: e-commerce is now part of everyday economic life, but our statistical understanding of the economic value it generates remains incomplete. Businesses increasingly use digital channels to reach customers, source inputs, enter new markets and adapt their business models. Yet in many economies, the value of these transactions is still not measured regularly, and where figures are available, they are not always easy to compare.

Reliable statistics on the value of e-commerce are needed to understand how digitalisation is changing business activity, trade, productivity, competition and market access. Policymakers, businesses, researchers and international organisations all need better evidence on where e-commerce is growing, which firms and sectors are benefiting, and where further support may be needed.

It has therefore been a privilege to chair the Task Group on Measuring E-commerce Value convened by UN Trade and Development (UNCTAD). The Group brought together experts from national statistical offices, international organisations and other agencies with a wide range of experiences and perspectives. Our discussions were practical and often detailed, reflecting the real challenges faced by compilers: how to apply the definition of e-commerce consistently; how to deal with marketplaces and digital intermediation platforms; how to value transactions; how to treat online orders that fall outside the statistical definition of e-commerce; and how to disseminate results in ways that users can understand and reuse.

These Guidelines and Recommendations are the result of that collective effort. They are intended to support statistical organisations that are beginning to measure e-commerce value, as well as those seeking to improve existing collections. They do not prescribe a single implementation path. National circumstances differ, including in terms of data sources, business structures, survey systems, legal frameworks and statistical capacity. Instead, the aim is to provide a common foundation that can be adapted to national circumstances while strengthening international comparability.

One of the central messages is that e-commerce should be understood as a way of placing and receiving orders, not as a sector. It cuts across industries, products, firm sizes and markets. This makes it both broadly relevant and challenging to measure, and also means that e-commerce statistics can contribute to wider work on digital trade, digital supply and use tables, national accounts, business digitalisation and SME development.

I would like to warmly thank all members of TG-eCOM for their time, expertise and openness in sharing national practices and challenges. The strength of these Guidelines comes from that exchange of experience. I am also grateful to UN Trade and Development for convening and supporting the work of the Task Group, and to all those who contributed evidence, examples and technical inputs along the way.

I hope these Guidelines will help more economies produce robust, useful and internationally comparable statistics on the value of e-commerce, and support better understanding of how digital ordering is shaping economic activity.

Dr. Siriphan Wichaidit
Chair, Task Group on measuring e-commerce value
Electronic Transactions Development Agency, Thailand

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Acronyms

AI	Artificial intelligence
API	Application Programming Interface
ATM	Automated teller machine
B2B	Business-to-business
B2C	Business-to-consumer
B2G	Business-to-government
BPM7	Seventh edition of the Balance of Payments and International Investment Position Manual
C2C	Consumer-to-consumer
CIC	Card issuer country
CIF	Cost, insurance and freight
COVID-19	Coronavirus disease 2019
DIP	Digital intermediation platform
DSUT	Digital supply and use table
EDI	Electronic data interchange
ERP	Enterprise resource planning
EU	European Union
Eurostat	Statistical Office of the European Union
FOB	Free on board
GDP	Gross domestic product
GST	Goods and services tax
ICT	Information and communications technology
IFRS	International Financial Reporting Standards
IMF	International Monetary Fund
IMTS	International merchandise trade statistics
IOs	International Organisations
ISIC	International Standard Industrial Classification of All Economic Activities
ITU	International Telecommunication Union
LDCs	Least developed countries
MCC	Merchant category code
MLC	Merchant location code
MNE	Multinational enterprise
MSITS	Manual on Statistics of International Trade in Services
MSMEs	Micro, small and medium-sized enterprises
NSO	National statistics office
OECD	Organisation for Economic Co-operation and Development
PDF	Portable document format
QR	Quick response
SDMX	Statistical Data and Metadata eXchange
SIM	Subscriber identity module
SME	Small and medium-sized enterprise
SNA	System of National Accounts
SPC	Pacific Community
TG-eCOM	Task Group on measuring e-commerce value
UN	United Nations
UNECE	United Nations Economic Commission for Europe
UNCTAD	United Nations Conference on Trade and Development
UNECLAC	United Nations Economic Commission for Latin America and the Caribbean
UNESCAP	United Nations Economic and Social Commission for Asia and the Pacific
UNSD	United Nations Statistics Division
VAT	Value added tax
WCO	World Customs Organization
WPDEMA	OECD Working Party on Digital Economics, Measurement and Analysis
WTO	World Trade Organization

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Consolidated recommendations

This section brings together the recommendations from each chapter in one place. It gives readers a quick way to review the main guidance in these Guidelines and Recommendations, while keeping the chapter structure so that each recommendation can be traced back to the discussion that supports it.

User needs for e-commerce value statistics

1) It is recommended that NSOs actively engage prospective users of e-commerce value statistics including policymakers, businesses, academics and other research users, and any other key stakeholders. This engagement has the aim of developing the political will needed to secure support and resources for the development and on-going production of e-commerce value statistics through awareness raising and establishment of user needs.

2) It is recommended that e-commerce statistics should seek, as far as feasible, to provide information on the total value of e-commerce sales and purchases, together with relevant breakdowns by economic activity, product, customer or seller location (including domestic and international transactions), customer type, firm size, firm structure and, where relevant, subnational location or other dimensions reflecting national priorities. However, national needs and priorities should be taken into account, especially where the resources available will not allow for all elements to be collected.

3) Where it is not possible to compile statistics on both e-commerce sales and purchases, it is recommended to prioritise measuring e-commerce sales.

4) A minimum collection and publication frequency of every two years is recommended. Compilers should also give attention to the timely dissemination and clear communication of key results so that the statistics can effectively support policy, analysis and public understanding.

5) Compilers should assess, in light of national legal frameworks, market conditions, user needs, resources and measurement feasibility, the coverage of registered or otherwise formalised unincorporated household market enterprises and whether to extend the scope of e-commerce statistics to informal-sector unincorporated household market enterprises. In all cases, the population represented by the statistics and any exclusions or partial coverage should be clearly communicated to users.

Scope of e-commerce

6) It is recommended to follow the OECD definition of e-commerce and accompanying guidelines for interpretation (OECD, 2025).

7) Any deviation from the OECD definition should be acknowledged and clearly communicated to users.

8) E-commerce should not be framed as a "sector". It is a means of placing and receiving orders that cuts across firms of all sizes, all economic activities, and all products.

9) Compilers should be aware that only a subset of business e-commerce sales occur B2C (often the minority by value). Steps should be taken to ensure that other flows, especially B2B, are included in the measurement of business e-commerce sales. The publication of breakdowns by customer type should reflect user needs and measurement feasibility.

10) Where they are measured, it is recommended that orders placed through unstructured processes such as email and online message conversations should be reported separately from transactions meeting the definition of e-commerce.

Complementing and contextualising the e-commerce concept

11) Where the needs of policy and measurement discussion extend beyond e-commerce per the OECD definition (i.e. orders conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders), it is recommended that the following terminology is used consistently:
    a. *"Other remote online orders"* to refer to orders placed over computer networks by methods not specifically designed for the purpose of receiving or placing orders (including unstructured exchanges of manually typed or recorded voice/video messages);
    b. *"On-premises online orders"* to refer to orders placed over computer networks through on-premises mechanisms such as kiosks or QR codes; and
    c. *"Online orders"* to refer more broadly to all orders placed over computer networks, including e-commerce, other remote online orders, and on-premises online orders.

    This can help to reduce ambiguous or conceptually incorrect use of the term "e-commerce", while preserving the OECD definition as the primary concept and statistical standard.

12) Efforts to measure buying and selling online should first and foremost focus on the production of robust and internationally comparable statistics on e-commerce. However, where other remote online orders and / or on-premises online orders are of policy interest, compilers are encouraged to measure them as complementary items.

13) Where other remote online orders and / or on-premises online orders are measured, they should be recorded and reported strictly separately from e-commerce transactions in all statistical outputs, especially those intended for international comparability purposes, thereby upholding the integrity of the 2025 OECD definition of e-commerce.

14) Where published statistics labelled as "e-commerce" unavoidably include other remote online orders and / or on-premises online orders, this should be clearly communicated to users.

Valuation of e-commerce transactions

15) E-commerce sales should be valued in accordance with the statistical definition of turnover, comprising the total value of market sales of goods and services to third parties. Most importantly, this implies reporting e-commerce sales net of amounts collected in respect of sales taxes such as VAT and of price reductions, rebates and discounts.

16) E-commerce purchases should be valued based on the values recorded in the purchaser's accounts.

17) Priority should be given to measuring e-commerce sales, with e-commerce purchases treated as a complementary extension where feasible.

18) Differences in valuation should be considered when making international comparisons and appropriately communicated to users.

Applying the definition of e-commerce and identifying the value to be recorded

19) Any good or service product can be digitally ordered. This remains true even where the term "order" is not generally used in relation to the product or activity concerned; terms such as bookings, reservations, subscriptions, accounts or contracts may be used instead.

20) All turnover arising from an order conducted over computer networks and by methods specifically designed for receiving or placing orders should be counted toward e-commerce, regardless of the industry or product concerned.

21) The definition of e-commerce should be applied at the level of individual transactions. As far as possible, broad assumptions applied at higher levels should be avoided. For example, if a firm makes some e-commerce sales, it should not be assumed that all its sales count as e-commerce. Nor should compilers infer, from product type, industry, or the general character of a platform or app, either whether a transaction is e-commerce or the type of customer involved (for example B2C or B2B/G).

22) Transactions that do not give rise to monetary payments are not of relevance to e-commerce value statistics and therefore should not be estimated for inclusion.

23) Where relevant to user needs and feasible given data availability and respondent burden, it is recommended to distinguish web sales through sellers' own websites or apps from those through e-commerce marketplaces.

24) EDI-type orders placed through machine-to-machine messages sent between business systems should be explicitly addressed in e-commerce data collections, with explanation of their link to enterprise resource planning (ERP) and other software for managing business processes. Where feasible, EDI-type sales should be collected and reported separately from web sales, to support correct measurement of

e-commerce and avoid under-coverage of this important form of digitally ordered transactions.

25) It is recommended that e-commerce should be sub-classified into domestic and international transactions according to the residence of the buyer and seller. This supports the measurement of digitally ordered trade in accordance with the Handbook on Measuring Digital Trade (IMF, OECD, UNCTAD, and WTO, 2023). However, compilers should be aware that valuation of turnover adopted in e-commerce value statistics does not directly align with the CIF or FOB valuation bases applied in trade statistics.

26) That a service is digitally delivered should not be treated as indicative of digital ordering. Digital ordering and delivery are separate concepts and should be assessed separately.

27) Where a digital order gives rise to multiple payments over time, such as with subscriptions for telecommunications, streaming media, utilities, periodic delivery of goods, etc., both the initial payment and subsequent payments should be treated as digitally ordered (e-commerce) and recorded in the relevant reporting periods.

28) For operators of digital intermediation platforms (DIPs), e-commerce sales should be distinguished between: (i) sales of digital intermediation services in respect of transactions between third-party buyers and sellers, recorded at the value of fees or commissions recognised as the operator's sales revenue; and (ii) any direct sales of goods or services made by the DIP operator in its own right, recorded at the sales revenue recognised by the operator. Gross merchandise value or gross transaction value, if collected, should be reported only as a separate item and not as the operator's e-commerce sales.

29) For businesses making sales through DIPs, the gross value of those sales of goods and services to buyers should be recorded as e-commerce sales. Any fees paid to the DIP for digital intermediation services should be recorded as e-commerce purchases.

30) For buyers using DIPs, e-commerce purchases should in principle be distinguished between: (i) purchases of the good or service being intermediated; and (ii) purchases of digital intermediation services, where these are paid for by the buyer. Measurement of e-commerce purchases through DIPs from the buyer side should generally be treated as a complement to, rather than a substitute for, measurement from the perspective of sellers and DIP operators.

31) Where it is not known whether fees for digital intermediation services are paid by the buyer, the seller, or both, they are assumed to be paid by the seller, in line with the treatment set out in the Handbook on Measuring Digital Trade (IMF, OECD, UNCTAD and WTO, 2023).

32) For transactions taking place through DIPs, the residence of the buyer, seller and DIP operator should be established wherever possible. This is necessary for the correct

recording in digital trade statistics of both the underlying sale of the good or service and the associated digital intermediation service.

33) Transactions involving social media platforms or messaging apps should not be classified by reference to the platform alone. The decisive issue is the role the platform plays in the order, namely whether it functions only as a marketing channel, as a structured ordering interface, or as a medium for unstructured communication between buyer and seller. This should be assessed at the level of individual transactions.

34) Where social media or livestream selling is used only to direct buyers to a seller's website, app or online marketplace listing, the resulting transactions should be classified according to the final ordering channel, the role of social media in attracting the buyer is not directly relevant. Compilers should not rely on the mere use of social media for promotion as evidence that a sale was digitally ordered.

35) Where a social media platform or messaging app provides structured ordering features through which buyers can place orders directly within the platform or app, the resulting transactions should be treated as e-commerce. In such cases, the platform is likely to be acting as a DIP.

36) Where orders agreed through manually typed, voice or video messages sent through social media platforms or messaging services are measured, they must be reported separately from e-commerce, as other remote online orders.

37) Payments to government should be counted toward e-commerce only where they represent the purchase of a specific good or service rather than a tax or other compulsory transfer, and where the order is placed over a computer network by methods specifically designed for receiving or placing orders. This includes fees, charges and licence payments only where they are made in return for a specific service and are not mainly regulatory or revenue-raising in character.

38) Government e-procurement transactions should be counted toward e-commerce where a specific order for goods or services is placed over a computer network by methods specifically designed for receiving or placing orders, including call-off orders placed through procurement portals, internal catalogues, marketplace-type interfaces or EDI-type systems under framework contracts or similar arrangements. By contrast, the digital publication of tenders and the electronic submission of bids are part of supplier selection and are not in themselves sufficient to make the resulting transaction e-commerce.

39) Government e-procurement systems may provide a useful source of data on e-commerce purchases by government and, in some cases, mirror data on B2G sales. However, compilers should not assume that all government e-commerce purchases pass through such systems, and should take care to distinguish domestic from foreign suppliers and to avoid double counting where the same transactions are already captured from business-side data.

40) Variations in ordering interfaces or transactional features do not create separate classification rules. App stores, in-app purchases and online bidding systems fall within e-commerce where they function as structured digital ordering systems; and features such as product customisation fields or digital signatures should be interpreted according to the role they play in the ordering process rather than taken as decisive in themselves.

41) Orders placed through unstructured online message conversations between buyer and seller, including exchanges of manually typed or recorded voice or video messages, do not meet the definition of e-commerce, because they are held through general-purpose communications tools rather than methods specifically designed for receiving or placing orders. Where measured, orders placed via these methods must be recorded and reported as other remote online orders.

42) Sector-specific applications such as financial, insurance and pension services, mobile money, utilities and higher education are established according to the same general ordering logic as other transactions. The sector concerned, or the use of different language for "ordering" (such as opening accounts or policies, subscribing or entering a contract for services, etc.), does not alter the need to determine whether a specific good or service was digitally ordered and gave rise to a transaction (or multiple transactions) to be recorded as e-commerce.

43) Transactions involving chatbots, voice assistants and AI agents are classified according to the same core ordering logic as other transactions. Where these tools are used to place or receive orders through digital systems specifically designed for receiving or placing orders, the resulting purchases and sales should be treated as e-commerce. The fact that the order is initiated, received, routed or executed by software does not in itself alter the classification.

44) Where a digitally ordered sale involves additional parties in fulfilment or supply arrangements, it is recommended that the customer-facing sale be distinguished from any related transactions with those additional parties. In cases such as drop shipping, parcel forwarding and bundled services, the e-commerce definition should be applied separately to each contract or transaction. The customer-facing sale should be classified according to how the customer placed the order and valued according to whether the seller acts as principal or agent, while additional related fulfilment, forwarding or bundled service transactions should be counted as e-commerce only where they are themselves digitally ordered.

45) It is recommended that crowdfunding, charitable donations, cashback portals, gift cards and creator-platform payments be assessed by reference to the underlying economic transaction. Payments should be counted toward e-commerce only where they represent digitally ordered purchases of specific goods or services; donations, transfers, cashback or referral rewards, and stored-value arrangements should be distinguished from such purchases and should not be treated as e-commerce sales merely because they occur online.

46) When a fee is levied for services involving transferring money, such as mobile money top-ups and transfers, crowdfunding, or charitable donations, and these transfers are ordered or instructed through digital channels, the fees charged should be reported as e-commerce turnover. However, the amounts transferred are not sales revenue of the service provider and should not be recorded as e-commerce.

Coverage of statistics on the value of business e-commerce

47) It is recommended that statistics on the value of business e-commerce sales and purchases should, as far as feasible, cover or be representative of the full population of businesses in the economy, so that they support comprehensive measurement of digitally ordered transactions by businesses.

48) Where full coverage is not feasible, compilers should minimise curtailments to coverage as far as resources, legal mandates and respondent burden allow. Decisions to exclude or partially cover particular industries, firm-size classes, institutional groups or other parts of the business population should be based on evidence of their likely materiality for the measured value of business e-commerce, rather than on assumptions about digitalisation alone.

49) In assessing coverage options, compilers should draw on relevant evidence and expertise, including business register information, previous survey results, administrative data, industry knowledge and consultation with major firms, industry bodies or regulators. Relevant factors include the economic weight of the excluded or partially covered group, its contribution to output, turnover, employment, value added or exports, the prevalence and value of e-commerce activity, and the extent to which activity is concentrated among economically significant firms.

50) When surveys originally designed to measure ICT usage or e-commerce uptake are extended to measure e-commerce value, the frame, stratification and sample design should be reviewed to ensure that they can support robust estimation of monetary aggregates, which may be highly concentrated among larger firms, particular industries or specific types of transaction. This review should consider how information identifying enterprises engaged in e-commerce can inform stratification and sample selection.

51) Where appropriate, compilers should consider complementary or targeted data collection to improve coverage of e-commerce transactions. This may include targeted inclusion of economically significant firms in otherwise excluded industries, data collection from resident e-commerce operators, especially online marketplaces and other DIPs, or complementary approaches to cover e-commerce activity by unincorporated household market enterprises.

52) Compilers should clearly document and communicate the scope of the statistics, the rationale for any exclusions or partial coverage, and the likely implications for completeness, interpretation and international comparability. Where possible, this should include contextual information on excluded groups, including unincorporated household market enterprises where relevant, and any available evidence on their likely contribution to e-commerce activity.

53) It is recommended that the enterprise be used as the statistical unit for measuring the value of business e-commerce. Where an enterprise comprises several legal units, sales between those units should be excluded from its total turnover and e-commerce sales, and corresponding purchases should be excluded from its e-commerce purchases.

Data collection and compilation: survey sources

54) Where surveys of ICT usage in business are in place, or being implemented, it is recommended that they be used as the natural starting point for collecting e-commerce value data, by adding follow-on questions on the value of e-commerce sales and, where feasible, purchases.

55) Where ICT usage surveys are not in place, or are not well suited to collecting monetary variables, compilers should consider adding e-commerce value questions to existing business surveys that collect revenues, expenditures or other accounting variables. Such surveys may provide a strong basis for estimating monetary totals, while ICT usage surveys may remain better suited to collecting detailed information including on ordering channels, customer type and location (digitally ordered trade).

56) Surveys targeting e-commerce operators, including operators of online marketplaces and other DIPs, as well as operators of other websites or apps facilitating ordering through methods specifically designed for the purpose of placing or receiving orders, can provide a useful complementary source, especially where many MSMEs or unincorporated household market enterprises sell through online platforms rather than operating their own sales websites or apps. However, totals from operator surveys are not equivalent to total e-commerce sales by resident businesses or total e-commerce purchases by resident buyers and accordingly should be interpreted and communicated with clear explanation of their coverage.

57) Survey instruments should, as far as possible, be designed around ordering channels and value concepts that respondents can relate to their business systems and accounting records. Questions should avoid relying on respondents' own interpretation of the term "e-commerce", for example by focusing on relevant ordering channels including online marketplaces and other DIPs, other websites and apps that implement methods specifically designed for the placing and receiving of orders, and EDI-type ordering. They should also use terminology that aligns with business records, such as turnover, revenue from sales of goods and services, gross transaction value, platform fees, and principal versus agent roles.

58) EDI-type ordering should be explicitly addressed in survey instruments and guidance. Where feasible, EDI-type sales should be separately identified from other e-commerce sales, with explanation of the relationship between EDI ordering and ERP or other business management systems, to reduce the risk that high-value B2B e-commerce transactions are missed.

59) Compilers should identify and ensure coverage of units likely to have a material effect on e-commerce value totals and breakdowns, including major online sellers, firms expected to have substantial EDI-type transactions, and resident operators of online

marketplaces and other DIPs. Sampling frames may need to be supplemented using administrative data, tax records, industry knowledge, payment data, regulator information, web searches and engagement with business associations.

60) Compilers should assess whether unincorporated household market enterprises are likely to make a material contribution to online commercial sales. Where this is the case, appropriate complementary methods should be considered, such as identification through household or individual surveys or administrative data sources with suitable survey-based follow-up, or alternatively platform reporting or the use of payment data. Where they are outside the scope of the statistics, this limitation should be clearly communicated.

61) Where the legal and institutional framework allows it, mandated response can help improve coverage, reduce non-response bias and support reliable estimates for surveys used to produce official economic statistics. It should be accompanied by practical support for respondents, including clear communication on the purpose of the survey, confidentiality and use of the data; accessible help channels; structured respondent engagement such as workshops or briefing sessions; and, where feasible, feedback mechanisms that provide respondents with useful information in return for participation.

62) Survey implementation should ensure that the right people within the enterprise are involved in providing information or completing the survey. Instructions should make clear that monetary e-commerce value questions may require input from sales, finance, accounting, procurement or business analytics staff, not only ICT contacts. For large or complex enterprises, separate contacts or questionnaire modules may be needed, and large-case units or similar arrangements should be used where available.

63) Compilers should apply validation, editing, imputation, weighting, grossing-up and quality-assessment procedures appropriate for monetary business statistics, in accordance with established best practices. Particular attention should be given to influential values, non-response by high-impact units, consistency between totals and breakdowns, calibration to relevant auxiliary variables where available, avoidance of double counting across sources, and metadata explaining coverage, valuation, methods and limitations.

Data collection and compilation: non-survey sources

64) Non-survey sources should be assessed as potential inputs to e-commerce statistics, either as primary sources for specific components of e-commerce value or as complements to survey-based estimates. Their suitability should be evaluated against the concepts required for e-commerce statistics, including coverage, valuation, residence, ordering method, transaction value and statistical unit.

65) Card payment data are recommended as a particularly promising source for measuring an important subset of e-commerce, especially where card payments are widely used to confirm online orders and transaction-level data include information such as card-present/card-not-present status, merchant category codes, merchant

location, card issuer country, merchant name and transaction value. Such data can offer advantages in timeliness, frequency, granularity and reduced respondent burden.

66) Before adopting card payment data for e-commerce measurement, compilers should assess the role of payment cards in the national e-commerce ecosystem. This should include card ownership and usage among households, businesses and other organisations, and the extent to which cards are used by these customer groups to pay for e-commerce orders, and the coverage of the available card payment dataset across issuers, acquirers, payment processors, networks and merchant types.

67) The coverage of statistics based on card payment data should be carefully assessed and clearly described to users. They should not be presented as measures of total e-commerce sales, or of total B2C e-commerce sales by businesses, unless supported by additional sources and adjustments. Card payment data will cover only the subset of e-commerce transactions that are paid by card and will exclude orders paid by credit transfer, mobile money, cash on delivery, wire transfer or other payment channels. In particular, this is likely lead to substantial under-coverage of B2B e-commerce.

68) Compilers using payments data should work closely with central banks, financial regulators, payment system operators, card issuers, acquiring banks, payment processors and card network operators to secure access to suitable data and improve the statistical usefulness of reporting. Particular attention should be given to obtaining or developing indicators that help identify likely digitally ordered transactions, merchant activity, buyer and seller location or residence, and the treatment of intermediary fees, taxes and ancillary charges.

69) Where card payment data or other payments data are used, compilers should combine automated processing with validation and expert review, and should clearly document the classification rules, assumptions and adjustments applied. Particular care is needed in relation to card-not-present transactions, merchant category codes, large multi-service merchants, digital intermediation platforms, residence of the merchant and buyer and transactions that can appear cross-border in payment data but are resident-to-resident in economic terms.

70) The identification of digitally ordered merchandise shipments is a promising approach for measuring (the bulk of) international e-commerce in goods. It is recommended for compilers of e-commerce statistics to work with customs authorities to implement the systematic identification of merchandise shipments that were ordered via e-commerce as a basis for measuring the digitally ordered merchandise trade component of overall e-commerce, in accordance with the Handbook on Measuring Digital Trade (IMF, OECD, UNCTAD, and WTO, 2023).

71) Statistical agencies should engage with tax authorities and other bodies responsible for e-invoicing systems to ensure that, where feasible, structured information on the ordering channel is incorporated into e-invoice requirements. In particular, systems should allow e-commerce orders to be distinguished from non-e-commerce orders

and, ideally, identify whether orders were placed through online marketplaces and other DIPs, other websites or apps, or EDI-type systems.

72) Other non-survey sources may be most useful in a complementary role. For example, web-scraped data may be helpful to identify the operators of websites that have e-commerce features, so that these can be included in survey frames or classified accordingly in payment data.

Analysis and dissemination of statistics on e-commerce value

73) The dissemination of e-commerce value statistics should be designed around the needs of different key user groups, using complementary products such as analytical reports, online databases and downloadable data tables. Analytical reports should be used to communicate key findings, visualisations, narratives and interpretation, while databases and tables should provide direct access to the underlying statistical series for reuse and further analysis.

74) Online databases and downloadable tables should be designed with reuse in mind, including stable time series, clear variable labels, consistent classifications, machine-readable formats where feasible, and metadata presented alongside the data. Relevant international guidelines and best practices should be followed, such as those in the Handbook on Management and Organization of National Statistical Systems (United Nations, 2025) and the Generic Statistical Business Process Model (UNECE, 2025).

75) All statistical products on e-commerce value must include sufficient explanatory information to support correct interpretation. This should cover, at minimum, the e-commerce concept used; ordering channels covered; population, statistical units and reference period; valuation basis; available breakdowns; data sources and compilation methods; quality limitations; confidentiality treatment; and any deviations from international guidance.

76) Statistics on other remote online orders, where compiled, must be published separately (i.e. as separate items) from statistics on e-commerce, with clear explanation of both concepts and the relationship between them. It is not recommended to publish a total incorporating other remote online orders alongside the value of e-commerce orders.

77) It is recommended that e-commerce value statistics be published both in monetary values and as shares of enterprise turnover. Where legal frameworks, statistical capacity and disclosure control arrangements permit, controlled access to anonymised or de-identified microdata including e-commerce value variables should also be considered for accredited researchers or approved analytical users.

78) When presenting e-commerce value statistics as ratios or other normalised indicators, compilers should choose denominators suited to the analytical question at hand and as closely aligned as possible with the scope, valuation and statistical unit of the e-commerce measure. Total enterprise turnover is the recommended starting point for comparisons across industries, firm-size classes and economies.

Other denominators, including the number of enterprises, GDP, value added, employment, trade flows or population, should be used with care and accompanied by clear explanation of their interpretation and limitations.

79) It is recommended that national statistical offices and other competent agencies take account of international dissemination needs when designing national outputs. This includes providing machine-readable tables, stable series identifiers, clear metadata, information on revisions or breaks in series, and sufficient detail to support ingestion, verification and re-dissemination by international organisations. Where feasible, international data and metadata exchange standards such as SDMX should be used to support efficient and interoperable transmission.

Chapter 1. Introduction

1.1 The digital revolution has transformed the global economy, with e-commerce emerging as a key element of the digital economy and driver of business activity, economic growth, and trade. As businesses and their customers, which include other businesses and organisations as well as consumers, increasingly embrace online channels for buying and selling goods and services, the volume and value of e-commerce transactions has soared. This trend has accelerated due to advancements in technology, increasing Internet penetration, and shifts in consumer behaviour, further intensified by the COVID-19 pandemic. The burgeoning prevalence of e-commerce underscores the need for statistics on the scale of economic activity facilitated through digital ordering.

1.2 However, figures on the value of e-commerce sales by businesses are only available for a limited number of economies (UNCTAD, 2024), and when such statistics are available there can be differences in the how the e-commerce concept is operationalised, restrictions on the firms covered (e.g. based on industry or firm size) and variations in the valuation of e-commerce transactions, as well as differences in the breakdowns available (UNCTAD, 2023). This has implications for the ability to make comparisons and aggregations across economies. It points to a need for internationally agreed guidelines and recommendations on measuring e-commerce value that can support additional countries in moving beyond "traditional" statistics on e-commerce uptake as well as harmonisation and comparability across countries.

1.3 To address this need, the Member States of UN Trade and Development (UNCTAD) resolved to establish a Task Group on measuring e-commerce value (TG-eCOM) to act as a forum for detailed technical discussions on measuring e-commerce value. Furthermore, through these discussions, the group would work to develop Guidelines and Recommendations on Measuring E-commerce Value. These efforts build upon vital foundations, most notably the definition of e-commerce and guidelines for interpretation developed under the auspices of the OECD Working Party on Digital Economics Measurement and Analysis (WPDEMA) and its predecessors (OECD, 2011; 2025), and the experiences of the European Community (Eurostat, 2025). These are complemented by supplementary information and guidance responsive to the varying circumstances faced by different countries and support capacity building for the development of internationally comparable e-commerce value statistics.

1.4 The proposal to establish the TG-eCOM was made at the third session of the UN Trade and Development Working Group on Measuring E-commerce and the Digital Economy in 2022 and agreed by its parent Intergovernmental Group of Experts in 2023. The TG-eCOM first met in November 2023 and continued to meet regularly in 2024 and 2025. Progress has been reported to the UN Committee of Experts on Business and Trade Statistics (UNCEBTS) and its subsidiary Task Team on Digitalisation.

1.5 These Guidelines and Recommendations represent outcomes of the technical discussions held by the TG-eCOM. They also present or make reference to various examples and experiences shared by countries through this dialogue.

1.6 E-commerce is a means of placing and receiving orders digitally that cuts across all economic activities and institutional sectors. Nevertheless, businesses are the main economic actors that engage in producing and selling goods and services, as well as also playing a central role on the demand-side as purchasers of inputs. The primary focus of these Guidelines and Recommendations is, therefore, e-commerce by businesses.

1.7 The following chapter begins by outlining the measurement needs that motivated and shaped this work.

Chapter 2. Measurement needs

2.1 Developing robust and policy-relevant statistics on e-commerce value begins with identifying the principal user groups for such statistics and the needs they are intended to serve. The usefulness of any statistical framework depends not only on conceptual soundness and methodological rigour, but also on its ability to meet concrete analytical, policy and monitoring needs. Against this background, the Task Group considered the main purposes for which statistics on e-commerce value are required and identified the following key users and use cases.

2.1 Key user groups

2.1.1 Policymakers

2.2 Statistics on the value and economic scale of e-commerce are crucial for understanding the contribution of e-commerce to economic activity. They also provide a basis from which to identify and assess the impacts of policy interventions in support of the development of e-commerce and digital trade. Statistics on e-commerce can be a key input to bilateral digital trade negotiations and multilateral initiatives such as the World Trade Organization (WTO) agreement on electronic commerce. They are therefore especially relevant to policymaking in the areas of digital economy and industrial development but also in tax, competition, consumer protection and fair-trading policy. E-commerce may also be integrated into national planning frameworks designed to promote economic activity across regions within the economy. For these purposes, several specific needs were identified.

2.3 At the most basic level, figures on the overall value of e-commerce sales by businesses are generally a minimum requirement, delivering initial insights into the economic significance of e-commerce.

2.4 Breaking this down by the customers involved can be helpful for targeting policies. Business-to-consumer (B2C) and business-to-business (B2B) e-commerce may develop at different paces. Their development can also be supported through targeted policy instruments such as online consumer protection measures or regulations establishing the application of industry standards for payments between businesses to online transactions. Furthermore, separately identifying B2C transactions within e-commerce statistics supports consumer protection and fair-trading authorities in monitoring developments in online consumer markets and identifying areas that may require policy or regulatory attention.

2.5 This also extends to e-commerce transactions involving other types of entities, namely business-to-government (B2G) e-commerce and transactions where the customer is a non-profit organizations.

2.6 Policymakers may be particularly concerned about the extent to which e-commerce transactions rely on digital intermediation platforms (DIPs). These facilitate transactions between multiple buyers and sellers, and include services commonly referred to as “online marketplaces”, as well as platforms facilitating services such as ride hailing and local delivery of food or groceries.

2.7 This points to a broader need to distinguish between the ordering channels through which e-commerce sales take place. Sales through a firm’s own website or app

may indicate direct digital capability and control over customer relationships, whereas sales via marketplaces and other DIPs may indicate dependence on third-party digital infrastructure for market access, visibility, customer acquisition and payment processing, as well as associated exposure to platform rules, fees and competitive dynamics.

2.8 Electronic Data Interchange (EDI)-type sales, by contrast, are more closely linked to business-to-business supply chains, procurement systems and integration into production networks, raising distinct issues related to interoperability, standards, supplier access and small and medium-sized enterprise (SME) participation.

2.9 Distinguishing these channels therefore helps enable policy responses that are tailored to the differing ways in which firms participate in e-commerce.

2.10 Policy interest may also extend to online sales that fall outside the definition of e-commerce outlined in Chapter 3, notably orders agreed through email or unstructured online message conversations through messaging apps or social media platforms. Such orders can be economically significant in some economies, especially where they provide a low-barrier route for firms and informal sellers to begin taking orders online. These raise distinct policy issues around business digitalisation, consumer protection, payment security, dispute resolution and the transition toward more formalised online sales channels. Such orders should not be included in e-commerce statistics, but may be subject to complementary measurement efforts to provide a fuller picture of online selling activity, as discussed in Chapter 4 under "other remote online orders".

2.11 The extent, composition and policy significance of e-commerce are also likely to vary across products and industries. Industry breakdowns therefore help users interpret aggregate figures and design policies that reflect sector-specific conditions. Product breakdowns are also important: while broad product classes within B2C e-commerce may suffice for consumer protection and fair-trading policy, trade policymakers can benefit from more detailed information to identify sectors with export potential or facing competitive pressures from digitally ordered imports.

2.12 Firm size is another key dimension. E-commerce uptake is generally higher among large enterprises, while SMEs are often a focus of policies to support digital adoption and market access. Breakdowns by firm size will therefore support both policy design and monitoring.

2.13 A final important characteristic is the "market" dimension, referring to whether an e-commerce transaction takes place domestically or internationally. The available evidence suggests that only a minority of e-commerce sales take place cross-border (UNCTAD, 2024). Nevertheless, the ease and convenience afforded by digital ordering, which reduce the costs of trade, mean that digitally ordered trade will likely continue to grow in importance.

2.14 One reason for delineating digitally ordered exports from within total business e-commerce sales is that these transactions may face additional frictions. They can therefore benefit from specific policy actions such as establishing that export credit guarantees apply in the case of orders placed digitally, or specific facilitation procedures to smooth the handling of digitally ordered merchandise shipments. Statistics on digitally ordered exports also promise insights into whether digital ordering mainly acts to make

pre-existing trade flows more efficient or promotes additional exports, with differing potential policy implications.

2.15 Digital ordering also impacts the import side. By value, in most e-commerce transactions both the seller and buyer are businesses (UNCTAD, 2024). It is likely that this extends to international e-commerce transactions but statistics on imports digitally ordered by businesses are needed to understand the role that digital ordering is playing in enabling businesses to access inputs at lower prices from abroad, and to assess whether this is resulting in substitution away from local producers.

2.16 Further details on digitally ordered export and import flows, including the trading partners involved and the products being traded, are particularly relevant in the context of negotiating and implementing international trade agreements. Such information is used to identify where digital ordering is facilitating market access, which sectors and products are most affected, where competitive pressures from digitally ordered imports need to be managed and where there is scope for fruitful trade between the negotiating parties.

2.17 The international dimension of e-commerce is also linked to firm structures. Along with e-commerce transactions between the residents of different economic territories, those conducted by foreign-owned subsidiaries fall within the scope of the work programme on electronic commerce at the WTO and the associated trade negotiations. The same applies to other trade agreements with provisions related to e-commerce and digital trade. Breaking down business e-commerce sales according to firm ownership can therefore also be of relevance.

2.18 Taken together, these needs highlight the importance of e-commerce value statistics not only as headline indicators of digital economic activity, but also as tools for policy design, monitoring and evaluation. For policymakers, the value of such statistics lies in their ability to show where digital ordering is taking place, which firms and sectors are involved, how domestic and international markets are affected, and where policy support or regulatory attention may be needed.

2.1.2 Businesses

2.19 Identifying trends in e-commerce helps businesses adapt, make investment decisions and compete effectively in domestic and international markets.

2.20 Business can especially benefit from detailed statistics not only on e-commerce in specific industries such as retail but on retailing of specific products such as clothing or household goods. This facilitates business users in understanding market dynamics and identifying opportunities for growth as well as playing an important role in making business cases to secure financing.

2.21 SMEs can particularly stand to benefit from the better availability of detailed statistics on e-commerce sales to identify market opportunities. At the same time, the market insights offered by e-commerce statistics can also support investment decision-making, including by multinationals looking to identifying opportunities and engage in foreign direct investment (FDI). Information on the sizes of firms engaging in e-commerce is of use alongside industry and product details.

2.1.3 Research and analysis (including statistical needs)

2.22 Statistics on e-commerce are used for various analyses to understand market trends, consumer behaviour, and the overall impact of e-commerce on the economy, including through analysis of links to business productivity.

2.23 A key channel for analysis is through the incorporation of e-commerce as a dimension in macroeconomic statistical frameworks. In both the framework for digital supply and use tables (DSUTs) (OECD, 2023) and that for digital trade (IMF, OECD, UNCTAD, and WTO, 2023), digital ordering – synonymous with e-commerce ordering – is one of two "natures of the transaction" which can denote a transaction as "digital" (the other is being digitally delivered). As such, it becomes crucial to know the value of both business output (or exports) and inputs (imports) that are digitally ordered. Furthermore, it is relevant to identify the subset of these transactions occurring through DIPs.

2.24 Information on products being digitally ordered is highly relevant in both these frameworks.

2.25 For integration in macroeconomic statistical frameworks, both monetary values and shares of enterprise turnover are useful: the former support direct incorporation into accounting and trade measures where appropriate, while the latter can serve as allocation factors for estimating digitally ordered activity from relevant industry, product and enterprise totals.

2.1.3.1 Digital supply and use tables

2.26 Supply and use tables have a structure in which the columns of the table represent different industries while the rows represent the different products those industries produce. In the digital supply and use table (DSUT) framework, the digital ordering nature is implemented as a breakdown within the product rows which splits the total supply of each product according to the channel through which it was sold (i.e. digitally ordered or not) as shown in **Table 1**. At the same time, the structure of the table requires that the supply of products sold through these various channels can further be broken down by industry.

Table 1. Transaction types in Digital Supply and Use Tables: accommodation services example

Accommodation services	
A	Digitally ordered
A_i	Direct from a counterparty
A_ii	Via a DIP
A_i_1	Via a resident DIP
A_i_2	Via a non-resident DIP
B	Not digitally ordered

Source: (OECD, 2023)

2.27 As supply and use tables cover not only the supply of products but also their use, it is also relevant to break down business purchases of intermediate inputs according to whether they are digitally ordered or not. As such data are needed not only on businesses' e-commerce sales but on their purchases made via e-commerce. More generally,

statistics on digital ordering by businesses offer a complementary perspective on the digitalisation of economic activities and supply chains.

2.1.3.2 Digital trade

2.28 With respect to measuring digital trade, the "market" dimension of e-commerce is crucial because it identifies whether a digitally ordered transaction crosses an international border.

2.29 In this context, digitally ordered trade consists of e-commerce transactions in which the buyer and seller are resident in different economic territories, regardless of whether they are businesses, consumers, government bodies or other entities (IMF, OECD, UNCTAD, and WTO, 2023). Residence refers to the economic territory with which an institutional unit has its strongest economic connection, or centre of predominant economic interest; it is not necessarily the same as nationality, ownership or the location of the website or platform through which the transaction is arranged (IMF, 2025).

2.30 For statistics on bi-lateral digital trade flows, the international market category can be further broken down according to individual trading partners or regions, with the level of detail calibrated according to policy needs.

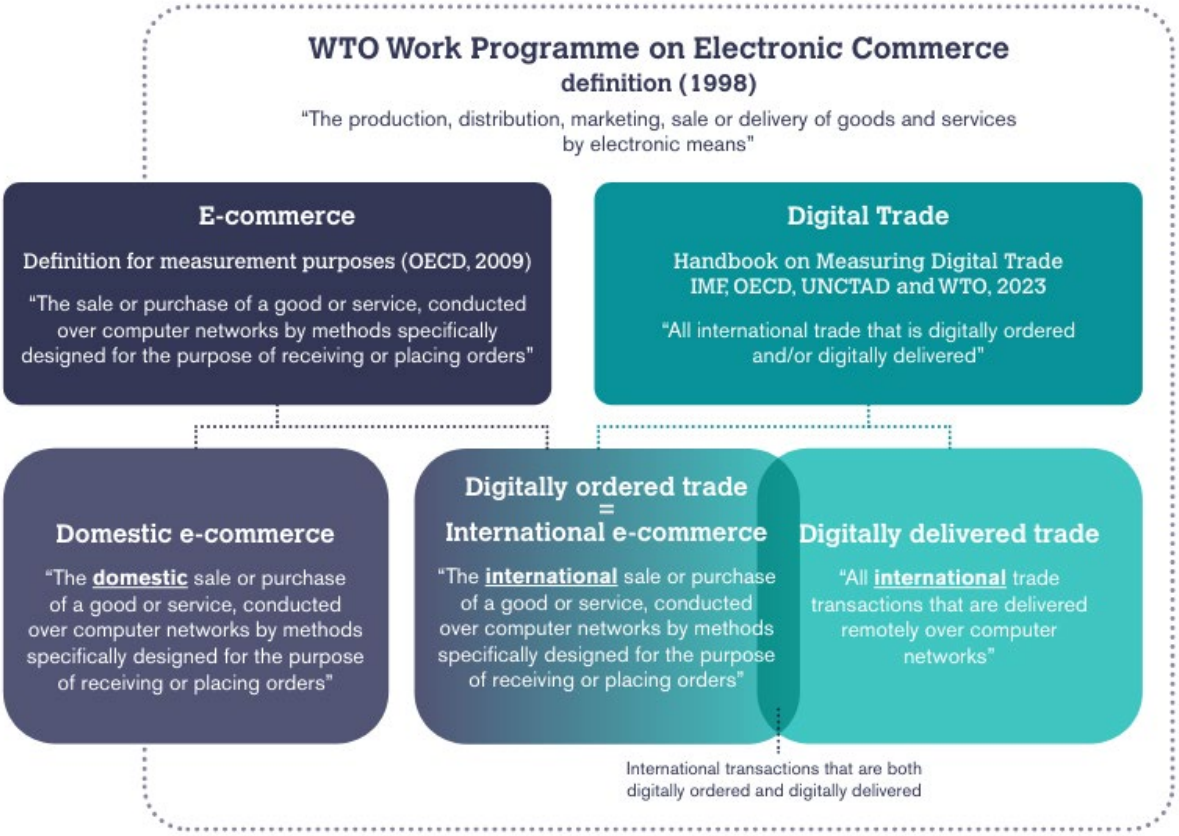
2.31 Product information is also a key enabler for calculating total digital trade.

2.32 Digital trade comprises two components: digitally ordered trade and digitally delivered trade, as shown in **Figure 1**. These components are not mutually exclusive. For example, digitally delivered services products including software, cloud services, streaming media, and telecommunications services are often also digitally ordered. And services that can be digitally ordered, such as consulting, research, health and educational services are increasingly delivered digitally over the Internet.

2.33 Simply adding digitally ordered trade to digitally delivered trade would therefore overstate total digital trade by counting such transactions twice. Product information, such as a breakdown between e-commerce sales of goods, digitally delivered services, and other services, is needed to identify which digitally ordered transactions relate to services that are also digitally delivered, so that appropriate adjustments can be made to mitigate double counting. This makes product detail especially important when using e-commerce statistics as an input to digital trade measurement.

2.34 Product information allowing e-commerce sales of goods, digitally delivered services and other services to be distinguished from one-another, supports the adjustments necessary to avoid double counting when compiling total digital trade. This detail is therefore especially important in enabling e-commerce statistics to be used in the context of digital trade measurement.

Figure 1. The relationship between e-commerce and digital trade



Source: (IMF, OECD, UNCTAD, and WTO, 2023)

2.1.4 International organisations

2.35 International organisations (IOs) make extensive use of e-commerce statistics in assessments and analyses that inform national and international discussions and agreements. Such statistics provide a basis for comparing the scale, composition and development of e-commerce across economies, identifying gaps in measurement and data availability, and supporting analysis of issues such as digital trade, business digitalisation, market access, participation of SMEs, women, and other groups and the integration of developing economies into digitally enabled markets. They also help IOs to monitor progress against policy objectives, prepare global and regional reports, and provide evidence for capacity-building, technical assistance and international cooperation.

2.36 Related to this, several IOs maintain databases of statistics on e-commerce and other aspects of ICT usage in enterprises produced by National Statistics Offices (NSOs) and other competent agencies into a standardised structure and format. This makes IOs a key user, and also disseminator, of e-commerce statistics.

2.37 The UN Trade and Development international database of statistics on the value of e-commerce sales by businesses presents figures expressed in monetary values and / or as a percentage of enterprise turnover, depending on data availability. Dimensions include the type of e-commerce sales (B2B/G/C; web sales / EDI-type sales), and the e-commerce sales market (e.g. domestic / international), as well as enterprise size, economic activity.

2.38 The aim is for all 195 UN Trade and Development Member States to be represented i.e. global coverage. However, as of May 2026 the only 49 developing and developed economies are covered, with significant further limitations to availability across years and variation in the availability of breakdown items. Africa, the Caribbean, and the Pacific remain entirely unrepresented, as are the least developed countries (LDCs).

2.39 The OECD also maintains a database on ICT Access and Usage by Businesses, which covers OECD Member States and partner economies, and includes indicators on the uptake of e-commerce and value of sales as a share of turnover. Both the UN Trade and Development and OECD databases also integrate data from the Eurostat Digital Economy and Society Database, which covers EU Member States and various partner economies.

2.40 Expanding country coverage requires a coordinated effort linking national implementation plans to international and regional support, with particular attention to developing countries, least developed countries and unrepresented regions. National statistical offices and other competent agencies should identify their measurement priorities and capacity constraints, while international and regional organisations should coordinate technical assistance around those needs. Shared guidance and training materials based on these *Guidelines and Recommendations*, regional exchanges of practical experience and follow-up support through survey testing, compilation and dissemination can help countries establish sustainable statistical production. Coordination should seek to avoid duplication and track progress in the availability of regular, internationally comparable statistics, rather than training participation alone.

2.1.5 Journalists

2.41 Finally, journalists were also highlighted as a relevant user group, with it being noted that they are predominantly interested in high-level national or sectoral headlines. Compilers can support journalists and other users with short, accessible statistical news briefs that explain key messages from e-commerce statistics. Sharing or promoting these briefs through social media can help make key statistical messages accessible to a wider audience.

2.1.6 Summary of key data needs

2.42 The above discussion of key users highlighted various specific data needs. **Table 2** presents an overview of details that statistics on e-commerce sales and purchases by businesses should generally seek to provide to meet the needs identified. Given the broad relevance of statistics on e-commerce sales, these should be a particular priority.

2.43 In addition, users need e-commerce value statistics in forms that support both interpretation and reuse. Monetary values are needed to assess the overall economic scale of e-commerce and to incorporate the statistics into other statistical sources and macroeconomic frameworks, while shares of enterprise turnover help users compare the relative importance of e-commerce across firms, industries and economies. For this reason, where feasible, e-commerce value statistics should be made available both in monetary values and as shares of enterprise turnover.

Table 2. User needs for e-commerce value statistics

Total e-commerce sales	Total e-commerce purchases
- by economic activity (i.e. ISIC Rev. 5)	- by economic activity (i.e. ISIC Rev. 5)
- by product (physical goods, digitally delivered services, other services; potential further product detail e.g. according to central product classification)	- by product (physical goods, digitally delivered services, other services; potential further product detail e.g. according to central product classification)
- by market (buyer location i.e. domestic e-commerce / digitally ordered exports, including detail on trading partners)	- by market (seller location i.e. domestic e-commerce / digitally ordered imports, including detail on trading partners)
- by customer type (B2B/B2C/B2G, etc.)	
- by e-commerce channel (through online marketplaces and other DIPs / through other websites or apps / through EDI-type ordering)	
- by firm size (small/medium/large)	
- by firm structure (e.g. foreign ownership)	
- by subnational location	

Source: UN Trade and Development

2.2 E-commerce, gender and broader inclusion dimensions

2.44 E-commerce – the act of buying and selling online – is not inherently gendered, nor is it intrinsically linked to age, education, disability status, location, or the characteristics of a firm's workforce or management.

2.45 Nevertheless, participation in and benefits from e-commerce may vary systematically across these dimensions because they shape access to digital infrastructure, devices, payment mechanisms, logistics, skills, formalization, and market information. Figures from the ITU (2025) show that men systematically use the Internet more than women and are more likely to engage in online selling. However, shopping online is in general more common among women than among men.

2.46 At the same time, e-commerce can lower entry barriers to economic activity by offering increased flexibility and providing access to wider markets. This gives e-commerce powerful potential as a tool for economic empowerment of women and other groups that face barriers to engaging in economic activity. For example, research (UNCTAD, 2025) has found that "women across the global South are increasingly turning to digital entrepreneurship as a pathway to economic empowerment, innovation and community impact." However, "those opportunities are not equitably distributed" and structural constraints can still limit these benefits. Supporting women-led digital businesses is "not only a matter of equity, but also a strategic imperative for inclusive and sustainable development".

2.47 For policymakers, this means that aggregate e-commerce statistics, while essential, may not by themselves reveal whether opportunities and constraints are distributed evenly across population groups, subnational locations, or types of businesses. Where feasible and relevant to national priorities, compilers may therefore seek to complement headline e-commerce value statistics with appropriate disaggregations or linked indicators that shed light on inclusion and disparities, while remaining mindful of data availability, quality, respondent burden, and the limits of what can be robustly inferred from existing sources.

2.48 When it comes to businesses, UN Trade and Development guidance promotes using business registers, employer-employee data, surveys and other sources to assess the gender composition of the firm's ownership, management and workforce (UNCTAD, 2023a). By defining thresholds for these, such as where women are the majority, firms can be categorised as "women owned", "women led", etc. Variations in the propensity to engage in e-commerce and digital trade, and the e-commerce value generated can then be compared between firms that do and do not meet these thresholds.

2.3 Frequency and timeliness

2.49 In most economies, e-commerce statistics delivered at one-to-two-year frequency have proven sufficient to meet most user needs. Annual e-commerce value statistics are preferable for monitoring developments, but collection every two years provides a practical alternative where resources or respondent burden constrain frequency. Countries collecting data less frequently are encouraged to move towards at least biennial collection and publication. The aim is to establish sustainable, regular statistics while balancing user needs, resources and respondent burden. Some TG-eCOM participants have also identified demand for quarterly or monthly statistics; such needs should be assessed against these considerations.

2.50 In many economies, e-commerce value statistics become available by the end of the year following the reporting year. This can be considered a relatively short time lag in the context of business and economic statistics.

2.51 In addition to publication frequency, users may also require timely communication of the main messages emerging from newly released data. Clear dissemination through concise commentary, charts and headline indicators can therefore significantly enhance the practical usefulness of e-commerce statistics, especially for policymakers, journalists and businesses.

2.4 Country situation and priorities

2.52 While the above gives some sense of general possibilities and relative priorities, the circumstances and economic conditions specific to each economy shape the information needed by users.

2.53 For example, the Republic of Korea shared with the TG-eCOM that, once e-commerce broadly reached "maturity" there was less need for over-arching statistics on e-commerce with the main interest being in the trajectory of retail (B2C) e-commerce.

2.54 In some countries, regional or city breakdowns are of interest to support policymaking at the subnational level.

2.55 It is important to engage with users to establish the specific needs and priorities to be addressed by e-commerce statistics.

2.4.1 Unincorporated household market enterprises and e-commerce

2.56 One particularly relevant aspect of the business environment within a country is the prevalence of unincorporated household market enterprises. These are businesses owned by individuals or households that produce goods or services for sale but are not constituted as legal entities separate from their owners. They are classified within the household sector in the System

of National Accounts (United Nations et. al., 2025) and Balance of Payments framework (IMF, 2025).

2.57 Unincorporated household market enterprises include **formal enterprises, such as registered sole traders**, as well as **informal-sector enterprises** that are not formally recognised through registration for tax or similar purposes. Operating without such registration may be permitted below certain thresholds or occur because of legal ambiguities or limited enforcement. Unincorporated status should therefore not be equated with informality.

2.58 In making it easier to engage in such activities, e-commerce and other remote online orders (defined in Chapter 4) can increase the prevalence of commercial activities occurring in the household sector. A widespread example is the use of digital intermediation platforms (as defined in Section 6.9) by households to offer accommodation services.

2.59 The intended population should be specified clearly rather than inferred from the label "business e-commerce". A scope restricted to incorporated enterprises excludes all unincorporated household market enterprises. A scope covering formal businesses additionally includes registered or otherwise formalised unincorporated household market enterprises, but excludes informal-sector unincorporated household market enterprises. A comprehensive measure of commercial e-commerce activity would encompass all three groups.

2.60 Classification in the household sector does not in itself exclude an enterprise from business surveys: registered sole traders and other formal unincorporated household market enterprises may be included if they fall within the business sizes and industries the survey covers and appear on the list from which its sample is selected. Where administrative sources are used to compile statistical business registers or other lists from which survey samples are selected, or as sources of e-commerce data, their coverage limitations - such as VAT registration requirements and thresholds - can also limit which unincorporated household market enterprises are represented.

2.61 Informal-sector unincorporated household market enterprises may be particularly likely to be absent from the registration and tax records used to identify businesses for statistical purposes. Coverage may require additional efforts to identify them and contact their owners. Furthermore, limited sales records might make it difficult to distinguish e-commerce from other sales and report reliable values. However, where these enterprises receive all their orders through DIPs, all their sales are digitally ordered and therefore count as e-commerce (see Section 6.9). This removes the need to separate e-commerce from other sales, although reliable sales values are still needed.

2.62 Payment data and information held by DIP operators, including platform information reported to tax authorities, may have the potential to help identify sellers missing from statistical business registers or other survey sampling lists. Where the available information allows e-commerce transactions and their values to be identified, these sources may also provide an alternative or complement to surveys for measuring e-commerce sales. Both uses are subject to legal access and confidentiality safeguards (see Section 9.6). Where these sources are combined with surveys or other data, care is needed to avoid counting the same sales more than once.

2.63 Measurement of e-commerce activity by informal-sector unincorporated household market enterprises can inform policy in areas including taxation, consumer protection, business regulation and formalisation, entrepreneurship and microenterprise development, and the inclusion of women and other groups that can face barriers to formal business activity.

2.64 Compilers should assess, in light of national legal frameworks and market conditions, which scope best matches policy and other user needs and can be delivered given available financial and human resources. This assessment should take account of the feasibility of identifying and surveying unincorporated household market enterprises and the possibility of using alternative data sources. In all cases, the population represented by e-commerce statistics and any exclusions or partial coverage should be clearly communicated to users.

2.5 Forging support for e-commerce statistics

2.65 While key users and needs may be relatively easy to identify, it can be considerably less straightforward to establish the buy-in needed amongst all relevant parties in order to secure the resources needed to develop statistics on e-commerce value.

2.66 The task group identified two main dynamics around this. In some economies, the key catalyst has been users (most often policy users) expressing a need for the NSO to develop statistics on e-commerce. They either provide, or help to secure, the resources needed. NSO communication about what would be possible to develop can help to establish such demand among users.

2.67 In other cases, it has been possible for the NSO to add questions on e-commerce value to a survey on its own initiative. This can particularly be the case in countries where surveys on ICT usage in businesses already exist and include questions to businesses on whether they make e-commerce sales. The marginal cost and burden of adding one or two follow-on questions relating to the value of those sales could be relatively low. Once these statistics become available, they are generally of high relevance and interest to users.

2.68 Regardless of the precise dynamics at play, helping decision-makers understand the need for better data to power decision making addressing both positive and negative effects from the shift to e-commerce is key to securing the support and resources for developing statistics on e-commerce value. This applies both internally within NSOs and across government. Achieving this will likely require articulating some sort of "business case". The following key points may be relevant to consider for this purpose:

- **Establishing a benchmark:** e-commerce statistics support understanding of a key aspect of digitalisation and the digital economy, including the extent of economic activity facilitated by e-commerce ordering and the employment associated with this. It establishes a benchmark of the extent of digitalisation that has already occurred and the room for further development.
- **Identifying opportunities:** e-commerce data helps businesses identify new market opportunities, including in export markets – giving them the information needed to drive trade and economic growth. It can also support optimisation of operations, and increase competitiveness, especially for SMEs looking to expand their reach.
- **Identifying challenges:** these statistics also provide a basis for identifying economic sectors or types of companies (e.g. SMEs) that are lagging in e-commerce adoption and may benefit from policy action to support uptake and adaptation. Additionally, they can help to identify the markets being most disrupted and the impacts arising that need to be managed. For example, as retail moves online this can impact the types of jobs available and their geographical distribution, as well as the ability of certain groups to access retail. Comprehensive e-commerce statistics can also be used to identify whether digital

ordering is promoting international trade, or leading to domestic production being supplanted by lower cost imports from abroad.

- **Showing trends and monitoring impacts:** regular e-commerce statistics can be used to identify trends at both whole economy and more granular levels. This supports assessing the effects of both policy actions and external factors such as restrictions on digital trade.
- **Identifying wider implications:** with statistics on e-commerce as a basis, wider implications for areas such as payments, logistics, consumer protection, taxation and more can be identified and actions taken where needed.
- **International comparison:** identifying similarities and differences in e-commerce development across economies can yield additional insights and help to identify appropriate policy actions. These Guidelines and Recommendations are intended to support the production of comparable statistics.
- **Building trust:** the availability of reliable and representative e-commerce statistics can support trust in the digital economy, a crucial foundation for engagement by individuals and businesses in the digital realm to enjoy its benefits, while risks can be identified and managed.
- **A trusted source:** government statistical agencies play a unique role as providers of statistics trusted to be accurate and meaningfully reflect relevant trends. This is as true in the area of e-commerce statistics as for any other statistical domain.

More generally, coordination by NSOs with representatives from Ministries and other stakeholders to raise awareness of practices and possibilities in the field of e-commerce measurement, and to assess the statistical needs of these stakeholders, is highly desirable.

2.69 National statistical offices are encouraged to take practical steps towards establishing or strengthening regular statistics on the value of business e-commerce. Working with relevant national agencies and users, they should identify priority information needs, assess available sources and develop a feasible implementation plan. Where resources are limited, an initial focus on e-commerce sales, including through questions added to suitable existing business surveys, can provide a foundation for progressively extending coverage and detail. Identifying the resources and technical support needed, and communicating results with clear metadata, should form part of this process.

2.6 Recommendations

1) It is recommended that NSOs actively engage prospective users of e-commerce value statistics including policymakers, businesses, academics and other research users, and any other key stakeholders. This engagement has the aim of developing the political will needed to secure support and resources for the development and on-going production of e-commerce value statistics through awareness raising and establishment of user needs.

2) It is recommended that e-commerce statistics should seek, as far as feasible, to provide information on the total value of e-commerce sales and purchases, together with relevant breakdowns by economic activity, product, customer or seller location (including domestic and international transactions), customer type, firm size, firm structure and, where relevant, subnational location or other dimensions reflecting

national priorities. However, national needs and priorities should be taken into account, especially where the resources available will not allow for all elements to be collected.

3) Where it is not possible to compile statistics on both e-commerce sales and purchases, it is recommended to prioritise measuring e-commerce sales.

4) A minimum collection and publication frequency of every two years is recommended. Compilers should also give attention to the timely dissemination and clear communication of key results so that the statistics can effectively support policy, analysis and public understanding.

5) Compilers should assess, in light of national legal frameworks, market conditions, user needs, resources and measurement feasibility, the coverage of registered or otherwise formalised unincorporated household market enterprises and whether to extend the scope of e-commerce statistics to informal-sector unincorporated household market enterprises. In all cases, the population represented by the statistics and any exclusions or partial coverage should be clearly communicated to users.

Chapter 3. Scope of e-commerce

3.1 What is e-commerce?

3.1 The internationally established definition of e-commerce for measurement purposes was developed by countries working together through the OECD Working Party on Digital Economics, Measurement, and Analysis (WPDEMA), and its predecessors.

3.2 A first definition, agreed in 2001, was clarified and streamlined in 2009 while retaining the same core principles (OECD, 2011). This definition has been widely adopted, including in UN Trade and Development measurement guidelines (UNCTAD, 2021) and policy support, the European Community Survey on ICT Usage and E-commerce in Enterprises, the System of National Accounts 2025 (United Nations et. al., 2025), and the seventh edition of the Integrated Balance of Payments and International Investment Position Manual (BPM7) (IMF, 2025).

3.3 More recently, a review of the definition and accompanying guidelines culminated in *"The 2025 OECD Definition of E-commerce and Guidelines for Interpretation"* (OECD, 2025), reproduced in **Table 3**. Importantly, this **maintained the core definitional text**, while providing refined and extended guidelines for interpretation and operationalisation of the definition.

3.4 The definition of e-commerce established by the OECD and used in these Guidelines is intended for statistical measurement. Its use for statistical purposes is without prejudice to the legal characterisation of transactions under national legislation, including consumer-protection, fair-trading and electronic-transactions laws. A transaction falling outside this statistical definition should not, by that fact alone, be regarded as falling outside the protection afforded to consumers under applicable national law.

Table 3. The definition of e-commerce

Definition of e-commerce	Guidelines for interpretation
An **e-commerce transaction** is the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders. The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online. An e-commerce transaction can be between enterprises, households, individuals, governments, and other public or private organisations.	**Include:** Orders made via webpages, apps, extranets, and Electronic Data Interchange (EDI). The type is defined by the method of making the order. **Exclude:** Orders made by telephone calls, facsimiles, on-premises mechanisms (including but not limited to kiosks or QR codes), manually typed messages (including but not limited to e-mails).

Source: OECD (2025)

Note: Some social media and messaging platforms facilitate orders in multiple ways. Orders placed through structured features specifically designed for receiving or placing orders qualify as e-commerce, while those placed through unstructured online message conversations do not. Whether an order through these services qualifies as e-commerce therefore depends on how it was placed, not simply on which platform or app was used.

3.5 The OECD definition establishes the defining features of e-commerce transactions:

> *"An e-commerce transaction is the sale or purchase of goods or services, conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders."*

3.6 Three points bear attention here. Firstly, and in principle, any product (good or service) that can be ordered has the potential to be ordered via e-commerce - that is, to be ***digitally ordered***.

3.7 For this reason, it is not helpful to refer to e-commerce as a "sector". E-commerce is a means of placing and receiving orders that cuts across firms of all sizes, all economic activities, and all products. It is therefore not independent of and cannot be separated from other commonly used "sectoral" concepts.

3.8 Second, the Internet is a "computer network" and will most often be the network over which e-commerce orders are placed. Nevertheless, other computer networks exist and may facilitate digital ordering, for example private connections between a business and its suppliers.

3.9 Third, to qualify as an e-commerce transaction it is not sufficient that the order is placed over computer networks; it must further be made "by methods specifically designed for the purpose of receiving or placing of orders". This point underpins the exclusion of orders made by telephone, fax, and manually typed messages including those sent by email and other means such as through messaging apps or via social media. These are general purpose communications tools which *can be* used for placing and receiving orders, but were not *specifically designed* for that purpose.

3.10 Two key foundational principles are identified as underpinning the definition of e-commerce. "The principle of **remoteness** defines e-commerce as transactions where the buyer and seller are not physically together, while **automation**, increasingly driven by advanced technologies, enhances the efficiency and scope of these transactions" (OECD, 2025).

3.11 The definition goes on to emphasise that *digital ordering* is the sole defining characteristic of e-commerce, with digitalisation of other aspects of the transaction being irrelevant:

> *"The goods or services are ordered by those methods, but the payment and the ultimate delivery of the goods or services do not have to be conducted online."*

3.12 Although taking of digital payment may often be a required step in confirming an e-commerce order, this is far from always the case. Indeed, payment of cash on delivery or collection remain common in certain industries and economies. For this reason, digital payment should not be conflated with digital ordering.

3.13 Likewise, the use of online features for product configuration, authentication, delivery or fulfilment, or the use of digital signatures, does not in itself make a transaction digitally ordered. More broadly, digitalisation may enable transaction models or supporting activities that would be difficult or commercially impractical to operate through traditional methods. In all cases, the decisive question remains whether a specific good or service was ordered over a computer network by a method specifically designed for receiving or placing orders. Further clarification on the application of the definition in specific cases is provided in Chapter 6.

3.2 Who does e-commerce?

3.14 Finally, the definition clarifies that all institutional sectors engage in e-commerce transactions:

> *"An e-commerce transaction can be between enterprises, households, individuals, governments, and other public or private organisations."*

3.15 It may be tempting to characterise enterprises as "sellers" in the e-commerce landscape, while households, individuals, governments, and other organisations might commonly be seen as "buyers". However, **any of these entities can engage in e-commerce as buyers or sellers**.

3.16 The statistics show an even higher share of businesses use e-commerce to order inputs (IMF, OECD, UNCTAD, and WTO, 2023) and the majority of e-commerce transactions by value occur business-to-business (UNCTAD, 2024).

3.17 The convenience of digital ordering offered by online marketplaces has also encouraged many households to engage not only in buying in selling goods (for example, handicrafts and second-hand items) and services (notably accommodation services). This has fundamentally increased the extent to which households are likely to engage as sellers.

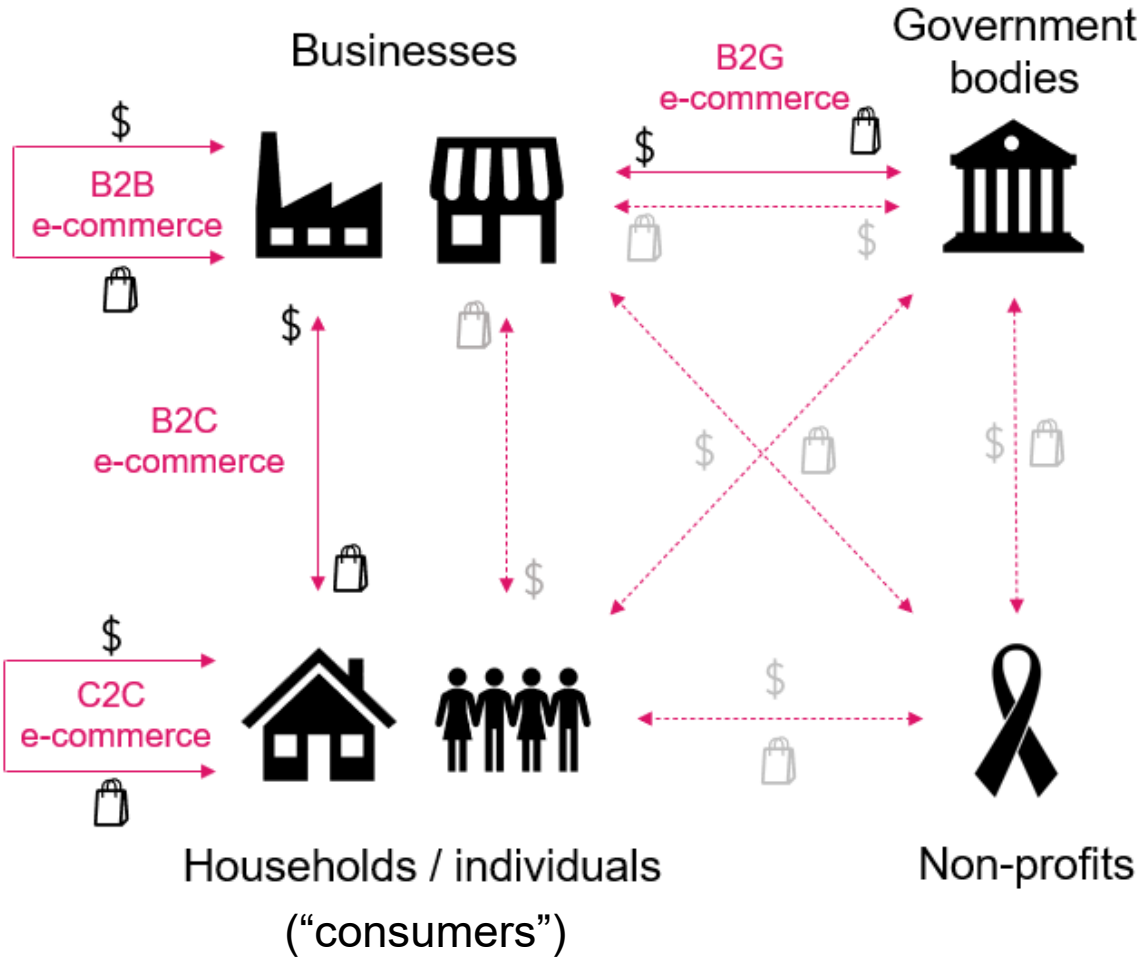
3.18 Government bodies and non-profit entities use e-commerce to buy goods and services, and also to make sales of their own outputs. For example, a government owned and operated train company may sell tickets online or a non-profit hospital may take orders for healthcare treatments from government (and/or others) through an online portal specifically designed for the purpose.

3.19 Nevertheless, in e-commerce transactions, the seller is most commonly a business. The following typology is widely used to describe key flows with the e-commerce landscape, which is visualised in **Figure 2**:

- Business-to-business (B2B)
- Business-to-consumer (B2C)
- Business-to-government (B2G)
- Consumer-to-consumer (C2C)

3.20 When operationalising such a typology of business e-commerce sales, transactions may not always be straightforward to classify. For example, a hotel stay may be reserved in an individual capacity, or by the same person acting as an employee of a business, government entity, or non-profit organisation. Furthermore, survey answers provided by sellers may be affected by how these respondents view themselves. For example, short-term accommodation platforms often present themselves as facilitating "peer-to-peer" (i.e. C2C) transactions. However, many businesses use these platforms to take bookings and, as noted above, customers may be acting in an individual or professional capacity. These platforms will therefore be facilitating a wide range of interactions including (but likely not limited to) C2C/B/G and B2C/B/G.

Figure 2. Visualisation of e-commerce flows



Legend:

flow of money | flow of goods / services | Flows named in e-commerce "typology" | other flows

Source: UN Trade and Development

3.21 As e-commerce is a means to access markets and make sales, measuring business e-commerce transactions can be expected to yield the biggest part of the puzzle. However, consideration should also be given to e-commerce activity in other institutional sectors as these provide important context for statistics on e-commerce sales and purchases by businesses.

3.22 Although these Guidelines focus on business e-commerce, surveys or other measurement approaches can also be designed to cover government units and non-profit entities as buyers and sellers. Government-controlled corporations should be included alongside other businesses. Extending survey coverage to other organisations may require additions to the sampling frame and adaptations to questionnaire terminology. The institutional coverage of the resulting statistics should be clearly communicated to users.

3.23 The potential extent of e-commerce sales by households is especially relevant to consider. The System of National Accounts (United Nations et. al., 2025) and Balance of Payments (IMF, 2025) use the term "unincorporated household market enterprises" to refer to individuals or households engaging in productive activities, for which they are remunerated, without incorporating as an enterprise. The exact process of incorporation, such as when this

may or must happen and how it is effected, will depend on the company law in effect in the country concerned.

3.24 In economies where unincorporated household market enterprises (as discussed in Section 2.4.1) are prevalent, it may be necessary to extend business-survey coverage or use household surveys to capture their e-commerce activity. Informal-sector unincorporated household market enterprises may require particular attention because they may be absent from the lists used to select business-survey respondents.

3.3 Guidelines for interpretation

3.25 The OECD definition is accompanied by "guidelines for interpretation" which aid in establishing which ordering methods are included and excluded.

3.3.1 Inclusions

"Include: Orders made via webpages, apps, extranets, and Electronic Data Interchange (EDI). The type is defined by the method of making the order."

3.26 The above leads to, a further typology of e-commerce into "Web e-commerce" and "EDI e-commerce", which from the seller's point of view are often referred to as "web sales" and "EDI-type sales", as in **Table 4**.

Table 4. Web and EDI e-commerce

E-commerce type	Definition
Web e-commerce	**Include:** Orders made through web-based interfaces, such as online stores (web shops), web forms on the Internet, extranet, or via an app, regardless of the access device (computer, laptop, mobile phone, etc.). Also included are orders placed via social media and messaging platforms using structured ordering features (e.g., catalogues) and AI-powered transactions that follow predefined, automated ordering processes (e.g., chatbots or voice shopping). Within web e-commerce, it is recommended to distinguish orders placed on platforms that act as intermediaries for a fee. **Exclude:** Orders placed via manually typed messages (including but not limited to e-mails), on-premises mechanisms (including but not limited to kiosks or QR codes), and voice or chatbot interactions that do not involve structured, automated ordering mechanisms.
EDI e-commerce	Orders initiated with electronic data interchange (EDI). EDI is an e-business tool for exchanging different kinds of business messages. EDI is here used as a generic term for sending or receiving business information in an agreed format which allows its automatic processing (e.g., EDIFACT, XML, etc.) and without the individual message being manually typed. "EDI e-commerce" is limited to EDI messages that place an order.

Source: OECD (2025)

3.27 The European business statistics compiler's manual for ICT usage and e-commerce in enterprises (Eurostat, 2025) offers useful explanations of the various terms used:

- **Online store (web shop)** is the most obvious and clear example of web-based e-commerce. It is a separate website, or part of a website, where products are presented and typically ordered via shopping cart functionality.
- **Web forms** are simple forms integrated into the enterprise's website where goods and services can be ordered. In these forms, the order can be typed or clicked/selected and then sent it by clicking the "submit" button on the web site.
- An **Extranet** is a closed environment for agreed partners or customers where other information between those parties can be accessed or exchanged. Within an extranet environment, orders may be placed through a web shop or via web forms, as explained above.
- **Bookings and binding/fulfilled reservations** are considered similar to orders; for some economic activities (e.g. Accommodation), these terms are more commonly used to describe the order.
- **Sales via apps for mobile devices or computers** are also counted as web sales. "App" refers to a software (device-installed) or web (Internet browser-accessed) application.
- **Sales via external e-commerce marketplace websites or apps** are also counted as web sales. E-Commerce marketplaces are external websites or apps used by multiple enterprises for selling their goods or services to customers.

3.3.1.1 EDI e-commerce

3.28 EDI can be defined as the transfer of structured data, by agreed message standards, from one computer system to another without human intervention. It provides a technical basis for automated commercial 'conversations' between two entities, either internal or external. The term EDI encompasses the entire process, including the transmission, message flow, document format, and software used to interpret the documents.

3.29 EDI messages may convey a wide range of information, structured for machine processing, such as purchase orders, invoices, shipping notices, and inventory updates. Messages may be sent over the Internet using secure communication protocols (EDI-over-Internet) or through a third-party "value-added network" (a form of computer network) which manages data transmission as well as conversion and validation of documents. These messages replace ordering via email, phone calls, and paper-based processing, supporting the efficient handling of transactions without manual intervention. Purchase orders sent and received via EDI messages are e-commerce orders.

3.30 EDI capabilities are commonly integrated within a broader suite of enterprise resource planning (ERP) software. ERP software helps organisations manage and integrate core business processes such as purchasing, inventory, accounting, and order management within a single system. Illustrative examples of vendors offering such solutions include Kingdee, Sage, SAP, Microsoft Dynamics, Oracle and Yonyou.

3.31 Within this context, EDI can underpin automated demand-driven ordering where, for example, a minimum inventory level has been specified in the ERP system of the buying enterprise; when inventory falls below that threshold, the system automatically transmits an EDI

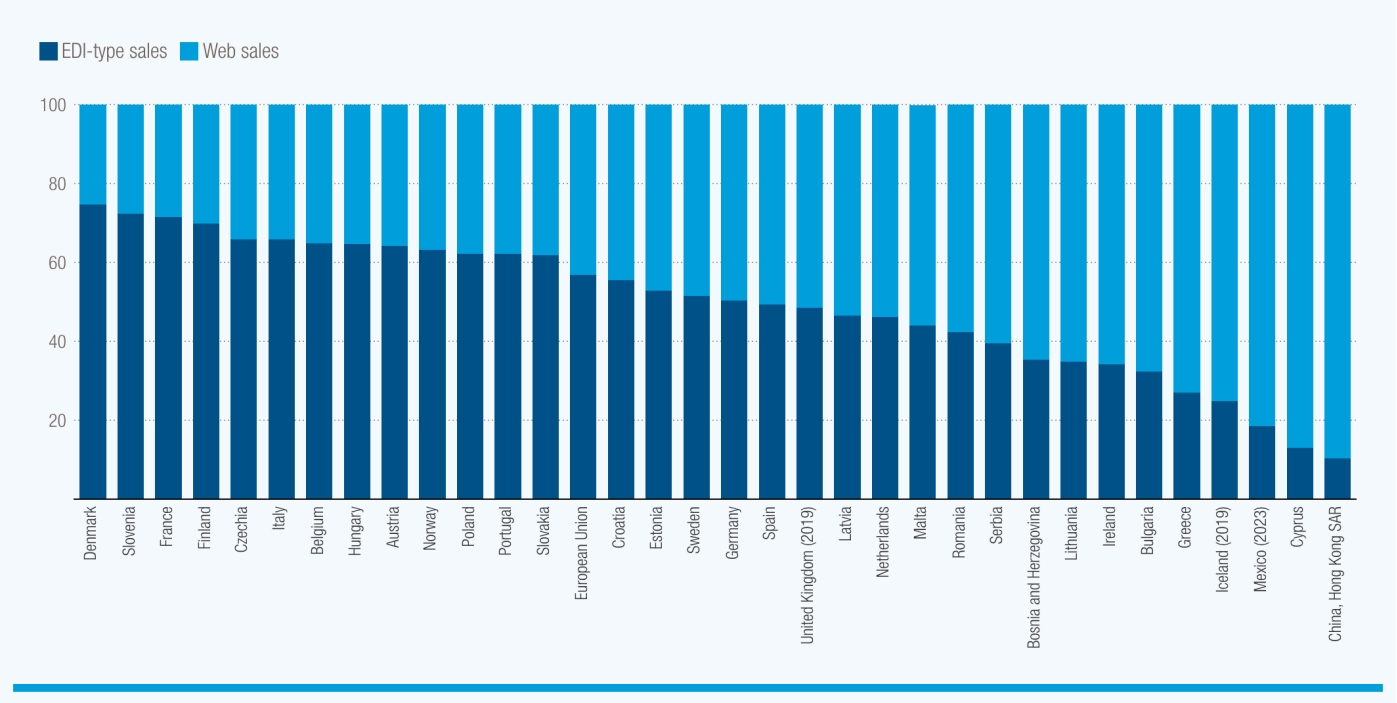
message to the supplier to order replenishment. EDI-type ordering includes orders received directly into the seller's ERP system.

3.32 EDI messages can also be used in the back-end of websites and apps used to order goods and book services such as accommodation, transport, and shipping. If an order is placed via a web interface, even if transmitted using EDI, it should be classified as web e-commerce. Only orders placed directly using an EDI system should be classified as EDI e-commerce.

3.33 Although EDI e-commerce may be less familiar to some compilers than web sales, it is not a niche ordering method. Indeed, across the economies for which this information is available, EDI-type sales comprise a large component of e-commerce sales by value, frequently the majority (**Figure 3**).

Figure 3. E-commerce sales: web and EDI-type sales

Percentage of total e-commerce sales value, 2024 or latest



Source: UN Trade and Development E-commerce value database (https://unctadstat.unctad.org/datacentre/dataviewer/US.ECommerceTotal), based on Eurostat digital economy and society database and national sources.
Note: The economic activities and firm sizes represented vary across country. See source for details.

3.34 EDI ordering is employed within and across a wide range of industries. Manufacturers use EDI to order components from suppliers. Wholesalers and retailers use EDI to order goods to sell from manufacturers, agricultural producers, and importers. Those selling goods via e-commerce use EDI to order parcel or freight delivery services. Construction companies use EDI to order lumber, bricks, concrete, etc. In the extractive industries, refineries and processors use EDI to order crude oil and ores. Airlines use EDI to order fuel and other supplies. Travel agencies use EDI to reserve flights from those airlines. Accommodation and food services providers use EDI to maintain inventories of inputs.

3.35 The adoption of EDI for ordering can be a crucial pre-requisite to participating in global supply-chains. This is one reason why EDI-type sales are more common among larger enterprises, though by no means exclusive to them.

3.36 It follows from the above that EDI ordering should not be assumed to be the preserve of “advanced economies” or only “high technology industries”. It is recommended that EDI-type ordering should be explicitly addressed in e-commerce data collections, along with explanation of the link to ERP.

3.37 Reporting of EDI-type sales separately from web sales may help to ensure that these orders are covered correctly.

3.38 At the very least, compilers are encouraged to speak to major firms in different industries within the economy to gauge the prevalence of EDI-type ordering to inform the approach that should be taken to data collection.

3.3.2 Exclusions

“Exclude: Orders made by telephone calls, facsimiles, on-premises mechanisms (including but not limited to kiosks or QR codes), manually typed messages (including but not limited to e-mails).”

3.39 Orders placed over general purpose communications tools including telephone calls , fax messages, and manually typed messages sent by emails or other means such as messaging apps or social media platforms do not meet the definition of e-commerce.

3.40 This logic would also exclude orders agreed through unstructured online message conversations involving recorded voice or video messages sent back and forth through messaging apps.

3.41 However, this does not mean that messaging apps or social media platforms cannot facilitate e-commerce ordering (see Section 6.10).

3.42 The 2025 guidelines for interpretation (OECD, 2025) clarify that orders placed through "on-premises mechanisms (including but not limited to kiosks or QR codes)" should also be excluded from e-commerce sales. The reasoning is that in these cases the buyer and seller are not remote from one another and so "while kiosks and QR codes automate transactions, similar to vending machines, they serve as technology-enabled substitutes for salespersons rather than constituting e-commerce". This implies a need to explicitly communicate the treatment of these orders to survey respondents, a practice which has not previously been widespread.

3.43 In practice, a notable minority of economies include orders placed by some of these methods when measuring e-commerce, especially orders via email and other manually typed messages (UNCTAD, 2023). This usually arises because these ordering channels are considered to be widely used in the economy in question and so there are policy and analytical interests in ensuring these orders are covered. The following chapter examines how these needs can be addressed through complementary concepts while maintaining the integrity and international comparability of the established definition of e-commerce.

3.4 Recommendations

6) It is recommended to follow the OECD definition of e-commerce and accompanying guidelines for interpretation (OECD, 2025).

7) Any deviation from the OECD definition should be acknowledged and clearly communicated to users.

8) E-commerce should not be framed as a "sector". It is a means of placing and receiving orders that cuts across firms of all sizes, all economic activities, and all products.

9) Compilers should be aware that only a subset of business e-commerce sales occur B2C (often the minority by value). Steps should be taken to ensure that other flows, especially B2B, are included in the measurement of business e-commerce sales. The publication of breakdowns by customer type should reflect user needs and measurement feasibility.

10) Where they are measured, it is recommended that orders placed through unstructured processes such as email and online message conversations should be reported separately from transactions meeting the definition of e-commerce.

Chapter 4. Complementing and contextualising the e-commerce concept

4.1 The OECD definition establishes that e-commerce is comprised only of orders that meet both of the following two criteria:

i. conducted over computer networks, and

ii. by methods specifically designed for the placing and receiving of orders.

4.2 Furthermore, it is clear that orders placed by manually typed messages including (but not limited to) those sent by email, messaging apps, and social networks do not meet the definition of e-commerce (OECD, 2025). Orders placed this way are conducted over computer networks but via methods for general purpose communication, rather than ordering. They meet the first criterion but do not meet the second criterion.

4.3 They are, therefore, orders which take place "online" but are not e-commerce orders; they are *"other online orders"*.

4.4 In some economies, these forms of online ordering are limited in scale and of only marginal policy relevance. However, online message conversations can offer businesses a way to use the Internet to take orders which has exceptionally low barriers to entry. The seller does not need to have the equipment and skills to implement a web shop, or to subscribe to an e-commerce service provider; they just need the ability to hold a conversation through typed, or even recorded voice or video, messages sent and received online.

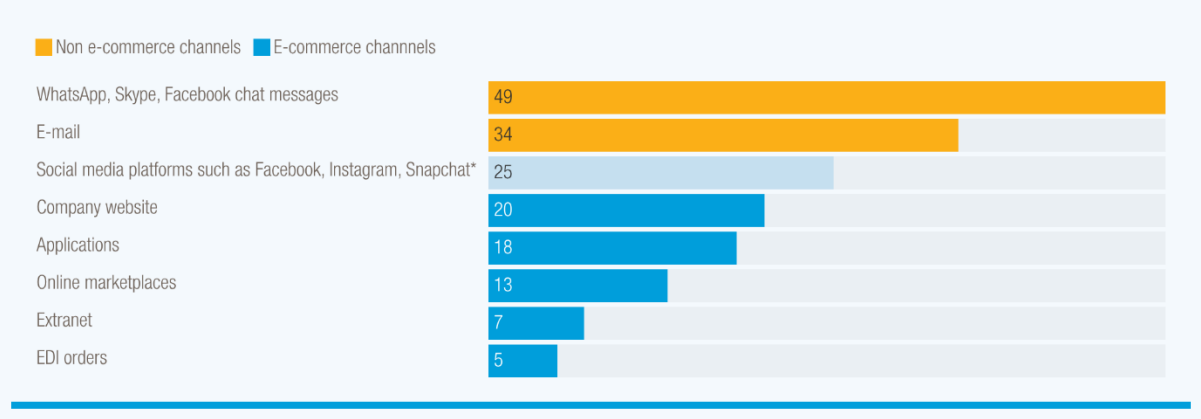
4.5 Evidence from Brazil showed that the disruption wrought by the COVID-19 pandemic encouraged many companies to begin online sales, with the share of enterprises selling online increasing sharply from 56 per cent in 2019 to 74 per cent in 2021. The greatest increases were related to businesses reporting sales excluded under the OECD definition of e-commerce. The share of businesses selling via messaging apps almost doubled from 42 per cent in 2019 to 78 per cent in 2021, while selling by email increased from 39 per cent to 62 per cent and via social networks from 20 per cent to 39 per cent of businesses.

4.6 Considering firms which sold online through only one channel, messaging apps were chosen by half of small enterprises (10-49 persons employed) with a further 30 per cent making online sales through email only. Meanwhile, although around one third of large enterprises (250+ persons employed) used websites, apps, online marketplaces, or EDI as a sole channel for online sales, almost two thirds sold only through email (50 per cent) or messaging applications (11 per cent). One-in-four medium-sized enterprises (50-249 persons employed) selling online through only one channel did so via email or messaging apps.

4.7 As of 2024, non-e-commerce channels remain the online sales channels most commonly offered by businesses in Brazil (**Figure 4**).

Figure 4. The online sales channels most widely offered by businesses in Brazil do not count as e-commerce

Percentage of enterprises that make sales through different online channels, 2024



Source: UN Trade and Development based on Brazilian Internet Steering Committee (2026).
Note: * may include sales made through messaging features rather than built-in e-commerce features such as native in-platform checkout, or through the seller's own website but accessed from, and presented within, the social media app.

4.8 In Thailand, sales through "social media such as Facebook, Line, Instagram" were equivalent to about half the value of e-commerce sales through online marketplaces in 2024, and about 40 per cent of all e-commerce sales through the sellers' own websites or apps (including online retail). For SMEs, social media was the second most valuable online sales channel, after domestic online marketplaces and ahead of sales through sellers' own websites and apps (ETDA, 2024).

4.9 Many of the sales conducted over social networks will take place through e-commerce features integrated in the social media platform and should be counted toward e-commerce statistics. However, this is far from always the case. Where orders are instead agreed through direct or general messaging conversations facilitated by social media platforms or apps, these do not meet the definition of e-commerce and should be excluded.

4.10 E-mails can also be a notable channel for buying and selling online, and countries such as Indonesia, Thailand, and the United States have included orders placed via e-mail in their published statistics on the value of e-commerce sales by businesses (UNCTAD, 2023).

4.11 The Economic Census of Mexico recorded around 4.9 trillion pesos (US$268 billion) of business e-commerce sales in 2023, comprised of sales through businesses' own websites, third-party websites such as online marketplaces, and EDI-type sales. By comparison, orders placed via e-mail accounted for a substantial value of almost 2.5 trillion pesos (US$134 billion), while orders through social media, including manually typed messages sent through social networking platforms, accounted for a further 0.43 trillion pesos (US$23.5 billion) (INEGI, 2024).

4.12 Collectively, this appears to confirm that e-commerce covers the majority of online buying and selling activities. At the same time, it shows that orders that take place online, but do not meet the definition of e-commerce can be highly material in some countries.

4.13 The latter fact has led to some criticism of the e-commerce definition for excluding this component of online buying and selling. But this is based on an implicit assumption that the e-commerce concept is *intended* to capture all buying and selling that takes place online.

4.14 It is understandable that some users interpret that e-commerce is meant to encompass all online buying and selling of goods and services. E-commerce is the principal concept related to buying and selling online. An internationally established statistical definition exists, and that definition has been in use for many years. By contrast, there is no widely agreed term for the broader universe of online ordering that would encompass both e-commerce and other online orders falling outside the OECD definition.

4.15 Additionally, the phrase "e-commerce" is widely employed in business and public discussion. In everyday language, however, it is often taken to mean online buying and selling in general, without regard to the specific ordering method involved. This broad understanding is further reinforced by the tendency to associate online transactions with digital payment, even though payment method is not the defining feature of e-commerce for statistical purposes.

4.16 The policy discourse has also contributed to this interpretation. In particular, the WTO Work Programme on Electronic Commerce, dating back to 1998, adopts a much wider formulation, referring to "the production, distribution, marketing, sale or delivery of goods and services by electronic means". While useful in a policy context that needs to address the application of digital technology in all areas of commerce, such a formulation is not sufficiently precise for statistical measurement and would be difficult to operationalise without a significant risk of overlap or double counting.

4.17 In the absence of a recognised umbrella term for all forms of online ordering, it is therefore easy to assume that "e-commerce" is intended to capture all buying and selling that takes place online. This helps explain why transactions that are conducted online but do not meet the OECD definition are sometimes viewed as having been excluded from e-commerce inappropriately, when in fact they fall outside the concept by design. This was specifically re-confirmed in *The 2025 OECD definition of e-commerce and guidelines for interpretation* (OECD, 2025), which emphasised the focus on structured ordering processes.

4.18 This does not imply any weakness in the OECD definition. On the contrary, the definition is intentionally designed to identify a clearly bounded subset of online transactions that can be measured in an internationally comparable way.

4.19 The difficulty lies instead in the absence of a parallel concept for online orders that do not meet the definition of e-commerce. While it is technically correct to describe such sales simply as "not e-commerce", this provides little basis for policy or measurement discussion in economies where unstructured online ordering is prevalent. The challenge is compounded by the lack of a convenient way to refer collectively to both e-commerce and other forms of online ordering, with "e-commerce" often unintentionally filling that role in practice.

4.20 It is therefore proposed to address these issues by:

1. Establishing a complementary concept – *"other remote online orders"* that can help frame discussion of these transactions without diluting the statistical integrity of the internationally agreed OECD definition of e-commerce.
2. Situating both concepts within a contextual framework which makes clear their separate and non-overlapping nature.
3. Introducing "online ordering" as a term (but not a statistical concept) by which to refer to the collective total of orders placed over computer networks.

4. Ensuring logical completeness and coherence by addressing orders that are placed over computer networks while on the seller's premises.

4.21 This allows NSOs and users to contextualize and quantify online buying and selling that falls outside the boundaries of the 2025 OECD definition of e-commerce due to the absence of the automation or remoteness principles, while maintaining strict adherence to the international standard for core e-commerce statistics.

4.22 Against this background, the following sections introduce complementary terminology intended to preserve the conceptual primacy, clarity and international comparability of the e-commerce concept, as defined by the OECD, while providing a clearer basis for discussing online orders that fall outside it. It does so by distinguishing between e-commerce and other forms of online ordering, and by situating both within a broader, non-statistical notion of online ordering.

4.1 Other remote online orders

4.23 To address the issues identified, a complementary definition is put forward (**Table 5**). It is structured in the mould of the definition of e-commerce and retains the underpinning principle of remoteness between the buyer and seller. The result is a definition of **"other remote online orders"**, with the word "other" situating the concept in relation to e-commerce orders.

Table 5. Definition of other remote online orders

Definition	Guidelines for interpretation
Other remote online orders refers to the sale or purchase of goods or services, conducted over the Internet or other computer networks, by methods not specifically designed for the purpose of receiving or placing of orders.	**Include:** orders made through unstructured exchanges of messages between the buyer and seller, including but not limited to manually typed messages, recorded voice messages or recorded video messages, sent by e-mail, messaging apps, social media platforms or other communication tools. **Exclude:** e-commerce orders (those conducted by methods specifically designed for the purpose of receiving or placing of orders); orders made by telephone calls (voice or video), facsimiles, on-premises mechanisms (including but not limited to kiosks or QR codes).

Source: UN Trade and Development

Note: This definition is a mutually exclusive complement to the 2025 OECD definition of e-commerce, strictly referring to remote transactions taking place online but characterized by the absence of ordering methods specifically designed for the purpose of placing and receiving orders. These lack the structured ordering process that underpins the automation principle which, along with remoteness, is foundational to the e-commerce concept. The lack of structured order processes leads to a lack of structured transaction data that is likely to create challenges in the compilation of robust, internationally comparable statistics on the value of other remote online orders.

4.24 By their nature, “other remote online orders” arise through unstructured exchanges conducted over the Internet rather than through systems specifically designed to receive and process orders. They therefore lack the structured records associated with e-commerce transactions. This may make it difficult for respondents to identify these transactions and report reliable values.

4.25 These difficulties may be especially pronounced for unincorporated household market enterprises, among which unstructured ordering is likely to be particularly prevalent. Even where such sellers fall within the scope of surveys used to collect data on e-commerce value, and are willing to respond, they may not maintain formal records of sales and purchases and may therefore face difficulty providing the information requested.

4.26 These measurement challenges reinforce the case for giving priority to the compilation of robust and internationally comparable statistics on e-commerce.

4.27 Nevertheless, other remote online orders may be economically significant in certain economies, creating a case for complementary measurement. Survey instruments can, in principle, ask respondents about such orders; indeed, the model survey module introduced in Chapter 8 includes optional items on *orders received or agreed through online message conversations*. As well as providing information on a potentially significant component of online buying and selling, addressing these orders specifically and separately may reduce the risk that respondents misreport them as e-commerce, thereby helping to improve the quality of e-commerce statistics.

4.28 The model sets out one possible approach, though adaptation to national circumstances and respondent capabilities is advised. For example, unincorporated household market enterprises and micro enterprises may find it more feasible to report activity over a shorter reference period, such as the three months preceding the survey, or to estimate the share of total online-order value attributable to these transactions rather than provide precise monetary values. Furthermore, non-survey sources, including payment data, may provide a more suitable basis for measurement where transactions arising from unstructured orders can be identified separately from other payments.

4.29 Having introduced “other remote online orders” and the challenges involved in measuring them, the following section situates the concept alongside e-commerce within the broader landscape of orders placed over computer networks. This framework is intended to support correct interpretation in policy and measurement discussions.

4.2 E-commerce and other remote online orders in context

4.30 E-commerce and other remote online orders are separate concepts which are mutually exclusive and exist in parallel. At the same time, they share a common root as both refer to orders placed and received over computer networks.

4.31 The absence of a convenient umbrella term for orders placed over computer networks (i.e. online) has tended to lead to "e-commerce" being used to fill that space in practice, even where this is not conceptually accurate. In that context, it is useful to refer more broadly to "online orders" as a framing term for orders placed over computer networks, while making clear that this is introduced only to provide useful context rather than a statistical concept, and does not alter the distinct statistical definition of e-commerce.

4.32 This provides a practical label where one is evidently required. Moreover, "online orders" is likely to be intuitive in both statistical and general usage, conveying without the need for elaboration that it refers broadly to orders placed over computer networks, including e-commerce but not limited to it.

4.33 For completeness, it should be noted that there is one final class of orders which take place over computer networks but are not covered by either of the concepts already established. Both e-commerce and other remote online orders are underpinned by a foundational principle of remoteness between the buyer and seller, with digital ordering being used to bridge that physical distance. This was further clarified in *The 2025 OECD definition of e-commerce and guidelines for interpretation* (OECD, 2025). For this reason, both concepts *exclude* orders placed through on-premises mechanisms (including but not limited to kiosks or QR codes).

4.34 Nevertheless, there are cases of "on-premises online orders", in which orders are placed by the customer, over computer networks, while on-site within a seller's premises through "technology-enabled substitutes for salespersons" (OECD, 2025). Examples include:

- purchasing tickets through kiosks located in cinemas or stations,
- ordering fast food through in-restaurant kiosks which present the menu and take orders,
- ordering table service in a bar or café through an online interface accessed via a QR code,
- booking a hotel outside reception hours via a kiosk which takes payment and issues code for immediate access to the room.

4.35 The distinction between e-commerce, other remote online orders and on-premises online orders concerns how orders are placed, not whether they are part of the digital economy. All three involve economic transactions conducted over computer networks and therefore would be considered to fall within the broad scope of the digital economy defined as economic activity reliant on, or significantly enhanced by, digital inputs (OECD, 2020; UNCTAD 2021). This does not extend the meaning of "digitally ordered", which remains synonymous with ordering via e-commerce.

4.36 **Figure 5** provides a visual summary of how e-commerce relates to other forms of online orders. It places e-commerce, other remote online orders, and on-premises online orders alongside one another, while highlighting their shared feature of "online orders", meaning that in all three cases the orders are placed and received over computer networks.

4.37 This is intended to support correct interpretation and discussion of the core concept of *e-commerce* and the complementary concept of *other remote online orders*. Clarifying terminology in this way does not diminish the centrality of the e-commerce concept as the target for statistics; *online orders* is not set forward as an over-arching target for measurement. Nor does it resolve the practical challenges associated with measuring orders placed through unstructured messages, rather than through systems specifically designed to receive and process orders, or of separating out on-premises online orders.

4.38 The OECD definition of e-commerce therefore remains the primary statistical standard for the measurement of online transactions in goods and services across countries. However, where other remote online orders and / or on-premises online orders are considered likely to be economically relevant and of policy interest, compilers are encouraged to develop approaches to measure them as complementary items.

Figure 5. Relationship between e-commerce and other forms of online orders

Online orders: orders of goods or services placed over computer networks		
+	+	+
by methods specifically designed for the purpose of receiving or placing of orders	*by methods not specifically designed for the purpose of receiving or placing of orders.*	*by on-premises mechanisms (including but not limited to kiosks or QR codes)*
=	=	=
E-commerce OECD (2011), (2025)	**Other remote online orders**	**On-premises online orders**

Source: UN Trade and Development

Note: While 'online orders' encompasses all three elements, the OECD definition of e-commerce remains the primary statistical standard for measuring online transactions across countries. The other items serve as complementary terms to facilitate policy and measurement discussions as relevant in national policy contexts.

4.3 Visualising the "e-commerce landscape"

4.39 A visual representation of the "e-commerce landscape" can be useful to help clarify the relationships between sellers and buyers, and between ordering channels. It also provides a useful basis for assessing which transactions different data sources can capture, where coverage gaps remain, and where sources may overlap.

4.40 Section 3.2 explained that businesses, government, non-profit entities and households can all participate in e-commerce as both buyers and sellers. Given the analytical interest in flows between these groups, including B2B, B2C, B2G and C2C transactions, a "supply-use-type" framing can be useful. **Figure 6** arranges sellers in rows and buyers in columns, with each cell representing transactions between the corresponding groups. Businesses can be further distinguished by economic activity, size and ownership. This is a schematic view of transaction relationships, rather than a formal supply and use table.

4.41 The matrix can support assessments of the coverage of different potential data sources. For example, a well-designed business survey can capture all e-commerce sales from the businesses sector, with coverage across all buyer sectors. If sales by formal unincorporated household market enterprises are included, coverage will also extend to this part of the household sector.

4.42 As another example, card-not-present payments (see Section 9.5) may most closely resemble a measure of B2B e-commerce, but on the seller side will also include sales by government units, non-profits and households paid for by card, and from the buyer perspective will likely include e-commerce purchases paid for by card by businesses, government units or non-profits. This measure will therefore straddle all seller-buyer combinations, to some degree. Additionally, all B2C e-commerce transactions paid by other means will be missing. And furthermore, while card-not-present payments may often be associated with digital ordering, they are not a perfect proxy for it. Card-not-present data therefore do not give a precise or complete measure of B2C e-commerce, or of e-commerce as a whole.

4.43 Mapping sources in this way can help in assessing coverage of different e-commerce flows, as well as any limitations to coverage of e-commerce or alignment with the e-commerce concept. Coverage also depends on dimensions not shown here, including residence, product and any thresholds applied.

Figure 6. The e-commerce landscape: sellers and buyers

		Buyer			
		Business - by economic activity - by size - by ownership	Government [incl. e-procurement*]	Non-profit	Households / individuals
Seller	Business - by economic activity - by size - by ownership - DIPs	B2B	B2G		B2C
	Government				
	Non-profit				
	Households / individuals [incl. unincorporated household market enterprises]				C2C

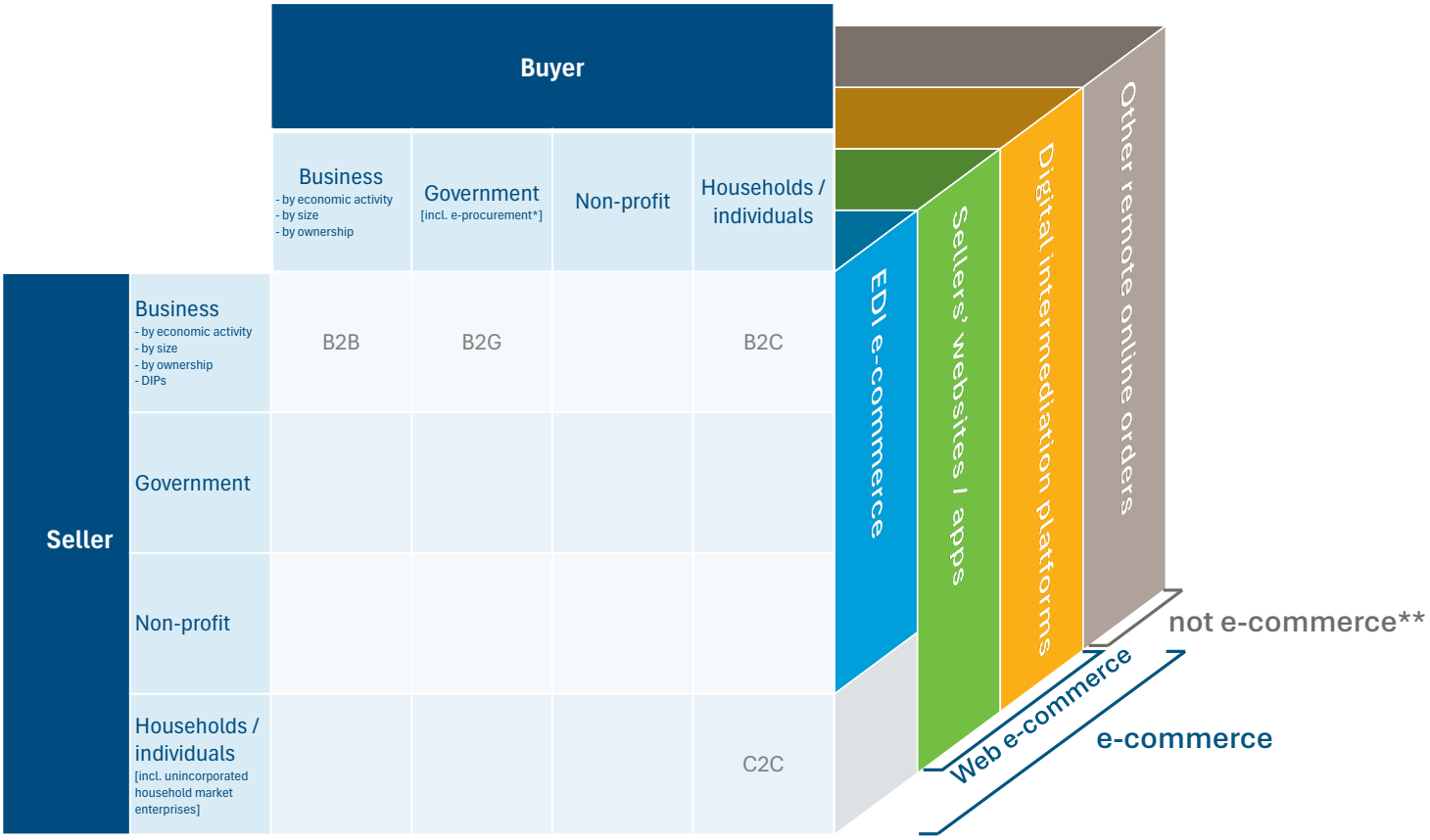
Source: UN Trade and Development.

Note: Household sellers include unincorporated household market enterprises, which may be formal or informal, as well as individuals selling personal possessions. The B2B, B2C, B2G and C2C labels identify important "named" relationships; unlabelled cells do not imply that transactions cannot occur.

*Includes government e-procurement transactions only where an order for goods or services is placed over computer networks by methods specifically designed for receiving or placing orders. Online publication of tenders or submission of bids does not in itself make the resulting transaction e-commerce.

4.44 Ordering channels can be added as a further dimension, as illustrated in **Figure 7**. E-commerce comprises EDI-type e-commerce and web e-commerce, with the latter further distinguished between orders through sellers' own websites or apps and online marketplaces and other DIPs. EDI facilitates ordering among businesses and other organisations, including government and non-profit entities, whereas web interfaces also facilitate purchases by households and individuals. The same seller–buyer relationship will involve orders through different channels. Other remote online orders, agreed through unstructured online message conversations, can be shown alongside these channels, but do not meet the definition of e-commerce.

Figure 7. The e-commerce landscape: sellers, buyers and ordering channels



Source: UN Trade and Development.

Note: Cell sizes and layer thicknesses are schematic and do not represent transaction values. Other remote online orders are shown as a separate complementary category, not as part of e-commerce. On-premises online orders are omitted from this illustration.

Household sellers include unincorporated household market enterprises, which may be formal or informal, as well as individuals selling personal possessions.

The B2B, B2C, B2G and C2C labels identify important "named" relationships; unlabelled cells do not imply that transactions cannot occur.

*Includes government e-procurement transactions only where an order for goods or services is placed over computer networks by methods specifically designed for receiving or placing orders. Online publication of tenders or submission of bids does not in itself make the resulting transaction e-commerce.

**conceptually, there are also "on-premises online orders" of goods or services placed over computer networks by on-premises mechanisms (including but not limited to kiosks or QR codes). These orders do not fall under the definition of e-commerce because the buyer and seller are not remote from one another.

4.45 Adding this dimension makes the coverage assessment more precise. For example, data from DIPs have the potential to cover the platform-ordering layer but will not cover orders through other websites or apps, or EDI-type transactions. A business survey may cover all three e-commerce channels, provided they are explicitly addressed and respondents can report them, and may even be extended to cover other remote online orders. The card-not-present payments may provide partial coverage of sales through DIPs and other websites or apps, and potentially of other online orders but will not provide coverage of EDI e-commerce as card payment is not generally used for such transactions.

4.46 The visual can also help clarify how other concepts relate to e-commerce. For example, the phrase "social commerce" is often used to refer to sales through social media websites and apps, but these platforms can facilitate orders in different ways. Orders placed through built-in shopping features specifically designed for receiving or placing orders qualify as e-commerce and, because the platform acts as a DIP with respect to these transactions, fall within the DIPs channel. By contrast, orders agreed through unstructured online message conversations using general-purpose messaging features provided by the social media platform fall within other remote online orders. "Social commerce" would therefore straddle the boundary between these two categories and cannot be treated as a subcategory of e-commerce. Similarly, orders through an app such as WhatsApp cannot be classified simply by reference to the app: what matters is how the individual order is placed.

4.47 Taken together, these visuals provide a common frame for discussing measurement priorities, assessing potential data sources and explaining the scope of published statistics. By keeping seller type, buyer type and ordering channel distinct, compilers can make clear which parts of the landscape a measure represents, rather than allowing a source or label to imply broader coverage than it provides.

4.4 Recommendations

11) Where the needs of policy and measurement discussion extend beyond e-commerce per the OECD definition (i.e. orders conducted over computer networks by methods specifically designed for the purpose of receiving or placing of orders), it is recommended that the following terminology is used consistently:
    a. "Other remote online orders" to refer to orders placed over computer networks by methods not specifically designed for the purpose of receiving or placing orders (including unstructured exchanges of manually typed or recorded voice/video messages);
    b. "On-premises online orders" to refer to orders placed over computer networks through on-premises mechanisms such as kiosks or QR codes; and
    c. "Online orders" to refer more broadly to all orders placed over computer networks, including e-commerce, other remote online orders, and on-premises online orders.

    This can help to reduce ambiguous or conceptually incorrect use of the term "e-commerce", while preserving the OECD definition as the primary concept and statistical standard.

12) Efforts to measure buying and selling online should first and foremost focus on the production of robust and internationally comparable statistics on e-commerce.

However, where other remote online orders and / or on-premises online orders are of policy interest, compilers are encouraged to measure them as complementary items.

13) Where other remote online orders and / or on-premises online orders are measured, they should be recorded and reported strictly separately from e-commerce transactions in all statistical outputs, especially those intended for international comparability purposes, thereby upholding the integrity of the 2025 OECD definition of e-commerce.

14) Where published statistics labelled as “e-commerce” unavoidably include other remote online orders and / or on-premises online orders, this should be clearly communicated to users.

Chapter 5. Valuation of e-commerce transactions

5.1 Having established that a transaction meets the definition of e-commerce, the question of what amount should be recorded in statistics on e-commerce value follows.

5.2 It may seem straightforward that, if the aim is to measure the value of e-commerce sales by businesses, the amounts received by businesses in respect of goods or services sold (or paid out, in the case of measuring businesses' e-commerce purchases) simply need to be recorded.

5.3 However, the amount received from the buyer does not necessarily correspond to the selling business's revenue. It may include sales tax (such as Value Added Tax) collected on behalf of the government. Other factors, including contractual arrangements for delivery and ancillary services, can also give rise to differences between the two.

5.4 It is also relevant that, by value, the strong majority of e-commerce sales occur from business-to-business (UNCTAD, 2024). In contrast to sales to consumers, where payment often accompanies an order being placed or is otherwise collected at the time the good or service is delivered, B2B transactions often involve time lags (e.g. of over 30 days) between invoicing and payment. Furthermore, discounts are commonly offered to incentivise rapid payment. This creates differences between the amounts invoiced by sellers and the money they actually receive (as well as differences in timing). It is necessary to specify how such differences should be handled. The same is true for amounts relating to sales that are later returned for refund.

5.5 The International Financial Reporting Standards (IFRS) establish accounting principles for the recognition and measurement of revenue from sales of goods and services. Under IFRS, much of this revenue is accounted for as "revenue from contracts with customers" under IFRS 15, but this does not encompass all revenue from sales of goods and services. For example, revenue from rental and similar arrangements may instead be accounted for under IFRS 16 if the arrangement conveys the customer the right to control the use of an identified asset rather than constituting the provision of a service. Revenue is recognised net of discounts, rebates and sales taxes such as VAT.

5.6 The term "turnover" is commonly used to refer to revenue from sales of goods and services, although terminology varies across countries and accounting frameworks, with "sales revenue" being a widely used alternative. For the purposes of these Guidelines and Recommendations, turnover provides the basis for valuing e-commerce sales. The definition of turnover used in the context of structural business statistics (Eurostat, n.d.) provides a useful frame:

> 5.7 *Turnover, in the context of structural business statistics, comprises the totals invoiced by the observation unit during the reference period: this corresponds to the total value of market sales of goods and services to third parties.*
>
> 5.8 *Turnover includes:*
>
> - *all duties and taxes on the goods or services invoiced by the unit with the exception of the value-added tax (VAT) invoiced by the unit vis-à-vis its customer and other similar deductible taxes directly linked to turnover;*
> - *all other charges (transport, packaging, etc.) passed on to the customer, even if these charges are listed separately on the invoice.*

5.9 *Reductions in price, rebates and discounts, as well as the value of returned packing must be deducted.*

5.10 *Excluded are:*

- *income classified as other operating income, financial income and extraordinary income in company accounts;*
- *operating subsidies received from public authorities*

5.11 Charges for delivery and other ancillary services are included to the extent that they form part of the reporting enterprise's recognised revenue; amounts collected as agent on behalf of another provider are excluded, as explained in Section 6.1.

5.12 What is of interest here is the value of market sales made via e-commerce. As such, e-commerce sales are a subset of total turnover. As well as being useful when it comes to understanding and contextualising e-commerce value, this linkage also makes e-commerce value statistics consistent with, and useful in the context of broader macroeconomic frameworks including National Accounts and trade statistics.

5.13 It is noteworthy that economies differ in the reporting of e-commerce value (UNCTAD (2023); (2025)). The majority employ net reporting, exclusive of amounts collected in respect to sales taxes such as VAT and with price reductions, discounts, and rebates applied (i.e. in line with the guidance above). However, a notable minority employ gross reporting, especially with regard to sales taxes. With standard sales tax rates varying between economies from zero to over 20 per cent, differences in valuation have the potential to significantly impact the value of e-commerce measured and to distort international comparisons.

5.14 Harmonisation in this regard, or the separate reporting of e-commerce value figures adjusted to account for sales taxes for use in international comparisons, would be beneficial. Indeed, the latest OECD guidance (OECD, 2025), reproduced in **Box 6** (Section 8.1.1), explicitly indicates that the value of e-commerce sales of goods and services should be reported "excluding VAT if applicable". This practice is also recommended here.

5.1 Multiple counting

5.15 In focusing on sales turnover, in contrast to a value added-type concept, e-commerce statistics accept that multiple e-commerce transactions may occur in relation to the same item. For example, a manufacturer of toys may use EDI to order components from suppliers. The manufacturer then sells the assembled toys to a retailer in fulfilment of an order also placed through EDI. The retailer then sells the toys to customers through its website. The price paid from the buyer to the seller at each of these steps is counted towards the value of e-commerce transactions.

5.16 This approach makes statistical information more straightforward to gather but makes it harder to assess the economic contribution of e-commerce by comparing it to GDP or the value added of various industries. This trade-off is common to many other business and international trade statistics. It should nevertheless be born in mind when compiling and using e-commerce statistics. E-commerce turnover measures the value of sales made through digital ordering, not the additional value added generated by using that ordering method.

5.17 The successive sales illustrated above should be distinguished from sales between legal units belonging to the same statistical enterprise. In enterprise-level measurement, these

internal sales should be excluded from both total turnover and e-commerce sales. Sales between separate enterprises, including those within the same enterprise group, may qualify as e-commerce and should not be excluded merely because of common ownership. Section 7.3 explains these statistical-unit distinctions and the reporting, consolidation and metadata considerations involved.

5.2 E-commerce purchases

5.18 Purchases of goods and services are recorded in different parts of a business's accounts according to the nature and intended use of the item acquired. Depending on the accounting treatment, a purchase may be recognised as an expense, inventory or another asset. E-commerce purchases therefore need to be identified across these different accounting categories.

5.19 The values recorded in the enterprise's accounts should provide the basis for valuing e-commerce purchases. However, the applicable accounting rules may require the recorded cost of acquired assets or inventory to include amounts arising from related but separately purchased goods or services, such as transport or installation services incurred in bringing them to the location and condition necessary for their intended use. Although these amounts are combined for accounting purposes, they arise from separate purchases and may have been ordered in different ways. For e-commerce measurement, each underlying purchase should in principle be assessed separately according to its ordering method.

5.20 Under IFRS, discounts and rebates reduce the amount recognised for a purchase, while taxes such as VAT are excluded where they are recoverable by the purchaser. Where such taxes are non-recoverable and form part of the amount recognised in the enterprise's accounts, they would also form part of the purchase value reported for e-commerce measurement. This differs from valuation on the seller side, where taxes collected on behalf of government do not form part of turnover. As a result, the seller and purchaser may not report the same value with respect to a given e-commerce transaction between them.

5.21 More importantly, it is less likely than for sales that businesses will keep records of whether purchases were made via e-commerce or not. This can create challenges in identifying e-commerce purchases within overall amounts recorded in business accounts as expenses, inventory and other assets. Nevertheless, experiences differ across countries and businesses. Smaller firms, for example, may be able to report e-commerce purchases more readily where they are handled by a single person or team, even if the ordering method is not separately recorded in their accounts. E-commerce sales should generally be measured first, with purchases developed as a complementary avenue where sufficiently reliable information can be obtained.

5.3 Recommendations

15) E-commerce sales should be valued in accordance with the statistical definition of turnover, comprising the total value of market sales of goods and services to third parties. Most importantly, this implies reporting e-commerce sales net of amounts collected in respect of sales taxes such as VAT and of price reductions, rebates and discounts.

16) E-commerce purchases should be valued based on the values recorded in the purchaser's accounts.

17) Priority should be given to measuring e-commerce sales, with e-commerce purchases treated as a complementary extension where feasible.

18) Differences in valuation should be considered when making international comparisons and appropriately communicated to users.

Chapter 6. Applying the definition of e-commerce and identifying the value to be recorded

6.1 In most cases, it is straightforward to identify whether an e-commerce transaction has taken place and the associated value which should be recorded.

6.2 In business and procurement contexts, the operative order is commonly referred to as a purchase order. It is often straightforward to establish whether that purchase order was placed and received digitally. **Box 1** examines an illustrative e-commerce transaction in detail, focusing on B2B sales because these account for the largest share of e-commerce by value in many economies.

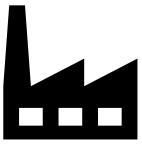
6.3 Even so, there are certain cases which can benefit from further explanation. Cases for clarification have been identified through TG-eCOM discussions as well as questions raised by participants in training workshops delivered by UN Trade and Development with partners including the IMF, OECD, SPC, UNECLAC, UNESCAP, UNSD, and WTO, among others. Explanation and guidance to address these is set out in the following sections. Order values should be recorded following the recommendations laid out in Chapter 5 and any further clarifications indicated below.

6.4 This chapter follows from the concept of e-commerce (Chapter 3) and valuation guidelines (Chapter 5), looking at their application in specific situations. However, some limitations may need to be accepted when measuring e-commerce in practice; these limitations should be acknowledged by compilers and communicated to users.

Box 1. An e-commerce transaction in detail

By value, most e-commerce transactions occur B2B. A typical B2B transaction is completed in multiple steps. Significant time may elapse between purchase and payment, not least because sellers may allow buyers 30 days or more to pay invoices.

Steps in a typical B2B transaction

Buyer				Seller
	→	1. Buyer submits purchase order to seller	→	
	←	2. Seller confirms by issuing a "sales order"	←	
	←	3. Delivery of goods or services from seller to buyer	←	
	←	4. Invoice issued from seller to buyer	←	
	→	5. Payment made by buyer to seller	→	
	←	6. Receipt issued by seller	←	
e.g. retail store				e.g. manufacturer

As e-commerce is defined by the nature of ordering, the key question is whether or not the **purchase order** was placed and received through digital ordering. That is, via EDI, or through a website or app operated by the seller or a third party (as set out in Chapter 3).

By contrast, **turnover** is based on the amounts "*invoiced*" by the enterprise during the reporting period (Chapter 5). In reality, the **final transaction value may not be confirmed until the receipt is issued**. For example, it cannot be known whether a discount for early / on time payment applies until payment has been made (discounts should be deducted from turnover).

In some e-commerce transactions, especially B2C, payment is made at the time of ordering with a receipt being issued and delivery of the goods and services coming after.

In any case, there will be a need for respondents to refer back to the ordering method when reporting e-commerce turnover or for careful establishment of what value is reflected in non-survey sources.

Illustrative example of invoice / receipt items for an e-commerce order between a shop (buyer) and a manufacturer (seller)

Invoice			**Seller's recognised turnover and e-commerce sales**	
	$			$
Goods	85		Goods	85
Discount	-5	➔	Discount	-5
Excise duty on goods	9		Excise duty on goods	9
Delivery	11		Delivery	11
Tax (VAT)	10		~~Tax (VAT)~~	~~10~~
TOTAL	**110**		**TOTAL**	**100**

For this example, the manufacturer acts as principal for delivery and recognises the delivery charge of $11 as its own revenue. It therefore reports total e-commerce sales of $100. If it instead collected the full delivery charge on behalf of a carrier as agent, with no fee or commission retained, its e-commerce sales would be $89; the carrier's delivery revenue would be assessed separately against the e-commerce definition. It is also assumed that the buying business can recover the VAT charged.

Recording in e-commerce statistics

The following illustrates how the invoice / receipt amounts should translate to reporting in e-commerce statistics.

		E-commerce sales	**E-commerce purchases**
Total e-commerce		**100**	**100**
By product	Goods	89	89
	Services (delivery)	11	11
By industry	ISIC C Manufacturing	100	
	ISIC G47 Retail trade		100
By customer type	B2B	100	100
	B2C		
	B2G		

Digitally ordered trade

Either one of these parties could be resident outside the economy for which statistics are being compiled:

- If the buyer is resident abroad, the e-commerce sale is a digitally ordered export of $100.
- If the seller is resident abroad, the e-commerce purchase is a digitally ordered import of $100.

However, it should be noted that trade transactions are subject to different valuation from turnover, as set out in **Box 3** (Section 6.5).

6.1 Identifying and recording e-commerce transactions

6.5 Transactions are defined in economic statistics as "Economic flows that are interactions between institutional units by mutual agreement or through the operation of the law" (United Nations et. al., 2025). E-commerce statistics are, by definition, focussed on the subset of transactions arising where a buyer pays a seller for the provision of goods and / or services.

6.6 The definition of e-commerce should be applied at the level of individual transactions. Each time a good or service is sold and bought, the order which led to the transaction should be assessed against two criteria:

i) Was ordering "conducted over computer networks"? and,

ii) Was the ordering "by methods specifically designed for the purpose of receiving or placing of orders"?

6.7 Only if the answer to both of these questions is "yes", was the transaction "digitally ordered" and should be counted towards e-commerce statistics.

6.8 Once a transaction has been identified as e-commerce, Chapter 5 provides the valuation principles for recording it: turnover for sales, and the value recorded in the purchaser's accounts for purchases.

6.9 From the perspective of an enterprise reporting on e-commerce sales, revenue from sales of goods and services, as reflected in its financial records, is the main starting point. The central task is to identify the part of this revenue arising from digital orders received by the enterprise, including through third-party platforms or ordering interfaces operated on its behalf. E-commerce sales should be recorded at the value and in the period in which the associated revenue is recognised in the enterprise's accounts, following the valuation principles in Chapter 5.

6.10 The relevant order is the one giving rise to the reporting enterprise's own sale. For example, where its customer purchases a good or service for resale, the enterprise should assess how that customer placed the order with it. A digital order placed by an end customer with the reseller does not make the enterprise's sale to the reseller digitally ordered.

6.11 A reporting enterprise may also receive or handle amounts related to an e-commerce transaction that are not recognised as its revenue under the applicable accounting rules, such as IFRS. Examples include amounts collected on behalf of sellers when operating a digital intermediation platform (Section 6.9), a shared online storefront for businesses trading under the same brand (Section 6.3.1), or a billing and payment collection service for a utility provider (Section 6.12.2.3). Such amounts are not recognised as the reporting enterprise's own sales revenue and therefore are not a candidate for reporting as e-commerce turnover. Any fees or commissions recognised as its own revenue should be assessed separately to establish whether they arose from digital orders.

6.12 The same principle applies to delivery, packaging and other services ancillary to the main sale of goods or services. In accounting terms, a seller acts as **principal** when it undertakes to provide the ancillary service to the customer as part of its own offering, even if it hires another business to carry it out. By contrast, it acts as **agent** when it only arranges for the customer to obtain the service from another provider, rather than undertaking to supply that service itself. For

delivery, the distinction is between “we will deliver your purchase, using a carrier” and “we will arrange delivery by a carrier on your behalf”. This distinction determines how much revenue the seller recognises. As principal, the seller recognises the charge for the ancillary service as revenue, without deducting amounts paid to another business to carry it out. Where the ancillary service is ordered digitally alongside the main good or service, that revenue forms part of the seller’s e-commerce turnover. As agent, amounts collected on behalf of the other provider are excluded from the seller’s turnover; only any fee or commission recognised as the seller’s own revenue is assessed for inclusion in e-commerce. Separately itemising a charge on the invoice does not determine which treatment applies.

6.13 Overall, accounting rules determine the revenue from sales of goods and services recognised in the enterprise’s accounts, as well as the timing of recognition. For e-commerce statistics, this revenue needs to be broken down according to whether those goods and services were digitally ordered.

6.14 On the purchasing side, business accounting rules determine the valuation and time of recognition of purchases, which may be recorded within inventory, other assets or expenses, depending on their nature. The ordering method likewise determines whether the purchase is e-commerce.

6.1.1 Non-monetary transactions

6.15 Non-monetary transactions, where goods or services are provided without a countervailing payment from the recipient, are beyond the scope of e-commerce statistics.

6.16 A widespread example of this is online services such as search, email, and social media services that are provided free of charge to the service users. When there is no monetary charge from the service provider to the user, there is no value to be recorded in e-commerce statistics.

6.17 However, the costs of running these services are commonly funded by sales of advertising (or other) services paid for by third parties. These advertising services are often ordered over computer networks and by methods specifically designed for the purpose of receiving or placing of orders; where this is the case, the sale and purchase should be recorded in the value of e-commerce.

6.2 “Pure-play” vs “multi-channel” sellers

6.18 Businesses engaging in e-commerce sales may be “pure play”, meaning that they only sell via e-commerce, or they may follow a “multi-channel” strategy combining sales via e-commerce with those through physical stores. This type of categorisation can be useful for analytical purposes and for contextualising e-commerce value statistics.

6.19 Because both pure players and multi-channel sellers engage in e-commerce sales, they *may* together be thought of as “e-commerce firms”. However, this should not be allowed to lead to an over-statement of e-commerce sales.

6.20 The definition of e-commerce is applied at the level of individual transactions; only the value of transactions where the order was placed / received digitally should be included in e-commerce value statistics.

6.21 Any other statistics, such as the total sales of all "e-commerce firms" (i.e. including both e-commerce and non-e-commerce sales) should be clearly and carefully labelled to avoid user confusion – and never mis-labelled as representing "e-commerce sales".

6.3 Orders placed via own websites and apps vs through online marketplaces

6.22 Web sales encompass orders placed through several types of web-based ordering interface, including sellers' own websites or apps and third-party online marketplaces. While all such transactions are recorded as web sales within the broader e-commerce concept, distinguishing between these ordering channels can be analytically useful. In particular, sales made through online marketplaces may raise specific policy and measurement issues, including questions of market dependence, concentration and resilience, especially where the marketplaces concerned are operated from abroad.

6.23 Accordingly, where relevant to user needs and feasible given data availability and respondent burden, it is recommended to break web sales down into two further sub-categories:

1. Orders placed through e-commerce marketplaces and other digital intermediation platforms that operate websites or apps used by multiple businesses or producers to receive orders for goods or services
2. Orders placed and received through the seller's own website or app

6.24 The main practical indicator distinguishing these two sub-categories is whether the website or app presents products from a single seller or from multiple sellers. If there is only one seller, and they own the goods or are responsible for providing the services being sold, these are orders through the seller's own website or app. By contrast, when a single website or app provides the buyer with access to listings from multiple sellers through the same interface, these are orders through an online marketplace. The example presented in **Box 2** provides a practical illustration of differentiating different e-commerce channels.

6.25 Many sellers make use of third-party service providers for the design, development, maintenance or hosting of the websites or apps they sell through. Indeed, it can often be evident from site or app layout and design elements that different sellers are using the same underlying e-commerce service provider. This does not impact the key distinction between whether the buyer is ordering through a *seller-specific storefront* or through a *multi-seller platform*. The fact that a third-party designs, hosts or maintains the site does not in itself prevent it from being treated as the seller's own website or app, provided the interface is operated by or on behalf of that seller for the sale of its own goods or services.

6.26 In most cases, online marketplaces are third parties in relation to the seller (as well as the buyer). However, the operators of online marketplaces can also make direct sales of goods which they themselves own, or services that they are directly responsible for delivering, sold through the same marketplace interface. From the perspective of a marketplace operator, the revenue from these sales is recognised in its entirety as the operator's own revenue and should be reported as e-commerce sales in statistical collections. Furthermore, that the seller and marketplace operator are the same does not change that these are orders via an online marketplace. This stands in contrast to the recognition and reporting of sales by third parties through the operator's marketplace, as set out in Section 6.9.

6.3.1 Shared online storefronts for businesses trading under the same brand

6.27 When a business trades under a shared brand, for example through a franchise arrangement, the brand's sales website or app serves as that business's online storefront. For example, a hotel participating in a branded hotel network receives bookings through the brand's website or app without needing a separate website of its own. The same principle applies to restaurants, car hire businesses, supermarkets and other retail stores that receive orders through the shared website or app of the brand under which they operate.

6.28 As noted in Section 6.3, third-party operation does not in itself prevent a website or app from being treated as the seller's own, provided it is operated by or on behalf of the seller. In a franchise or similar branding arrangement, the shared online storefront is run by the company responsible for the brand on behalf of participating businesses. These businesses pay royalties and other fees for use of the brand and associated services, including marketing on the shared storefront and receiving orders through it.

6.29 Although the shared storefront receives orders for multiple legal entities operating under the brand, each participating business' sales through that storefront should be reported as sales through the seller's own website or app. Meanwhile, the company responsible for the brand does not recognise participating businesses' sales as its own revenue in its accounts and should not report them as its own e-commerce turnover. Its income from royalties and other fees should be assessed separately against the e-commerce definition, following the principles in Section 6.1.

6.30 By contrast, the same hotel may also receive bookings through an external accommodation marketplace platform. In that case, the platform provides digital intermediation between the hotel and guests, but the hotel does not operate under the platform's brand. Bookings received through this channel should be reported as marketplace sales.

6.4 EDI e-commerce

6.31 EDI (electronic data interchange) refers to structured, standardised messages transferred within and between computer systems using agreed formats, without manual re-entry. Only the subset of EDI messages used for the purpose of placing or receiving orders is relevant for EDI e-commerce, as set out in Section 3.3.1.1. Those orders fall within e-commerce because they are conducted over computer networks and through systems that have been specifically designed with features for order creation and processing. In practice, EDI ordering is often integrated with ERP systems, linking automated order messages to wider business processes such as inventory control, purchasing and invoicing.

6.32 Given the broader use of EDI within business systems, it is important to distinguish between EDI as the ordering method and EDI as part of the subsequent transmission, processing or fulfilment of orders placed through a web interface. Because the type of e-commerce transaction is defined by the method used to place the order (OECD, 2011; 2025), rather than how the order is subsequently processed, only orders initiated directly through EDI-type messages between the buyer's and seller's systems qualify as EDI e-commerce. Orders placed through a website, app, marketplace or other web interface remain web sales, even where the interface subsequently generates or transmits EDI messages to confirm, transmit or process the order.

6.33 **Box 2** provides an illustrative example of implementing this distinction. This example also illustrates that, because of how EDI e-commerce orders are structured, they may tend toward

(much) greater per-order values than web sales. Even when EDI ordering is not believed to be widely used in the target economy, it is important that efforts are made to ensure that EDI orders are captured in e-commerce statistics.

Box 2. Hotel sales through web and EDI e-commerce channels

Hotels are one common example of businesses that make extensive use of e-commerce to make sales, including varied web sales channels and EDI ordering. This example is used to illustrate a distinction that applies more generally across industries with the key determinant being the ordering method or interface used by the buyer, not the seller's back-end processing.

Scenario

A hotel receives room bookings through multiple e-commerce channels:

1. Some guests book directly through the hotel's own website.
2. Other guests book through an external accommodation booking platform (a third-party website or app used to book rooms across multiple hotels) or a hotel group website (a website operated under a hotel brand or group through which affiliated properties are marketed and booked), where the booking is made through a web interface but EDI messages are subsequently exchanged with the hotel's ERP system to confirm availability, prices and booking details.
3. A nearby conference centre sells event packages that include accommodation; when such a package is booked, its ERP or event-management system exchanges EDI messages directly with the hotel's system to reserve the required rooms.

For ICT survey reporting, the decisive issue is how the order was placed. Bookings made through the hotel's own website and through the external platform or chain website are web sales. Only bookings initiated directly through EDI-type messages exchanged between the conference centre's system and the hotel's system are EDI-type sales.

All three channels will generate records within the booking, property-management or ERP environment, including reservation records, sales orders and invoices at different stages of the process. Importantly, these records will usually include reservation source or channel information, meaning that the hotel can distinguish how the booking was received, even where the underlying records sit within the same operational systems. Indeed, this information will often be used internally for monitoring the importance and effectiveness of different ordering channels.

This example illustrates that the presence of EDI messages in the back-end of a booking process, including where they are exchanged between the systems of different parties and feed into the hotel's ERP system, does not by itself make the resulting sale EDI e-commerce. For classification, what matters is whether the booking was placed through a web interface or initiated directly through EDI-type messages.

Illustrative bookings received by the hotel

Ordering scenario	How it appears in hotel systems	Revenue recognised	Sales channel reflected in hotel system
Guest books via hotel's own website	Reservation and invoice recorded in booking / ERP system	120	Direct sale via website
Guest books via branded hotel brand app	Reservation received in booking / ERP system via background EDI exchange	125	Sale via hotel brand channels
Guest books via travel platform (DIP)	Reservation received in booking / ERP system via background EDI exchange	155	Sale via online travel agency
Conference centre sends booking directly via EDI	EDI order received directly into booking / ERP system	10,000	Direct sale via EDI

Recording in e-commerce statistics

The following illustrates how this revenue should translate to reporting in e-commerce statistics.

		E-commerce sales	E-commerce purchases
Total e-commerce		**10,400**	
By product	Services (Accommodation)	10,400	
By industry	ISIC I Accommodation and food service	10,400	
By customer type	B2B	10,000	
	B2C	400*	
	B2G		
By e-commerce type	EDI e-commerce	10,000	
	Web sales	400	
	- via own websites or apps	(120+125=) 245	
	- via e-commerce marketplaces	155	

** for the purpose of this example it is assumed that the guests are staying in their capacity as private individuals and so the bookings are B2C. In practice, the hotel ought to make reference to relevant details such as the customer account type (individual/company), whether a corporate negotiated rate or business/government payment method was used (business account / central bill / company card), or the guest's stated reason for stay (i.e. business vs leisure reasons) to decide whether the sale should be reported as B2C or B2B/G.*

6.5 Digitally ordered trade

6.34 The link between e-commerce and digital trade was noted in Chapter 2 and illustrated in **Figure 1**. In particular, e-commerce transactions occurring internationally – that is, between buyers and sellers resident in different economic territories – constitute digitally ordered trade.

6.35 Furthermore, in transactions taking place through DIPs, it is common for the DIP to be resident abroad even when the buyer and seller are both located domestically.

6.36 There is, therefore, a need to sub-classify e-commerce transactions according to whether they are domestic or international e-commerce.

6.37 The factor which determines that an e-commerce transaction is a digitally ordered trade transaction is the residence of the buyer and seller. As set out in the frameworks for balance of payments (IMF, 2025), international merchandise trade statistics (IMTS) and international trade in services statistics (MSITS), international trade transactions take place between residents of different economic territories, where residence is determined by the economic territory in which the transacting unit is ordinarily based and with which it has its centre of economic interest. These reference also offer guidance on collecting residence information from respondents.

6.38 From the perspective of a given compiling economy, a digitally ordered trade transaction requires that either the buyer or the seller is resident in that economy, while the other is resident in a different economic territory. If the buyer is the resident, the result is a digitally ordered import whereas if the seller is the resident the transaction is a digitally ordered export.

6.39 Digital intermediation platforms can complicate this assessment (see Section 6.9).

6.40 With regards to valuation, it should be noted that e-commerce turnover includes:

- *all duties and taxes on the goods or services invoiced by the unit with the exception of the value-added tax (VAT) invoiced by the unit vis-à-vis its customer and other similar deductible taxes directly linked to turnover;*
- *all other charges (transport, packaging, etc.) passed on to the customer, even if these charges are listed separately on the invoice.*

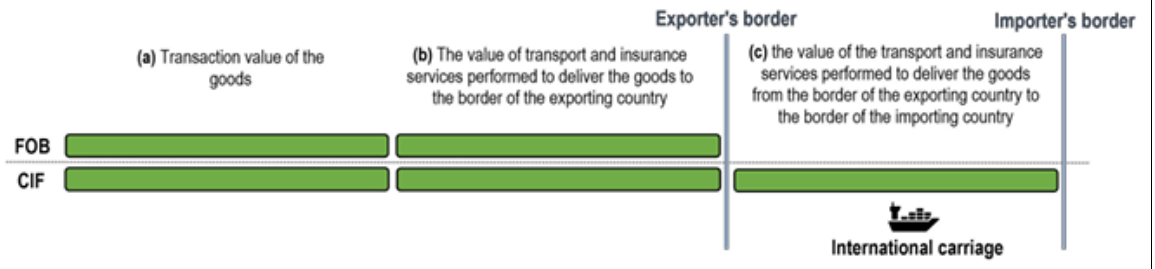
6.41 Transacting across borders may introduce additional duties or taxes to the transaction. For goods, international deliveries will likely incur greater transport and insurance costs than for domestic deliveries. These should be accounted for in measuring the value of e-commerce sales turnover. The treatment of these charges may be different in trade statistics (see **Box 3**).

Box 3. Valuation of digitally ordered trade

For services, the valuation used in international trade in services statistics is broadly aligned with the turnover or revenue basis used in e-commerce statistics because services are recorded at transaction values. As a result, valuation differences are generally less significant for services than for goods, although some differences may still arise in practice because of timing, taxes, bundling, or the treatment of intermediary margins.

For goods, by contrast, e-commerce turnover may not perfectly align with the valuation applied in merchandise trade statistics, which prioritises "Free on Board" (FOB) and "Cost, Insurance, Freight" (CIF) valuation schemes as shown in **Figure 8**.

Figure 8. Illustration of FOB and CIF valuation



Source: (Fiallos, Liberatore, & Cassimon, 2024)

In accordance with the definition of turnover, the cost of transport and insurance services to deliver the goods from the importing country's border to the final delivery destination would be included in e-commerce turnover, where these are included in the overall price paid from the buyer to the seller.

At the same time, International Merchandise Trade Statistics: Concepts and Definitions 2026 (United Nations et al., 2026) recognises that observed transaction values or invoice values are conceptually preferred because they reflect the value of the change of ownership and align more closely with the principle of output valuation at basic prices used for domestic transactions in the 2025 System of National Accounts. Observed transaction values or invoice values are conceptually closer to the turnover basis used in e-commerce statistics than FOB/CIF-type valuations, because they better reflect the value of the change of ownership between buyer and seller. They may therefore offer a stronger basis for future alignment between e-commerce, digital trade and national accounts statistics, although some practical differences may still remain.

Differences in valuation should be taken into account when using business e-commerce sales figures in the context of measuring digital trade, digital supply use tables, or National Accounts. For more on valuation differences see (IMF, 2021).

6.42 Within the context of digitally ordered trade, several specific cases can be further clarified:

6.5.1 Mobile roaming services

6.43 An individual visiting another country may use the SIM card from their home-country mobile service provider to connect to and receive service from a cell network in a country they are visiting. This is the product of a system specifically designed to allow seamless and instantaneous digital ordering of roaming mobile network service.

6.44 The roaming service is provided by the mobile network operator in the country being visited. However, the individual has no direct dealing with this company; having procured a contract including roaming service from their home-country mobile service provider.

6.45 The resulting digitally ordered trade transaction occurs between the host and home country telecommunications providers and should reflect the amount charged by the former for the provision of roaming service to the latter's customer. This amount should in principle be included in digitally ordered trade.

6.46 In practice, collecting this data has the potential to be relatively straightforward. Most countries only have a small number of mobile network operators (often including some virtual network operators). These "home" network operators need to report the amounts:

- paid to network operators abroad for roaming services provided to subscribers of the home operator – to be recorded as digitally ordered imports
- received from network operators abroad for providing services to visitors roaming on the home network – to be recorded as digitally ordered exports.

6.5.2 Transactions between affiliated enterprises

6.47 A high proportion of imports and exports of goods and services are between affiliated enterprises. Affiliated enterprises can use private networks or proprietary computer systems for the purpose of receiving and placing orders between members of the group. The same principles apply as for trade between unaffiliated enterprises, and orders via such systems would constitute digitally ordered trade.

6.6 Digitally delivered products

6.48 Digitalisation has transformed the way many services are delivered, both domestically and across borders. The main changes can be grouped into several broad patterns as follows:

- Services which rely on inter-personal interactions, such as medical, financial, legal, and other forms of consultation and advice can now be provided with those interactions taking place remotely through video calls or typed messages.
- Some services used to rely primarily on inter-personal interactions, but are now commonly provided remotely through self-service online interfaces. Examples include banking and other financial and insurance services.
- Some service providers have adopted both of the above. For example, e-learning platforms can offer a combination of self-service access to recorded or interactive materials as well as live lessons delivered remotely.

- The delivery of some services is embodied in the form of outputs such as reports, designs, blueprints, product formulations, etc. Examples include research and development (R&D) services, accounting services, and architectural services. Such outputs are now often delivered in the form of digital files in place outputs being printed and posted.
- And various goods, such as books, and media and software CDs and DVDs, have undergone a transformation into services products [1] so that they can be delivered digitally in the form of eBooks, media streaming services, and cloud services.

6.49 All of these cases are covered by the concept of digital delivery, defined as "transactions that are delivered remotely over computer networks" ((OECD, 2023); (IMF, OECD, UNCTAD, and WTO, 2023)).

6.50 While it bears some similarities (i.e. reference to computer networks), digital delivery is conceptually distinct from digital ordering (e-commerce). Indeed, the definition of e-commerce makes clear that whether the product ordered is digitally delivered or not is irrelevant to the assessment of whether it is an e-commerce transaction: "the ultimate delivery of the goods or services do not have to be conducted online" (OECD, 2025).

6.51 Nevertheless, a *perceived* link between these two phenomena may arise because many of the digitally delivered services most familiar in daily life, such as streaming services, are often also digitally ordered. Even so, compilers should not conflate digital delivery with digital ordering, and should take steps to avoid respondents doing the same; just because a service is delivered digitally does not automatically mean that it was digitally ordered and counts toward e-commerce statistics.

6.52 For example, when large corporations enter contracts for the organisation-wide provision of services such as telecommunications or e-learning to staff, it is common for these contracts to be negotiated in-person and agreed "on paper". This disqualifies the order from e-commerce without affecting the digitally delivered nature of the services concerned.

6.53 Digital delivery of services is also helping to fuel the rise of several further phenomena: subscriptions and bundled transactions.

6.7 Subscriptions

6.54 Some digital orders give rise to an ongoing provision of services with accompanying payments (recurring transactions). Examples include subscriptions to telecommunications services, streaming media, online software and gaming services, subscriptions for food and grocery delivery services, subscriptions for meal-preparation kits, clothing rental subscriptions, among many others.

6.55 Although the order is placed only once, the service continues over subsequent periods (often with monthly renewals) for as long as the subscription is not cancelled and the relevant subscription fees continue to be paid.

[1] Although there may be a preference in some arenas to continue referring to these products as "goods", the practical reality is that they are no longer tangible and hence will not be captured by statistical sources relying on counting physical items – notably the customs declarations underpinning merchandise trade statistics.

6.56 In principle, all periodic subscription payments arising under these arrangements are for a digitally ordered service and should be counted toward e-commerce.

6.57 If a subscription service provider only allows customers to sign up through e-commerce channels, it is straightforward that all subscription income should be recorded as e-commerce revenue.

6.58 However, many service providers offer subscription sign-ups through both digital and non-digital channels, or did in the past. In practice, these firms may not have the information needed to identify the original ordering method associated with recurring payments – especially for subscriptions which began years or even decades in the past.

6.59 For current-period payments arising under subscriptions taken-out in previous periods, it may be necessary to estimate the share of total subscription revenue in the current period arising from digital orders so that this can be counted towards e-commerce sales. One possibility is to do so based on the share of digital ordering among subscriptions initiated in the current period. This can be conceived as reflecting the share of digital ordering which would be likely to arise if customers had to place a new order each time instead of the service automatically renewing. The method used should be clearly documented and communicated to users.

6.8 Framework contracts

6.60 In some cases, two parties agree an over-arching "framework contract" for the provision of goods or services from one to the other. For example, an agreement under which a company becomes the exclusive supplier of certain inputs to another business.

6.61 The framework contract may be negotiated and agreed in person and set parameters such as unit prices, minimum purchase volumes and the duration of the agreement. It may also specify how orders are to be placed. Digital orders ensuing under the agreement should be included in e-commerce statistics.

6.62 For a contract spanning several statistical periods and potentially involving multiple transactions, each transaction should be classified as digitally ordered or not digitally ordered, reflecting the mode(s) of ordering used in the current period.

6.9 Digital intermediation platforms (DIPs)

6.63 Online platforms play an increasingly important role in the digital economy. They facilitate economic transactions (e.g. trade in goods and services), or non-economic interactions (e.g., social media and discussion sites) (UNCTAD, 2019). In 2019, the OECD, after extensive consultations, set out a broad definition of online platforms as "a digital service that facilitates interactions between two or more distinct but interdependent sets of users (whether firms or individuals) who interact through the service via the Internet" (OECD, 2019).

6.64 A particularly crucial subset of online platforms are DIPs, sometimes referred to as "online marketplaces". These platforms facilitate transactions in goods and services and charge a fee for facilitating the transaction. The World Customs Organization (2022), and the OECD Centre for Tax Policy and Administration (OECD, 2018; 2019a) identified the key defining features of DIPs:

i) There are multiple buyers and multiple sellers that interact through the platform; and

ii) The platform itself does not own the goods, nor does it render the services that are being intermediated.

6.65 Based on these criteria, DIPs are defined as *"Online interfaces that facilitate, for a fee, the direct interaction between multiple buyers and multiple sellers, without the platform taking economic ownership of the goods or rendering the services that are being sold (intermediated)."* (IMF, OECD, UNCTAD, and WTO, 2023; OECD, 2023).

6.66 Orders placed through DIPs are, by definition, digitally ordered and count toward e-commerce statistics.

6.67 However, DIPs complicate e-commerce transactions by introducing a third-party alongside the buyer and seller. In facilitating the transaction between the buyer and seller, the DIP produces a "digital intermediation service" which is supplied simultaneously to both these parties. This service consists of "matching" buyers with sellers and thus facilitating the exchange of goods or the provision of services. Digital intermediation services are defined as *"online intermediation services that facilitate transactions between multiple buyers and multiple sellers in exchange for a fee, without the online intermediation unit taking economic ownership of the goods or rendering the services that are being sold (intermediated)"* (IMF, OECD, UNCTAD, and WTO, 2023; OECD, 2023).

6.68 By listing goods or services for sale through a DIP, sellers instruct the platform to intermediate resulting orders in return for the applicable platform fees. Each digital order placed by a buyer through the DIP activates that arrangement and the associated intermediation service. The digital intermediation service is therefore digitally ordered, including where the seller pays the intermediation fee. Digital intermediation services are also digitally delivered.

6.69 DIPs often facilitate payment for the good or service being intermediated by collecting monies from the buyer and, after retaining fees for the digital intermediation service they provided, passing the residual amount on to the seller. This means that following the flow of money obscures the underlying economic relationship in which the seller is providing a good or service to the buyer (not to the DIP that it is receiving the payment from).

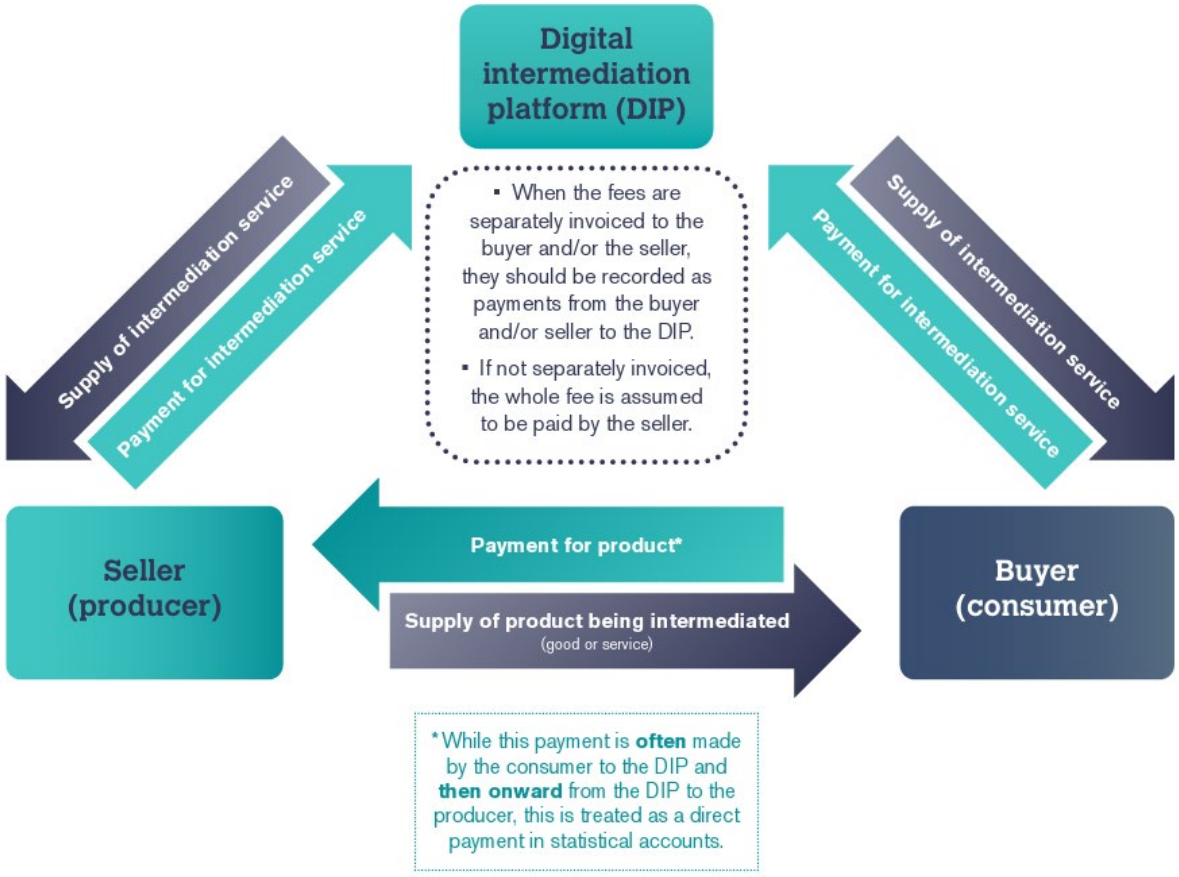
6.70 To record the value of e-commerce transactions facilitated by DIPs, it is necessary to distinguish the supply of goods or services (i.e., the transaction between the seller and the buyer) from the provision of intermediation services (i.e., the transactions between the DIP and both the seller and the buyer), as visualised in **Figure 9**.

6.71 The fees for digital intermediation service provided by DIPs may be paid by the buyer, the seller, or both. Fees may be separately itemised in the transaction invoice, or separately invoiced ("explicit"), or they may be implied by a difference between the amount collected by the platform from the buyer and the amount passed by the platform to the seller with respect to the transaction ("implicit").

6.72 It should be noted that additional factors may also affect the spread between the amount paid by the buyer and that received by the seller. For example, the DIP may be required to withhold taxes levied on the transaction for payment to the government or the transaction amount may cover additional services provided by the DIP, such as warehousing and logistical services for goods. Transactions for ride hailing services may include additional amounts covering tolls or airport charges. DIPs may also collect tips on behalf of drivers. Often, these amounts are itemised separately on invoices. Where intermediation fees are estimated from payment flows, compilers

should therefore account for these other components rather than assume that the entire difference is intermediation revenue.

Figure 9. Unpacking a DIP transaction



Source: IMF, OECD, UNCTAD and WTO (2023)

6.73 Against this background, it is useful to consider separately how these transactions should be recorded and reported from the perspective of each of the three parties involved.

6.9.1 Operators of digital intermediation platforms

6.74 In respect of marketplace transactions between third-party buyers and sellers, **DIP operators recognise as revenue only the fees charged for the digital intermediation services that they provide**. Under IFRS, the platform typically acts as an "agent" in such transactions and therefore recognises only the net fee or commission to which it expects to be entitled, rather than the gross value of the goods or services sold. In financial statements, the gross merchandise value / gross transaction value facilitated by the DIP may optionally be reported as a separate item.

6.75 Fees for digital intermediation services may be charged per transaction or as fixed periodic charges for access to the platform's intermediation service. Both should be included in the operator's recognised revenue from digital intermediation services; fees for other services, such as advertising or logistics, should be assessed separately.

6.76 This follows the general reporting principles set out in Section 6.1: amounts collected on behalf of sellers are not the DIP operator's turnover. In relation to transactions where the DIP intermediates goods or services between buyers and sellers, only the value of fees or

commissions received for the provision of digital intermediation services, which are digitally ordered by definition, should be recorded as e-commerce revenue of the DIP. The associated revenue should be reported as e-commerce turnover in the period in which the operator recognises it in its accounts.

6.77 DIPs may fund rebates or other incentives that reduce the amount buyers pay for the goods or services being intermediated. Incentives recorded separately as marketing expenses in the DIP's accounts are not deducted when reporting e-commerce turnover. When these statistics are used as inputs to national accounts or balance-of-payments compilation, adjustments may be needed for differences in recording periods and to reflect the effect of incentives on the values of the underlying sale and intermediation service, as discussed in the global-consultation draft of the guidance note (IMF, 2026).

6.78 However, it must be acknowledged that **some DIPs engage in additional activities alongside the operation of an online marketplace**:

- Some DIPs intermediating merchandise sales also make direct sales of their own products through the same interface. In respect of these transactions, the operator is acting not as a DIP but as an online retailer selling goods it owns.
- Services-oriented DIPs may also present similar situations, such as where a food delivery platform includes listings serviced from kitchens that it directly owns and operates, or a "ride hailing" platform directly employs some drivers.
- Some DIP operators also supply services other than digital intermediation services or the services intermediated through the platform. These may be ancillary to their activity as a DIP, such as when an operator intermediating merchandise sales provides marketing, warehousing, logistics or returns management services for sellers. Or they can be unrelated to their activities as a DIP, such as providing cloud computing, entertainment, or financial services. These services may or may not be digitally ordered.

6.79 Revenue from digital intermediation services should therefore be distinguished from the operator's other revenue streams and each assessed separately against the e-commerce definition. Total e-commerce turnover reported by a DIP operator should not be interpreted as revenue from digital intermediation services alone.

6.80 In cases where the platform operator is directly selling the goods or is itself responsible for providing services purchased by the buyer through the platform, the corresponding sales revenue recognised in the operator's accounts should also be reflected in e-commerce statistics.

6.81 A DIP operator may also contract with sellers to supply services related to their sales activities through the platform, such as warehousing, logistics, delivery or returns management. Where such services are supplied directly by the DIP under an arrangement that is itself digitally ordered, the corresponding sales revenue recognised in the operator's accounts should likewise be recorded as e-commerce sales of the DIP operator. However, such sales should not be treated as e-commerce solely because they are connected to transactions taking place through the platform.

6.82 DIPs that facilitate the delivery of products provided by others, such as food and grocery delivery platforms, merit further scrutiny because such transactions involve a fourth party – the person or entity providing delivery. **Box 4** looks at this in detail.

Box 4. Delivery couriers

Platform-mediated sales of goods and services often include platform-arranged delivery. Local delivery of restaurant meals and supermarket groceries are a notable example.

The delivery element may give rise to an additional service transaction, the treatment of which in e-commerce statistics depends on how the associated revenue is recognised in business accounts. The key issue is whether the platform supplies delivery to the buyer or arranges for another party to do so.

Where the platform acts as an intermediary, or "agent" in accounting terminology, amounts received from the buyer on behalf of the delivery provider are not recognised as the platform's revenue. Only the fee or commission to which the platform is entitled is recognised as revenue and should be included in e-commerce sales. In this case, and in the context of the framework outlined in **Figure 9**, the courier is effectively acting as a second seller in the DIP transaction – one providing delivery services.

By contrast, where the platform is itself responsible for supplying the delivery service and therefore acts as "principal" in accounting terms, the corresponding amount paid by the buyer is recognised as revenue by the DIP operator and should be recorded as an e-commerce sale.

One potential indication of whether the DIP is acting as a principal or agent is whether couriers are legally treated as employees of the DIP or as independent contractors. The amounts paid to couriers would be recognised as an expense in the platform's financial statements, as labour costs or payments to contractors depending on the legal and contractual arrangement. In the latter case, the DIP would be digitally ordering contractual services, and these should in principle be recorded in e-commerce purchase statistics.

These intricacies may make it appear that identifying the correct recording in e-commerce statistics will be complicated. But statistical compilers should recall that the enterprise's accounts provide the starting point for identifying the revenue to be assessed against the e-commerce definition, while the turnover principles in Chapter 5 determine its valuation for e-commerce statistics. The key task is therefore to establish which recognised sales revenue arises from digitally ordered goods or services, rather than to determine independently how payments related to delivery should be accounted for. In the case of a DIP operator, revenue arising from transactions ordered through the digital intermediation platform, including revenue recognised in relation to delivery services supplied by the operator, is digitally ordered and should be recorded in e-commerce statistics.

To the extent that a courier is formalised as an enterprise or is otherwise covered by an e-commerce survey (for example because household sellers operating outside the formal business sector, discussed in Section 2.4.1, have been included in the survey population), the revenue or income received for the provision of delivery services within a DIP transaction should be reported as the sale of a digitally ordered service, which would count toward e-commerce. This would be the case whether the courier is supplying the service to the DIP under a subcontract-type arrangement or directly to the buyer where the DIP acts only as an intermediary (agent).

However, couriers may understand themselves to be "working for" the platform rather than supplying a service to the DIP operator or the buyer. Specific instructions, tailored survey questions, or a dedicated collection approach may therefore be needed to gather robust information.

This is also an area were the sub-classification of e-commerce sales by type is likely to be challenging to apply. The formalisation status of the courier, as well as their contractual arrangement with the DIP, will affect whether the service provided by the courier should be treated as B2B, B2C or even C2C e-commerce. [2]

Alternatively, as couriers may act as private individuals rather than formalised businesses, it may be feasible to ask the DIP to report this information on their behalf, especially where it is resident in the compiling economy. This approach could also extend to other services commonly supplied by private individuals, such as passenger transport, cleaning and gardening.

[2] Or indeed B or C to G or NPISH (non-profit) if the buyer is not a business or household (consumer).

6.83 In some cases, the seller and DIP may also enter a framework contract (Section 6.8) governing the provision of services such as marketing and order or booking management by the DIP to the seller. That overarching agreement may itself be negotiated or concluded offline "on paper". This does not alter the treatment of transactions facilitated through the DIP: where customers place orders through the platform using features specifically designed for the placing and receiving of orders, those orders remain e-commerce orders. The digital intermediation service provided by the DIP likewise remains digitally ordered (and digitally delivered). This includes when digital orders are placed within the context of a wider business agreement between the seller and the platform that was concluded offline.

6.84 For statistical purposes, the key distinction is between revenue earned by the platform for digital intermediation and revenue arising from goods or services that it supplies directly in its own right. Where the platform acts only as an intermediary between buyer and seller, only the fees or commissions earned for digital intermediation services should be recorded as e-commerce revenue of the DIP operator. Where the platform also directly supplies goods or services, the corresponding amounts should be recorded as e-commerce revenue of the DIP if those goods or services are themselves digitally ordered.

6.85 Where a DIP operator undertakes several productive activities, kind-of-activity units (KAUs) may provide a useful basis for distinguishing digital intermediation from own-account sales and other services. Where separate KAU data are available, they can help compilers identify the revenue attributable to each activity and apply the appropriate e-commerce treatment. Alternatively, these distinctions can be captured through activity breakdowns within an enterprise-level return. In either case, the figures should reconcile with the operator's enterprise-level turnover and e-commerce sales, following the statistical-unit and reporting-boundary guidance in Section 7.3.

6.86 The task of measuring e-commerce by DIPs may be aided by the introduction in ISIC Rev.5 (UNSD, 2024) of new classes for intermediation service activities (**Table 6**). Although these include any intermediation activities taking place offline alongside digital intermediation services, the structure adopted gives a useful indication of the products being intermediated, and these new classes should, in principle, help compilers to identify and keep track of DIP operators. It is recommended that firms classified in these ISIC classes should be covered by data collections on e-commerce.

Table 6. Intermediation service activities in ISIC Rev. 5

ISIC Rev. 5 code	ISIC Rev. 5 title
F434	Intermediation service activities for specialized construction services
G479	Intermediation service activities for retail sale
H523	Intermediation service activities for transportation
H5231	Intermediation service activities for freight transportation
H5232	Intermediation service activities for passenger transportation
H533	Intermediation service activities for postal and courier activities
I554	Intermediation service activities for accommodation
I564	Intermediation service activities for food and beverage services activities
M6821	Intermediation service activities for real estate
O775	Intermediation service activities for rental and leasing of tangible goods and non-financial intangible assets
O7751	Intermediation service activities for rental and leasing of cars, motorhomes and trailers
O7752	Intermediation service activities for rental and leasing of other tangible goods and non-financial intangible assets
O824	Intermediation service activities for business support activities n.e.c., except financial intermediation
Q8561	Intermediation service activities for courses and tutors
R8691	Intermediation service activities for medical, dental, and other human health services
R8791	Intermediation service activities for residential care activities
T954	Intermediation service activities for repair and maintenance of computers, personal and household goods, and motor vehicles and motorcycles
T964	Intermediation service activities for personal services

Source: UN Trade and Development based on ISIC Rev. 5

6.9.2 Sellers

6.87 In a DIP transaction, the seller is responsible for providing the good or service to the buyer. In doing so, the seller would recognise the gross amount from the sale as revenue under IFRS, while also recognising any fee paid to the DIP as an expense. Consistent with the turnover principles set out in Chapter 5, the gross sales revenue recognised in the seller's accounts should be recorded as its e-commerce sales value, without deducting the fee paid to the DIP.

6.88 For the purposes of e-commerce statistics, the following information should be reported by or otherwise captured or estimated in relation to **businesses making sales through online marketplaces**:

i) amounts received in payment for the goods and services sold to the buyer,
ii) amounts paid for digital intermediation services provided.

6.89 It is important to establish whether i) is reported inclusive or exclusive of ii) – which may depend on how payments are handled by the DIP and / or business financial accounting practices as well as on guidance included in the survey form.

6.90 From the perspective of the seller, payments for digital intermediation services should be treated like any other intermediate cost paid out of sales revenue, such as materials, marketing

or utility bills. With respect to turnover, it is an example of 'other charges (transport, packaging, etc.) passed on to the customer, even if these charges are listed separately on the invoice' which are to be included in the amount reported, per the guidance established in Chapter 5.

6.91 Where the DIP operator collects payment for the full transaction, it is common for the fees payable by the seller to be deducted before the remaining amount is passed on to the seller. In such cases, the cash amount received by the seller will be lower than the gross sales revenue recognised in its accounts under the applicable accounting standards, such as IFRS, and reported as e-commerce sales. The documentation provided to the seller by the DIP may also reflect this net cash flow rather than presenting the gross sale value.

6.92 It is important that the seller reports the gross value of the e-commerce sale without netting off fees taken by the DIP for providing digital intermediation services. If this does not happen, asymmetry can arise between the e-commerce purchase reported by the buyer and the balance and the balance of e-commerce sales and purchases reported by the seller and the DIP.

6.93 The table "Recording in sales and purchases ledgers" in **Box 5** can aid in visualising the impact this would have; if the seller was to report the sale based on the cash received from the DIP (i.e. 80 rather than 88), while also reporting the fee paid to the DIP (8) as a purchase, the intermediation fee would be accounted for twice and the seller's e-commerce sales would be underestimated.

6.94 Importantly, this treatment is consistent with using the enterprise's accounting records as the basis for valuation. The main task for the enterprise should therefore be to identify the portions of sales revenue and purchases, valued in accordance with its accounting records, that arise from orders received or placed via e-commerce, rather than to report figures on a different basis.

6.95 To support a full statistical recording in accordance with the above framework, it is necessary to distinguish the value of purchased digital intermediation services from other e-commerce purchases. This detail is not required in IFRS reporting and sellers' ability to provide it is likely to vary.

6.96 Where the value of fees paid for digital intermediation services is not available, it may still be possible to estimate the value involved. DIP operators often publish details of their fee structure or the average platform fee percentage charged on transactions. This information may also be requested from DIP operators, either through a survey vehicle or other engagement - for example in the context of a "large case unit" (see Section 8.5.4) - especially in the case that they are based or otherwise have a commercial presence in the economy for which e-commerce statistics are being compiled.

6.97 If the platforms that the seller uses to make sales can be identified – either through survey questions, alternative data sources (e.g. web scraping), or through knowledge of the markets in which the seller operates – it may be possible to derive reasonable estimates either at the level of individual sellers or at an aggregated level. It is therefore recommended to collect information on the DIPs through which sellers make sales, especially when they are not able to directly report the value of digital intermediation services they have purchased.

6.98 Finally, it should be noted that the seller-facing interface provided by a DIP will often present structured information on transactions, including the gross value of sales, fees charged for digital intermediation services, and the amounts remitted to the seller. This information

enables sellers to track marketplace activity and integrate it with their business and accounting systems, and should therefore provide a solid basis for reporting transactions made through DIPs.

6.9.3 Buyers

6.99 The position of buyers is also important to consider, not least because most business e-commerce transactions by value take place between businesses (see Section 3.2).

6.100 As with sellers, the starting point is the enterprise's accounting records. Purchases of goods and services are recorded in different parts of those accounts according to the nature and intended use of the item acquired, as an expense, inventory or another asset. Identifying e-commerce purchases therefore requires information across these different accounting categories, as explained in Section 5.2.

6.101 Nevertheless, the task is first to identify the purchases which arose from e-commerce ordering. Second, from within those, purchases made through DIPs need to be distinguished; and third, within that subset, the value of digital intermediation services purchased by the buyer from the DIP needs to be captured or estimated.

6.102 It should be noted, however, that where it is not known whether the fee for digital intermediation is paid by the buyer, the seller, or both, it is assumed to be paid by the seller (IMF, OECD, UNCTAD, and WTO, 2023).

6.103 Where the value of fees paid for digital intermediation services is not separately available, it may still be possible to estimate the value involved using information from DIP operators (see above). If the platforms that the buyer uses to make purchases can be identified, for example through survey questions or alternative data sources (e.g. data on payments), it may be possible to derive reasonable estimates either at the level of individual buyers or at an aggregated level. It is therefore recommended to collect information on the DIPs that buyers use to make e-commerce purchases, especially when they cannot directly report the value of digital intermediation services they have purchased.

6.104 Compared with the seller perspective, this exercise is likely to be more challenging to operationalise because the relevant expenditures may be distributed across different accounting categories and may also be more difficult than sales to identify as arising from e-commerce. For this reason, the measurement of purchases through DIPs should generally be treated as a complement to, rather than a substitute for, the measurement of e-commerce sales made through DIPs from the perspective of the seller and the activities of DIP operators.

6.9.4 Digitally ordered trade through DIPs

6.105 As noted in Section 6.5, an e-commerce transaction is a digitally ordered trade transaction if the buyer and seller are residents of different economic territories. In a DIP transaction, there are (at least) three parties to the transaction, and it is necessary to assess the residence of each.

6.106 On one end of the spectrum, all three may be resident in the economy for which statistics are being compiled. In that case, it is at least relatively feasible that all the information needed for statistical compilation can be accessed by compilers.

6.107 At the other, only one party is resident in the compiling economy, for example the seller may be resident but the DIP and buyer are located abroad. As many of the biggest DIPs are

headquartered in only a handful of countries, it is especially likely that the DIP will be non-resident and so transactions with it will be digitally ordered trade transactions.

6.108 The most comprehensive information on the value of transactions intermediated by DIPs and the associated fees will be held by the DIP operators themselves. However, non-residence can limit the information available to statistical compilers, who may have no authority to survey operators resident abroad or compel them to provide information for statistical purposes. Alternative sources or reporting arrangements may therefore be needed. Chapters 8 and 9 identify several possibilities for obtaining information on transactions involving DIPs.

6.109 **Box 5** presents an illustrative recording of a DIP transaction in each of the residence scenarios.

Box 5. A stylised example of a DIP transaction

Scenario
A hotel requires speciality printer paper to make welcome cards for their guests. The responsible employee visits an online marketplace to search for paper of a suitable specification and price, eventually placing an order with a paper manufacturer that lists its products on the marketplace. The outcome is a B2B e-commerce transaction.

Orders placed through digital intermediation platforms are digital orders (e-commerce); this applies both to the good or service being intermediated and the digital intermediation service provided by the DIP.

The means of payment used is not relevant. However, in this example, as the transaction amount is relatively small the buyer pays at the time of ordering, using a business payment card.

Following the money
In this example, the DIP collects payment from the buyer, subtracts its fees for digital intermediation service, and passes the remainder to the seller.



Business bookkeeping
Both the buyer and seller receive a document from the DIP summarising the transaction. However, the DIP provides only the information relevant to each party rather than a full accounting of the transaction.

Transaction receipt (received by buyer)	
Total paid (to DIP)	100
Platform service fee	12

Statement of transaction (received by seller)	
Gross sales through DIP	88
Platform service fee	8

As the buyer and seller are businesses, they maintain ledgers of both sales and purchases. These ledgers record details including the purchase date, invoice number, and the products and amounts concerned. The DIP is also a business, so likewise records the transaction for accounting purposes.

Recording in sales and purchases ledgers

	Buyer		Seller		DIP	
	Sales	Purchases	Sales	Purchases	Sales	Purchases
Goods		88	88			
Services		12		8	(12+8=) 20	
Balance	-100		80		20	

Recording in e-commerce statistics

The following illustrates how these amounts should translate to reporting in e-commerce statistics. In this example, the enterprise operating the e-commerce marketplace is classified as a retailer.

		E-commerce sales	E-commerce purchases
Total e-commerce		**108**	**108**
By product	Goods (paper)	88	By product
	Services (digital intermediation)	20	
By industry	ISIC C Manufacturing[1]	88	By industry
	ISIC G47 Retail trade[2]	20	
	ISIC I55 Accommodation	-	
By customer type	B2B	108	By customer type
	B2C	-	-
	B2G	-	-

1. Specifically, ISIC Rev. 5 C170 Manufacture of paper and paper products
2. Specifically, ISIC Rev. 5 G4790 Intermediation service activities for retail sale; this class was introduced in ISIC Rev. 5.

Digitally ordered trade

The above recording treats the buyer, seller, and DIP as residents of the same economic territory. However, it is common for one or more of these parties to be located outside the economy for which statistics are being compiled. **Box 5.1** of the Handbook on Measuring Digital Trade (IMF, OECD, UNCTAD, and WTO, 2023) details the recording of the above example under the framework for digital trade.

It should be noted that, in the table above, the total e-commerce value reaches $108 because the sales of digital intermediation services by the DIP include $8 of services provided to the seller. Meanwhile, this amount is not netted off from the turnover the seller generated by selling goods because turnover is reported including "all other charges passed on to the customer, even if these charges are listed separately on the invoice".

If the DIP is resident abroad, then its fees charged for digital intermediation services no longer count toward the e-commerce sales of the compiling economy. The total e-commerce sales presented in e-commerce statistics change accordingly. However, it continues to sell digital intermediation services to the buyer and seller. This opens a gap between the total value of e-commerce sales and e-commerce purchases.

Recording in e-commerce statistics: buyer and seller resident, DIP abroad (non-resident)

		E-commerce sales	E-commerce purchases
Total e-commerce		**88**	**108**
By product	Goods (paper)	88	88
	Services (digital intermediation)	-	(12+8=) 20
By industry	ISIC C Manufacturing[1]	88	8
	ISIC I55 Accommodation	-	100 (incl. 12 digital intermediation)
By customer type	B2B	88	108
	B2C		
	B2G		

Furthermore, it may be that only one party is resident and hence reflected in e-commerce statistics.

Recording in e-commerce statistics: only seller resident

		E-commerce sales	E-commerce purchases
Total e-commerce		**88**	**8**
By product	Goods (paper)	88	
	Services (digital intermediation)	-	8
By industry	ISIC C Manufacturing[1]	88	8
By customer type	B2B	88	8
	B2C		
	B2G		

Recording in e-commerce statistics: only buyer resident

		E-commerce sales	E-commerce purchases
Total e-commerce		**-**	**100**
By product	Goods (paper)	-	88
	Services (digital intermediation)	-	12
By industry	ISIC I55 Accommodation	-	100
By customer type	B2B	-	100
	B2C	-	-
	B2G	-	-

6.10 Social media and online selling

6.110 Social media platforms are online services that enable users to create and share content, maintain networks of contacts or followers, and interact with one another through features such as posts, comments, messaging, livestreams, and embedded applications. The term can be understood to encompass platforms centred on peer-to-peer messaging, as these often support many of the same features.

6.111 "Social commerce" is sometimes used to refer broadly to the buying and selling of goods or services through social media platforms. However, the meaning of "through" requires scrutiny as there are different roles that the platform can play in online ordering and not all of these meet the definition of e-commerce:

1. Drive customers to the seller's e-commerce website or listings on an online marketplace. In this case, the social media is not directly involved in the e-commerce transaction but posts, content, livestreams, etc. on social media act as a marketing tool to generate e-commerce orders.
2. Facilitate structured ordering processes using e-commerce features such as shopping carts, "buy now" buttons, and native checkout functionality built into the platform website or app. In this case, the social media is essentially acting as a digital intermediation platform (DIP).
3. Facilitate ordering via unstructured exchanges of manually typed, voice or video messages sent back-and-forth between the buyer and seller over the platform.

6.112 Because under case 1 the platform is not directly involved in the e-commerce transaction, the key distinction in practice is between cases 2 and 3.

6.113 Communication through manually typed messages is a central feature of messaging apps and social media platforms. These tools may also support conversations through recorded voice or video messages. Such communication features have has contributed to the rise of "livestream selling", a marketing strategy "where a host showcases products via livestream", allowing viewers to interact (e.g. through in-app chat) "and purchase items in real time" (Shopify, 2024).

6.114 Where buyers and sellers use messaging features to agree orders, these do not meet the definition of e-commerce because they are made through conversations held over general purpose communication features offered by the platform.

6.115 Messaging apps and social media platforms are, however, increasingly integrating e-commerce features such as product listings, shopping carts, and the ability to buy products directly within the app/platform through native checkout functionality. These are features that *are* specifically designed for digital ordering, and so orders placed through them are e-commerce orders.

6.116 This has an important implication: it is not correct simply to say that "orders placed through messaging apps / social networks are not e-commerce orders". This links back to the fact that the e-commerce definition is applied at the level of individual transactions (see Section 6.1). For correct recording as e-commerce or other remote online transactions, it is necessary to distinguish between orders placed through structured digital ordering features integrated into messaging and social media services, and those agreed through unstructured typed, voice or video messages sent through these services.

6.117 Structured ordering systems built into messaging and social networking platforms also provide sellers with tools for recording and tracking orders received. As a result, sales made through these e-commerce channels should be relatively straightforward for sellers to identify and report.

6.118 This stands in contrast to orders agreed through unstructured messages, for which comparable transaction records may not exist, making reliable reporting of their number and value more difficult. Nevertheless, where these ordering channels are of policy interest, compilers are encouraged to develop complementary measurement approaches suited to national circumstances and respondent capabilities. Where measured, these orders should be recorded and reported separately from e-commerce as "other remote online orders" (see Chapter 4).

6.119 The distinctions discussed above are summarised in **Table 7**, which provides a practical overview of how social media platforms relate to online selling. In particular, it highlights the contrast between cases where the platform provides structured ordering features and those where buyers and sellers agree orders through general-purpose communication features. This distinction is central both to correct classification and to understanding the differing possibilities for statistical measurement.

Table 7. Roles of social media platforms in online selling and statistical implications

Role of social media	Classification	Reasoning	Information for measurement
Drive customers to the seller's website or listings on an online marketplace for ordering	Depends on whether the final ordering channel meets the definition of e-commerce	The social media platform is not directly involved in ordering.	Depends on seller records for the final ordering channel, not on the role of social media in directing traffic.
Facilitate the full ordering process	E-commerce	In this case, the social media platform is effectively acting as a DIP by providing structured features through which buyers can place orders directly on the platform.	The platform provides structured transaction information to sellers, giving a clear basis for reporting these sales.
Facilitate ordering via unstructured exchanges of manually typed, voice or video messages	Other remote online orders	These orders are agreed through general-purpose communication features of the platform rather than through features specifically designed for placing and receiving orders.	Unstructured. Likely to be difficult for sellers to report reliably. Likewise, social media platforms are unlikely to be able to identify and report accurately on the volume and value of transactions completed in this way.

Source: UN Trade and Development

6.11 Government e-commerce sales and e-procurement

6.120 Government can engage in e-commerce both as a supplier of goods and services and as a purchaser, though the latter is likely to be far more significant in practice.

6.11.1 Government sales

6.121 When government units or public corporations provide goods or services for payment, the first question is whether the payment represents the purchase of a specific good or service or instead a tax or other compulsory transfer. This matters because only payments for goods or services supplied to the payer can give rise to sales that may be recorded in e-commerce statistics.

6.122 For the purposes of e-commerce statistics, a government-related transaction should be counted only where two conditions are met. First, the payment must count as the purchase of a specific good or service rather than as a tax or other compulsory transfer. Second, the order must be placed over a computer network by methods specifically designed for receiving or placing orders.

6.123 The System of National Accounts (United Nations et. al., 2025) provides the general framework by defining taxes as "compulsory, unrequited payments, in cash or in kind, made by institutional units to government units". In this context, "unrequited" means that the payer does not receive a specific good or service in return that is proportionate to the amount paid. Accordingly, only payments for specific goods or services supplied by government can potentially give rise to e-commerce sales.

6.124 The European System of Accounts 2010 (Eurostat, 2013) and the Eurostat Manual on Government Deficit and Debt (Eurostat, 2023) provide further practical guidance on operationalising this distinction for fees, charges and licence payments. In particular, such payments should be treated as sales only where they are made in return for a specific service and are not set at a level clearly out of proportion to the cost of providing that service. Where a charge is compulsory and mainly regulatory or revenue-raising in character, or is clearly disproportionate to the service provided, it should instead be treated as a tax or similar levy rather than as a sale. Even where a payment does qualify as a sale, it should count toward e-commerce only if the order for the good or service provided by government was placed through qualifying digital ordering methods; payment through an online government portal is not sufficient on its own.

6.125 The same practical distinction applies in government accounting terms: taxes, duties and similar compulsory levies collected under government authority are not sales revenue of the collecting agency and should not be counted toward e-commerce sales by government.

6.126 Government sales that meet the e-commerce definition should be recorded at the value and in the period in which the associated sales revenue is recognised in the selling entity's accounts, consistent with the recording principles in Section 6.1.

6.127 In practical terms, sales of goods and services are usually only a small component of government revenue, and government sales can likewise be expected to represent only a small share of total e-commerce sales within the economy. For this reason, compilers should generally prioritise measuring other components of e-commerce first, especially e-commerce sales by businesses, including by unincorporated household market enterprises where relevant, as discussed in Sections 2.4.1 and 8.5.2.

6.11.2 Government e-procurement

6.128 Government procurement refers to the acquisition by government units of goods and services needed to carry out their functions. This may range from routine purchases of office supplies, medicines or ICT services to large purchases of construction, transport, maintenance or professional services. "Government e-procurement" refers to the use of digital systems in this process. However, not every use of digital tools in procurement gives rise to an e-commerce transaction. As elsewhere, what matters for e-commerce statistics is whether a specific order for goods or services provided to government is placed over a computer network by methods specifically designed for receiving or placing orders. This includes, for example, orders placed through websites, apps, online procurement portals with ordering features or EDI-type systems used for ordering.

6.129 In some government procurement systems, particularly those for repeat purchasing or supply-chain type arrangements, orders may also be placed directly through EDI-type messages integrated with procurement or organisation management systems. In accordance with the guidance on EDI ordering in Section 6.4, these should be treated as e-commerce only where the EDI-type system is used to place the order itself, rather than merely to transmit or process an order placed by other means.

6.130 One common form of government e-procurement involves framework contracts or similar standing arrangements under which one or more suppliers are pre-approved to provide specified goods or services over a period of time. Individual government units may then place call-off orders through an online catalogue, procurement portal or marketplace-type interface set up for that purpose. Where such orders are placed digitally through these systems, they meet the

definition of e-commerce purchases by government, and of corresponding e-commerce sales by suppliers.

6.131 By contrast, another important form of e-procurement involves the publication of online tenders through which government invites firms to submit bids, often assessed on a combination of price, quality and other criteria. In such cases, the tendering and bidding process is part of supplier selection rather than the placing of a specific order. The eventual contract may give rise to e-commerce only if, once the supplier has been selected, the order itself is subsequently placed over a computer network and by methods specifically designed for receiving or placing orders. The online publication of a tender, and the electronic submission of bids in response, are not in themselves sufficient to make the resulting transaction e-commerce.

6.132 Government purchases that meet the e-commerce definition should be recorded at the value and in the period in which the acquisition of the goods or services is recognised in the purchasing entity's accounts, consistent with the recording principles in Section 6.1. Procurement systems may record the date and value of orders or contract awards, which can subsequently change or be cancelled. Where these systems are used as statistical sources, compilers should distinguish these records from recognised acquisitions and, where necessary, link them to the relevant accounting records.

6.133 Government e-procurement systems have the potential to be a useful source of data on e-commerce. On the demand side, they may provide a robust measure of e-commerce purchases by government. However, compilers should not assume that all government e-commerce purchases pass through such systems. For example, relatively low-value transactions, such as transport or catering services, may be ordered directly by government units or by individuals acting in their capacity as government employees through websites or apps outside formal e-procurement channels.

6.134 The same systems may be considered as a source of "mirror data" for estimating B2G e-commerce sales on the supply side. However, this requires care.

6.135 Purchases from domestic suppliers should be distinguished from those made from suppliers resident abroad, so as to avoid overstating domestic business' e-commerce sales to government and the apparent importance of government as a customer for resident businesses.

6.136 Steps should likewise be taken to avoid double counting where the same transactions are already captured through business-side reporting of e-commerce sales. At the same time, seller-reported B2G e-commerce sales are not necessarily sales to the domestic government. They may include sales to governments resident abroad, for example where an airline provides transport services to employees of a foreign government. Compilers should therefore avoid assuming that B2G e-commerce sales reported by sellers are conceptually equivalent to e-commerce purchases that would be reported by the domestic government.

6.137 Taken together, these considerations show that government e-procurement is best understood as a specific component of overall e-commerce, particularly within business-to-government transactions, rather than as a distinct domain of measurement.

6.12 Additional precisions and clarifications

6.138 The preceding sections have addressed several of the most important and conceptually demanding cases that arise in applying the definition of e-commerce. This section brings together

a further set of specific situations where brief clarification may help ensure consistent interpretation and recording, without altering the underlying principles set out above.

6.12.1 Ordering methods and interfaces

6.12.1.1 Orders placed through recorded voice or video messages

6.139 Some communications tools allow users to send recorded voice or video messages back-and-forth as an alternative to manually typed messages.

6.140 Where buyers and sellers use these features to agree orders, the resulting exchanges remain unstructured and take place through general-purpose communication tools rather than through methods specifically designed for receiving or placing orders. Such transactions therefore do not meet the definition of e-commerce and should be classified, like orders agreed through manually typed messages, as 'other remote online orders.

6.12.1.2 App stores and purchases within apps and games

6.141 Online app stores are another example of DIPs. App store purchases are digitally ordered and count towards e-commerce sales.

6.142 The same applies to online purchases within apps or games, including extra content, currency, tokens or items. For in-game currency purchased through these interfaces, the associated turnover recognised in the gaming service provider's accounts should be included in e-commerce sales, following the principles in Section 6.1.

6.12.1.3 Online bidding platforms

6.143 Platforms allowing users to place bids online for items, with sales being made to the highest bidder after a certain duration has elapsed, are specifically designed to facilitate this type of ordering.

6.144 Often, these platforms facilitate sales between multiple buyers and sellers, and hence are DIPs. However, products directly owned by a platform operator may be sold through an online bidding format. In both cases, these are e-commerce orders.

6.12.1.4 Product customisation (written messages)

6.145 Where a buyer uses a website or app to select a product and enters free-text specifications or customization instructions in a dedicated box or field provided for that purpose, the resulting order still meets the definition of e-commerce. Although the customisation details may be entered manually, they form part of an order placed through a system specifically designed for receiving or placing orders, rather than through a general-purpose communication tool.

6.12.1.5 Digital signature

6.146 The use of a digital signature to confirm or validate a transaction does not in itself determine whether the transaction is e-commerce. What matters is how the order was placed. If the order is placed through a website, app, online marketplace, EDI system or other method specifically designed for receiving or placing orders, the transaction meets the definition of e-commerce whether or not a digital signature is also required. By contrast, if a contract or order agreed through non-qualifying means such as email or manually typed messages is later signed digitally, this does not make the transaction e-commerce.

6.12.2 Sector-specific applications

6.12.2.1 Financial, insurance and pension services

6.147 Like all other products, financial, insurance and pension services can be ordered via e-commerce. However, these services take various forms, and the term "ordering" does not always apply neatly.

6.148 Financial, insurance and pension services are considered to be digitally ordered when the customer (whether an individual or organization) applied online for the service – e.g., opening a bank or trading account, taking out a loan, subscribing to an insurance or pension contract, or instructing an action for which a service fee is charged such as buying or selling financial instruments.

6.149 Recurring and one-off fees paid for services which were ordered digitally should be recorded as e-commerce transactions. This includes monthly fees charged for the provision of current account and payment card services, and for insurance coverage.

6.150 Some financial, insurance and pension services may have features of both digital and non-digital ordering. For example, a customer may subscribe online to a share dealing service, paying a monthly fee which would be recorded in the value of e-commerce. Under the contract, the customer might give instructions for the purchase or divestment of shares and as a result have to pay a specific "action fee". The instruction and associated action fee should be regarded as a separate order/transaction and assessed according to whether or not the order was placed digitally.

6.151 In some cases, when a customer requests an evolution of a contract, it is necessary to consider this as giving rise to a separate transaction. For example, a business might take out an employee travel insurance policy. As the order was placed online, this transaction and ensuing subscription payments should be recorded as e-commerce. Several months later, the company contacts the insurer by phone to extend the policy to cover loss or damage to specialized equipment during business travel, increasing the total insurance premium to be paid. This can be regarded as establishing a new contract/transaction, and the ensuing premium payments would be excluded from e-commerce, as the order was placed by phone.

6.152 The complexity of financial insurance and pension services may make the above distinctions difficult for some providers of these services to operationalize and report upon. Nevertheless, multiple countries have shown that firms can report on e-commerce sales, either through a standard cross-industry survey or sector-specific form.

6.12.2.2 Mobile money transactions

6.153 Mobile money is a digital medium of exchange and store of value which is usually offered by a mobile network operator. Unlike mobile banking and mobile wallets, which are linked to traditional bank accounts, mobile money allows access to financial services with just a mobile phone (Shirono, Das, Fan, Chhabra, & Carcel-Villanova, 2021). Mobile money plays an important role in low- and middle-income countries where access to traditional banking is limited, being commonly used for financial transfers – including in payment for the provision of goods and services.

6.154 Payments are made from (and to) the user's mobile money balance. This balance can usually be topped up by visiting a mobile money agent to convert cash into mobile money. A fee is likely to be charged for this service. However, these transactions are conducted in-person

between a user and an agent acting as a representative of the mobile money service and so are not e-commerce.

6.155 It may also be possible for users to buy mobile money credit through digital ordering, for example by accessing a portal which allows the mobile money balance to be topped up with a card payment. Such a service may also allow the conversion of mobile money balances to bank balances, with fees being paid for this conversion. In these cases, only the income from service fees and commissions should be recognised as e-commerce sales because they constitute payments for services provided by the mobile money service or its agents; the amounts being added to mobile money balances are not sales.

6.156 The mobile money provider may also charge fees on payments made and received between user accounts. When these fees arise from payments that were digitally ordered (i.e. ordered i. over computer networks, and ii. through methods specifically designed for the placing and receiving of such orders), they should be reported as e-commerce revenues – but the amounts transferred between users are not revenues of the mobile money provider.

6.157 When mobile money is used to pay for goods of services, this does not imply that those goods or services were digitally ordered. The means of payment does not determine whether a transaction should be considered e-commerce.

6.12.2.3 Utilities

6.158 Although charges may depend on the amounts consumed, electricity, gas and water supply resemble subscriptions: service provision continues as long as the customer continues to pay the relevant periodic charges. Where the customer establishes the utility service contract through digital ordering, the resulting revenue should be included in the utility company's e-commerce sales – though as for other subscriptions, a degree of estimation may be necessary (see Section 6.7).

6.159 Digital payment, including payment through an outsourced billing and collection service, should not be confused with digital ordering.

6.160 In some cases, contracts for service provided by the utility operator may be established through a website or app operated by a third party, which may also handle billing and payment collection. The utility operator and the website or app operator each recognise revenue in accordance with the nature of their commercial arrangement and the applicable accounting rules (e.g. IFRS). Following Section 6.1, only revenue from sales recognised in each company's own accounts is a candidate for reporting as its e-commerce turnover, and each should assess whether the orders giving rise to that revenue meet the definition of digital ordering.

6.12.2.4 Higher education

6.161 Higher education services are similar to subscriptions (Section 6.7) in that the student (buyer) signs up to receive, and the higher education institution (seller) undertakes to provide, educational services over a set duration (for example, three years for a bachelor's degree). The service will be delivered as long as the student continues paying the required fees and meets any other contractual conditions.

6.162 The term "order" is not widely used in this context. Nevertheless, that is the underlying economic substance. Like any other ordering situation, the agreement is not established until it has been accepted by both parties, and any relevant conditions have been met. In higher education, an offer from the institution may be conditional on the prospective student satisfying

prescribed entry requirements. Where those conditions are not met, the agreement does not take effect, and no transaction arises to be measured. Where they are met, the resulting transaction(s) should then be assessed as e-commerce or not according to the digital ordering criteria set out in Section 6.1.

6.163 Prospective students often apply for higher education places online through interfaces specifically designed for the purpose of making and receiving applications. Where the educational service agreement between the higher education provider and student is finalised over a computer network and through an interface specifically designed for facilitating such agreements for the provision of educational services, the resulting transaction may be treated as digitally ordered and the associated fees recorded as e-commerce sales.

6.164 By contrast, if the agreement between the two parties must be signed on paper and returned by post, or printed, signed and scanned for online submission, in order to establish that the educational service will be provided, the transaction does not meet the definition of e-commerce because the agreement is not concluded through methods specifically designed for receiving or placing orders. The use of digital signature does not prevent the transaction from being treated as e-commerce, provided the ordering method otherwise meets the definition.

6.165 The key issue is therefore not whether a higher education application is submitted online, but whether the contract giving rise to the educational service is ultimately concluded through qualifying digital ordering methods.

6.166 For a higher education provider reporting on e-commerce sales, the central task remains identifying whether tuition revenue recognised in its financial records arose from digital orders, following Section 6.1. Where a standard process is used to establish educational contracts, the provider can assess whether that process meets the digital-ordering criteria and apply the result to the associated tuition revenue. Where different processes are used, for example across programmes or admission routes, these can be assessed separately. The assessment should cover the contracts giving rise to revenue in the reporting period, including those established in earlier years. Where direct identification is difficult, the estimation approaches discussed for subscriptions in Section 6.7 may be useful. The method used should be clearly documented and communicated to users.

6.167 In some higher education systems, once admitted, students may subsequently select and register for individual courses or modules through online interfaces specifically designed for that purpose, even using “shopping cart” type functions. Where these selections themselves determine the educational services to be provided and give rise to associated fees, these should be treated as digitally ordered transactions.

6.12.3 Automated and AI-mediated ordering

6.12.3.1 Orders placed through chatbots

6.168 A chatbot is a software that can simulate a conversation (or “a chat”) with a user through messaging applications, websites, mobile apps, etc. Modern versions use Artificial Intelligence (AI) to receive user inputs and provide responses in natural language. Less advanced versions may offer the human user several pre-defined responses to choose from at various steps when navigating the conversation.

6.169 Businesses can use chatbots to automate repetitive tasks. Integrated into e-commerce platforms, messaging applications, and company websites, some chatbots enable customers to

search for products, receive recommendations, and place orders through structured, automated workflows (Shopify, 2023). Where a chatbot is able to take customer orders (i.e. by using the conversation to fill-in and submit an order form in the background), this feature has been intentionally integrated into the chatbot for the purpose of receiving orders – and therefore meets the definition of e-commerce.

6.170 "A clear distinction should be made between AI-powered chatbots and human-operated chat functions. While AI chatbots leverage automated, predefined scripts for structured order processing, human-assisted chat interactions are typically unstructured and rely on manual input. As such, orders placed via human-operated chats are comparable to manually typed emails or messages, and therefore fall outside the scope of e-commerce" (OECD, 2025).

6.171 Order-placing capabilities can also be integrated into voice assistants built into smartphones and other devices. These allow users to place orders directly through spoken commands, for example by instructing the assistant to purchase a specified product through a linked e-commerce service. Because the capability to receive and process such commands for the purpose of placing orders is specifically built into the voice assistant, the resulting transactions meet the definition of e-commerce.

6.12.3.2 Agentic e-commerce

6.172 The term "agentic e-commerce" is increasingly used to describe situations in which an AI-based software agent acts on behalf of a user to search for products, compare options and place orders, often with limited direct human intervention at the point of purchase. In practical terms, the user delegates the shopping task by expressing preferences, constraints or goals, and the software agent then interacts with one or more digital ordering systems to execute the transaction. This may occur, for example, where a user instructs an AI assistant to purchase a specified product, restock routine supplies, or identify and order the best available option meeting defined requirements.

6.173 From the standpoint of statistical classification, the key issue remains the same as for any other transaction: whether the order is conducted over computer networks and by methods specifically designed for the purpose of receiving or placing orders. Where an AI agent places the order through a website, app, marketplace, API or other digital ordering interface built for that purpose, the resulting transaction meets the definition of e-commerce. The fact that the order is initiated and carried out by software acting on behalf of a human or business user does not alter this conclusion; rather, the software agent functions as the means by which the user's digital order is executed.

6.174 The same logic applies from the seller's perspective. Where a business receives orders placed by AI agents through digital ordering interfaces specifically designed for that purpose, the resulting sales should likewise be treated as e-commerce. The use of software agents by the seller to receive, route or process such orders does not alter that classification.

6.12.4 Other transaction arrangements and clarifications

6.12.4.1 Drop shipping

6.175 In a drop shipping arrangement, an entity accepts an order from a customer but does not itself hold the goods ordered in inventory or dispatch them from its own premises. Instead, after receiving the customer's order, the entity transmits the order details to a third-party supplier, which ships the goods directly to the customer. Drop shipping is therefore a fulfilment arrangement, not a distinct type of transaction. Whether the customer-facing sale counts as

e-commerce depends on how the customer places the order, not on which party physically fulfils the delivery.

6.176 Where the customer places the order through a website, app, online marketplace, EDI system, or other online method specifically designed for receiving or placing orders, the contract with the customer is digitally ordered and should be counted toward e-commerce. If the customer-facing seller then places a further order with the supplier through those same qualifying digital ordering channels, that separate contract between seller and supplier is also an e-commerce transaction. Conversely, if either order is placed through non-qualifying means such as email or manually typed messages, that specific transaction should not be counted as e-commerce. The e-commerce definition must therefore be applied separately to each contract or transaction in the chain.

6.177 For valuation, the key issue is whether the customer-facing seller "controls" the good (in accounting terms, meaning that it is responsible for the good before it is transferred to the customer), and therefore satisfies the performance obligation as principal, or instead arranges for another party to provide the good and therefore acts as an agent. Where the seller is the principal, the value of its e-commerce sale should reflect the gross revenue from the sale to the customer, in line with the guidance in Chapter 5, even though fulfilment is undertaken by the supplier. Where the seller is an agent, it should record as its sale only the fee or commission for arranging the sale. In all cases, the fact that the goods are shipped directly from supplier to customer does not in itself determine whether revenue should be recognised on a gross or net basis by the drop shipper, nor whether the transaction falls within e-commerce.

6.12.4.2 Parcel forwarding

6.178 Parcel forwarding services enable a buyer to purchase goods from a retailer that does not ship directly to the buyer's location. The buyer first orders the goods from the retailer using an address provided by the parcel forwarding company, typically a warehouse address in the retailer's country. The retailer ships the goods to that address, after which the parcel forwarder arranges onward shipment to the buyer, sometimes offering additional services such as consolidation, repacking, or customs handling. Parcel forwarding is therefore a logistics arrangement that facilitates delivery, rather than a distinct type of sale.

6.179 For statistical purposes, the sale of the goods by the retailer to the buyer should be assessed separately from the parcel forwarding service. If the buyer places the order with the retailer through a website, app, online marketplace, EDI system, or other online method specifically designed for receiving or placing orders, that is an e-commerce sale, even though delivery is routed via the forwarding company.

6.180 The parcel forwarding company is supplying a separate transport or logistics service, which should itself be counted as e-commerce only if the buyer orders that service through those same qualifying digital ordering methods. The use of a forwarding address does not in itself affect whether the underlying sale is classified as e-commerce.

6.12.4.3 Bundled services

6.181 It is increasingly common for providers of Internet service, mobile (cellular) service, cable or satellite television service and even other services such as banking to offer additional services from third-party providers, which would normally require a separate subscription, bundled with the main service they provide.

6.182 Commonly these bundled services are digitally delivered, such as access to streaming media services, gaming platforms, or antivirus software. Bundled services may also be physically delivered, such as premium delivery from food and grocery ordering apps.

6.183 The bundled offer may provide cost advantages for the customer compared to subscribing to services separately, as well as the convenience of managing single, rather than multiple, payments.

6.184 For the purposes of this discussion, the service provider with whom the customer interacts directly to buy the service bundle will be referred to as the "bundle seller". The additional services included in the bundle are provided by third party "bundled service suppliers".

6.185 In principle, the nature of ordering applies to the whole services bundle. For example, a contract for mobile network service which includes bundled access to a third-party streaming media platform should be counted in its entirety toward e-commerce if digitally ordered (and not counted if ordered through other channels such as in the mobile network's physical stores).

6.186 The arrangement between the customer, bundle seller, and underlying service provider can take various legal forms. From a statistical point of view, bundle sellers and underlying service providers will often belong to different economic activities (i.e. ISIC "industries") – for example mobile service providers are in telecommunications and banks are in financial services, while streaming service providers are in publishing, broadcasting, and content production and distribution activities. Bundled transactions would therefore benefit from being un-bundled for recording purposes.

6.187 However, it is not possible to foresee and set out specific recording requirements for every potential bundling arrangement structure. Even if it was, they would be challenging to operationalise given respondents would need to understand both the reporting requirements and the complexities of contractual arrangements they have with underlying service providers / bundle sellers they supply.

6.188 Instead, it is reasonable to establish pragmatic rules as a baseline for practical recording:

i) Service bundles should be recorded as e-commerce sales when the customer places the order via e-commerce channels (i.e. when the bundle is digitally ordered).
ii) The price paid by the customer to the bundle seller for the product bundle should be recorded in total as an e-commerce sale by the bundle seller (subject to the valuation provisions in Chapter 5).

iii) Where an underlying service provider receives digital orders from a bundle seller these should be recorded by the underlying service provider as e-commerce sales, even if the underlying order between the customer and bundle seller was non-digital. [3]

6.12.4.4 Crowdfunding

6.189 Crowdfunding platforms allow creators such as artists, musicians, filmmakers, designers, and entrepreneurs to raise funds for their projects by collecting contributions from a large number of people. This can be a way to raise funds for products when loans or traditional forms of financing would be unavailable or prohibitively expensive. Crowdfunding can also help

[3] In practice, the underlying service provider is unlikely to know whether the underlying customer order was placed digitally or not.

to prove there is market demand for the products being developed. Often backers are offered "rewards" such as early access to products or exclusive content.

6.190 Transactions are often (but not always) framed to the backer as buying a good or service to be delivered some time way off in the future. These are digital orders. However, there may be a long lag between the payment being made, and the order being fulfilled (if it is at all).

6.191 In business accounting, the initial receipt of the funding provided by backers is recorded as a liability (specifically as "unearned revenue"). It is then booked as revenue (turnover) only when products are delivered to backers. This turnover should be reported as digitally ordered (e-commerce).

6.12.4.5 Online charitable donations

6.192 Various portals exist to facilitate charitable giving online. Though these take place through an online interface, payments made by donors to recipients that are not requited with the provision of a specific good or service in return are not e-commerce sales but current transfers of money from the donor to the charity.

6.193 However, the charitable giving platform may charge fees to either or both parties for facilitating the transaction, receiving and transferring out funds, etc. These should be reported as revenues from digitally ordered sales (e-commerce).

6.194 In some cases, charities directly make e-commerce sales, using the profits from these toward their charitable goals. In principle, these sales should be reflected in statistics on e-commerce value. However, charities may not be covered by surveys of ICT usage and e-commerce in businesses.

6.12.4.6 Cashback portals

6.195 When shopping online, customers may use portals offering "cashback" or other incentives (such as "reward points") on online purchases. Usually, these portals record the user's visit before forwarding them to the seller's own website to select products and make a purchase.

6.196 As set out in Chapter 5, "Reductions in price, rebates and discounts [...] must be deducted" from turnover. However, from the seller's point of view, they are not paying a rebate to the customer but a commission for marketing services provided by the cashback portal; the marketer is the one deciding to pass some of that commission on to the customer in the form of "cashback". In the seller's accounts, these payments would be recorded as a cost of sales rather than as a reduction in turnover.

6.197 From the perspective of the cashback portal operator, the commissions it receives for marketing services are recognised as sales revenue in its accounts. Where the marketing services provided to the seller were digitally ordered, this revenue should be included in the portal operator's e-commerce sales.

6.198 Cashback or other rewards paid out would be reflected separately in the portal operator's accounts as costs and, like for other costs such as staff, premises, and electricity, are not netted off when recognising turnover or reporting e-commerce turnover.

6.12.4.7 Gift cards

6.199 A gift card allows the holder to obtain goods or services from the issuer up to a stated value at a later date. The purchase of the gift card is therefore not yet the purchase of the underlying goods or services; rather, it is the purchase of a claim on the issuer, to be exercised

when the card is redeemed. For statistical purposes, this distinction matters because the ordering of the gift card and the ordering of the goods or services obtained with it occur at different times and potentially through different channels.

6.200 Under IFRS and statistical frameworks including Structural Business Statistics and the System of National Accounts (United Nations et. al., 2025), a gift card is not a good or service itself but an instrument representing a liability of the gift card issuer and a financial asset of the purchaser. Such sales do not meet the condition that "an e-commerce transaction is the sale or purchase of goods or services" (OECD, 2025) and therefore would not be recognised in e-commerce turnover.

6.201 The gift card may eventually be used to pay for goods or services. The means of payment is not directly relevant to determining whether digital ordering has taken place. As with any transaction, this should be counted as e-commerce only if the order for those goods or services is placed through a website, app, online marketplace, EDI system, or other online method specifically designed for receiving or placing orders.

6.12.4.8 Content creators

6.202 A content creator produces digital content, such as videos, images, audio, written material, livestreams, software or other digital outputs, and makes it available through online platforms that facilitate distribution, sharing and engagement. Many such platforms allow content to be uploaded, shared and viewed free of charge, while others provide paid access to the platform as a whole, to content from particular creators, or to specific content, communities or services.

6.203 Many content creation activities are unremunerated, in which case they are treated as leisure activities rather than production for the purposes of economic statistics (United Nations et al., 2025). However, content creators can also earn income in various ways, including advertising revenue, sponsorships, subscriptions, membership fees, tips, one-off payments for content access or customisation, and merchandise or other related sales. Where such activity is undertaken for remuneration, it may constitute productive activity carried out by an enterprise or unincorporated household market enterprise, depending on the legal and organisational arrangements in place.

6.204 Payments received in exchange for specific goods or services represent sales revenue of the content creator. Where the corresponding order is placed over computer networks by methods specifically designed for receiving or placing orders, these are e-commerce sales. This can include creator-to-business arrangements, such as orders for advertising, sponsorship, branded content, product placement, affiliate marketing, licensing or permission to use content, or other promotional services, as well as audience-facing arrangements, such as paid memberships, content, communities, livestream access, downloads, software, custom content or other creator services.

6.205 Both commercial and audience-facing creator transactions may be negotiated or agreed through unstructured discussions rather than through structured ordering features. Where the order is placed through manually typed, voice or video messages sent through the content platform or via other communication tools, the transaction falls outside the definition of e-commerce because the ordering method is a general-purpose communication channel rather than a method specifically designed for receiving or placing orders. Such transactions should

instead be treated as other remote online orders. The use of a digital payment mechanism does not in itself make an order e-commerce or an *other remote online order*.

6.206 Payments made in general support of a creator, without the payer receiving or becoming entitled to receive a specific good or service in return, should not be treated as sales. Such payments are unrequited and current transfers akin to charitable donations, even if made through an online platform or digital payment mechanism. This may include voluntary payments from "patrons" or "members", or tips that are not linked to access to specific content, services or other benefits.

6.207 Content creators may also be paid by the platform itself under partner, monetisation or revenue-sharing programmes. Where the creator is paid to supply a specific good or service to the platform, the payment is sales revenue of the creator that may count as e-commerce sales depending on the ordering method used by the platform, which is acting as a buyer. Where the payment is instead a general share of platform revenue or an incentive linked to ongoing activity on the platform, it should not automatically be treated as e-commerce sales merely because the platform's own revenue arises from advertising or other services sold via e-commerce.

6.208 Where a creator sells goods or services to buyers through a platform that facilitates similar transactions for multiple creators and multiple buyers, the platform is acting as a DIP, as set out in Section 6.9. In such cases, the creator's sales should be recorded on a gross basis before deduction of platform fees, while the platform should record only the fees or commissions it earns for providing digital intermediation services. This distinction is important because the amount remitted to the creator may be lower than the value of the sale and so replicating the cash flow could lead to understatement of creator sales and misclassification of platform revenue.

6.209 Where the payment to the creator is unrequited, rather than payment for a specific good or service, the amount received by the creator should not be treated as a sale and should not be included in e-commerce sales, even if the payment is made through a platform. However, the platform may still charge a fee for the platform or facilitation service it provides. Any fee or commission retained by the platform for facilitating the transaction should be treated as revenue of the platform. Where that platform service is digitally ordered, the fee or commission may be recorded as e-commerce revenue of the platform.

6.210 In compiling statistics, content creator activity may raise practical coverage and measurement issues. Some creators may operate through incorporated enterprises, while others may be unincorporated household market enterprises or otherwise fall outside standard business survey frames. Where creator activity is believed to be economically significant, compilers should consider whether business, household, labour force, tax, payment or platform data sources can be used to capture relevant e-commerce activities. The scope of coverage should be clearly communicated, especially with respect to coverage of unincorporated household market enterprises.

6.13 Recommendations

19) Any good or service product can be digitally ordered. This remains true even where the term "order" is not generally used in relation to the product or activity concerned; terms such as bookings, reservations, subscriptions, accounts or contracts may be used instead.

20) All turnover arising from an order conducted over computer networks and by methods specifically designed for receiving or placing orders should be counted toward e-commerce, regardless of the industry or product concerned.

21) The definition of e-commerce should be applied at the level of individual transactions. As far as possible, broad assumptions applied at higher levels should be avoided. For example, if a firm makes some e-commerce sales, it should not be assumed that all its sales count as e-commerce. Nor should compilers infer, from product type, industry, or the general character of a platform or app, either whether a transaction is e-commerce or the type of customer involved (for example B2C or B2B/G).

22) Transactions that do not give rise to monetary payments are not of relevance to e-commerce value statistics and therefore should not be estimated for inclusion.

23) Where relevant to user needs and feasible given data availability and respondent burden, it is recommended to distinguish web sales through sellers' own websites or apps from those through e-commerce marketplaces.

24) EDI-type orders placed through machine-to-machine messages sent between business systems should be explicitly addressed in e-commerce data collections, with explanation of their link to enterprise resource planning (ERP) and other software for managing business processes. Where feasible, EDI-type sales should be collected and reported separately from web sales, to support correct measurement of e-commerce and avoid under-coverage of this important form of digitally ordered transactions.

25) It is recommended that e-commerce should be sub-classified into domestic and international transactions according to the residence of the buyer and seller. This supports the measurement of digitally ordered trade in accordance with the Handbook on Measuring Digital Trade (IMF, OECD, UNCTAD, and WTO, 2023). However, compilers should be aware that valuation of turnover adopted in e-commerce value statistics does not directly align with the CIF or FOB valuation bases applied in trade statistics.

26) That a service is digitally delivered should not be treated as indicative of digital ordering. Digital ordering and delivery are separate concepts and should be assessed separately.

27) Where a digital order gives rise to multiple payments over time, such as with subscriptions for telecommunications, streaming media, utilities, periodic delivery of goods, etc., both the initial payment and subsequent payments should be treated as digitally ordered (e-commerce) and recorded in the relevant reporting periods.

28) For operators of digital intermediation platforms (DIPs), e-commerce sales should be distinguished between: (i) sales of digital intermediation services in respect of transactions between third-party buyers and sellers, recorded at the value of fees or commissions recognised as the operator's sales revenue; and (ii) any direct sales of

goods or services made by the DIP operator in its own right, recorded at the sales revenue recognised by the operator. Gross merchandise value or gross transaction value, if collected, should be reported only as a separate item and not as the operator's e-commerce sales.

29) For businesses making sales through DIPs, the gross value of those sales of goods and services to buyers should be recorded as e-commerce sales. Any fees paid to the DIP for digital intermediation services should be recorded as e-commerce purchases.

30) For buyers using DIPs, e-commerce purchases should in principle be distinguished between: (i) purchases of the good or service being intermediated; and (ii) purchases of digital intermediation services, where these are paid for by the buyer. Measurement of e-commerce purchases through DIPs from the buyer side should generally be treated as a complement to, rather than a substitute for, measurement from the perspective of sellers and DIP operators.

31) Where it is not known whether fees for digital intermediation services are paid by the buyer, the seller, or both, they are assumed to be paid by the seller, in line with the treatment set out in the Handbook on Measuring Digital Trade (IMF, OECD, UNCTAD and WTO, 2023).

32) For transactions taking place through DIPs, the residence of the buyer, seller and DIP operator should be established wherever possible. This is necessary for the correct recording in digital trade statistics of both the underlying sale of the good or service and the associated digital intermediation service.

33) Transactions involving social media platforms or messaging apps should not be classified by reference to the platform alone. The decisive issue is the role the platform plays in the order, namely whether it functions only as a marketing channel, as a structured ordering interface, or as a medium for unstructured communication between buyer and seller. This should be assessed at the level of individual transactions.

34) Where social media or livestream selling is used only to direct buyers to a seller's website, app or online marketplace listing, the resulting transactions should be classified according to the final ordering channel, the role of social media in attracting the buyer is not directly relevant. Compilers should not rely on the mere use of social media for promotion as evidence that a sale was digitally ordered.

35) Where a social media platform or messaging app provides structured ordering features through which buyers can place orders directly within the platform or app, the resulting transactions should be treated as e-commerce. In such cases, the platform is likely to be acting as a DIP.

36) Where orders agreed through manually typed, voice or video messages sent through social media platforms or messaging services are measured, they must be reported separately from e-commerce, as other remote online orders.

37) Payments to government should be counted toward e-commerce only where they represent the purchase of a specific good or service rather than a tax or other compulsory transfer, and where the order is placed over a computer network by methods specifically designed for receiving or placing orders. This includes fees, charges and licence payments only where they are made in return for a specific service and are not mainly regulatory or revenue-raising in character.

38) Government e-procurement transactions should be counted toward e-commerce where a specific order for goods or services is placed over a computer network by methods specifically designed for receiving or placing orders, including call-off orders placed through procurement portals, internal catalogues, marketplace-type interfaces or EDI-type systems under framework contracts or similar arrangements. By contrast, the digital publication of tenders and the electronic submission of bids are part of supplier selection and are not in themselves sufficient to make the resulting transaction e-commerce.

39) Government e-procurement systems may provide a useful source of data on e-commerce purchases by government and, in some cases, mirror data on B2G sales. However, compilers should not assume that all government e-commerce purchases pass through such systems and should take care to distinguish domestic from foreign suppliers and to avoid double counting where the same transactions are already captured from business-side data.

40) Variations in ordering interfaces or transactional features do not create separate classification rules. App stores, in-app purchases and online bidding systems fall within e-commerce where they function as structured digital ordering systems; and features such as product customisation fields or digital signatures should be interpreted according to the role they play in the ordering process rather than taken as decisive in themselves.

41) Orders placed through unstructured online message conversations between buyer and seller, including exchanges of manually typed or recorded voice or video messages, do not meet the definition of e-commerce, because they are held through general-purpose communications tools rather than methods specifically designed for receiving or placing orders. Where measured, orders placed via these methods must be recorded and reported as other remote online orders.

42) Sector-specific applications such as financial, insurance and pension services, mobile money, utilities and higher education are established according to the same general ordering logic as other transactions. The sector concerned, or the use of different language for “ordering” (such as opening accounts or policies, subscribing or entering a contract for services, etc.), does not alter the need to determine whether a specific good or service was digitally ordered and gave rise to a transaction (or multiple transactions) to be recorded as e-commerce.

43) Transactions involving chatbots, voice assistants and AI agents are classified according to the same core ordering logic as other transactions. Where these tools are used to place or receive orders through digital systems specifically designed for

receiving or placing orders, the resulting purchases and sales should be treated as e-commerce. The fact that the order is initiated, received, routed or executed by software does not in itself alter the classification.

44) Where a digitally ordered sale involves additional parties in fulfilment or supply arrangements, it is recommended that the customer-facing sale be distinguished from any related transactions with those additional parties. In cases such as drop shipping, parcel forwarding and bundled services, the e-commerce definition should be applied separately to each contract or transaction. The customer-facing sale should be classified according to how the customer placed the order and valued according to whether the seller acts as principal or agent, while additional related fulfilment, forwarding or bundled service transactions should be counted as e-commerce only where they are themselves digitally ordered.

45) It is recommended that crowdfunding, charitable donations, cashback portals, gift cards and creator-platform payments be assessed by reference to the underlying economic transaction. Payments should be counted toward e-commerce only where they represent digitally ordered purchases of specific goods or services; donations, transfers, cashback or referral rewards, and stored-value arrangements should be distinguished from such purchases and should not be treated as e-commerce sales merely because they occur online.

46) When a fee is levied for services involving transferring money, such as mobile money top-ups and transfers, crowdfunding, or charitable donations, and these transfers are ordered or instructed through digital channels, the fees charged should be reported as e-commerce turnover. However, the amounts transferred are not sales revenue of the service provider and should not be recorded as e-commerce.

Chapter 7. Coverage of statistics on the value of business e-commerce

7.1 E-commerce is a means through which sales can be made, and has the potential to play a role wherever orders are placed and received throughout the economy. It is therefore best understood not as a "sector" but as an ordering channel which cuts across all sectors – whether defined in terms of the industries involved, classified according to the ISIC, or the products being sold, per the Central Product Classification (CPC).

7.2 At the same time, because the primary role of businesses is to sell goods and services – whether produced by the business itself or purchased and resold – e-commerce is especially relevant for businesses. This relevance extends to their role as purchasers, since businesses also use e-commerce to order inputs.

7.3 It follows that statistics on business e-commerce should, as far as feasible, cover or be representative of the full business population. This supports comprehensive measurement of digital ordering across firm sizes, industries and other relevant business characteristics.

7.4 In some economies, relevant e-commerce activity may also be carried out by unincorporated household market enterprises that fall outside standard business registers and business survey frames. Whether such activity is within scope depends on the intended target population, but its potential materiality to e-commerce statistics should be considered when assessing coverage.

7.5 E-commerce sales and purchases by businesses are the core focus for these Guidelines and Recommendations. However, there is often a trade-off between full coverage and the resources available for data collection and processing. The following sections therefore consider how statistics on business e-commerce can be scoped in practice, how e-commerce transactions can be targeted within that scope, and how any resulting coverage limitations should be assessed and communicated. The chapter also considers the statistical unit to which the figures relate, including the treatment of internal flows within complex enterprises.

7.1 Considerations related to coverage

7.6 Although e-commerce may occur throughout the business sector, and indeed the wider economy, the pursuit of comprehensive coverage needs to be balanced against cost, feasibility and respondent burden, especially in the context of business surveys, which are the most widely used vehicle for collecting data on the value of e-commerce (UNCTAD, 2023).

7.7 It should also be noted that these surveys are generally not designed with the sole or primary aim of compiling exhaustive statistics on the value of e-commerce. For example, surveys of ICT usage in business, which are a common vehicle for collecting data on e-commerce sales and purchases, have primarily been focused on capturing differences in the degree of digitalisation across businesses of different sizes and in different industries. When a pre-existing survey is extended to measure the value of e-commerce, the sample design should be reviewed to ensure that it can support robust estimation of monetary aggregates, which may be highly concentrated among larger firms or particular industries.

7.8 Identifying enterprises engaged in e-commerce is important for designing data collections that adequately capture its value. Information from previous surveys and other

relevant sources can inform stratification and sample selection, particularly to ensure adequate representation of enterprises likely to contribute substantially to e-commerce totals. However, enterprises whose e-commerce activity is not known in advance should not automatically be excluded.

7.9 To control cost and respondent burden, compilers commonly limit the survey frame by excluding certain industries or firms below specified employment or turnover thresholds. In deciding whether such exclusions are appropriate, consideration should be given to the following factors:

7.1.1 Preponderance of businesses in the sector

7.10 One basis for exclusion derives from the fact that e-commerce is a means for making sales and purchases. Furthermore, the first priority is the measurement of e-commerce sales (rather than purchases) by businesses as these are generally of wider interest to users and more straightforward for firms to report on.

7.11 From this perspective, it would not be a priority to cover ISIC economic activities where there are minimal units engaged in selling goods or services. This applies especially to ISIC Rev.5 section P (public administration and defence; compulsory social security) but may also relate to ISIC sections such as Q (education) and R (human health and social work activities), for example.

7.12 However, it should be noted that industries where non-market producers predominate can still include businesses (including public corporations), and that these may be engaged in selling through e-commerce. ISIC section Q includes private schools, and R includes private healthcare providers, which may well be engaging in e-commerce sales to private citizens, businesses, or to government.

7.13 ISIC section O includes private companies contracted to undertake functions in support of public administration such as managing citizen-facing service processes, collecting local government revenues, distributing grants or supporting public-sector recruitment and training. While these services are often provided under a framework contract (see Section 6.8), individual actions or service provision may be ordered by local or national authorities through online systems and hence count toward e-commerce sales of the service provider and purchases of the government. Furthermore, the sums involved can be large and therefore their inclusion in e-commerce statistics may be material.

7.14 The balance between businesses selling services and other units depends on the structure and dynamics of each sector. These factors should be considered carefully when considering excluding certain economic activities from the scope of e-commerce measurement.

7.1.2 Level of digitalisation

7.15 Differing levels of digitalisation can provide another rationale for excluding certain economic activities from the scope of e-commerce statistics. For example, in some economies relatively low levels of digitalisation may be observed in industries such as Agriculture, forestry, and fishing (ISIC section A), Mining and quarrying (B), or Construction (F).

7.16 However, these industries are far from immune to digitalisation, and even in cases where digital technologies have not been widely adopted in the process of production itself, it does not necessarily follow that e-commerce has not been adopted in the process of taking orders.

7.17 Moreover, there can be substantial variation between units within the same industry. An industry (for example Agriculture) may contain many small, less digitalised firms selling through traditional channels, while also including larger or more specialised firms that make extensive use of digital ordering and account for a significant share of output. Compilers may consider targeted inclusion of larger or economically significant firms in otherwise excluded or lightly covered industries. While this would not allow representative industry-level uptake indicators to be compiled, it could improve the comprehensiveness of overall estimates of the value of business e-commerce sales.

7.18 Targeted inclusion need not depend on an existing business-register indicator of e-commerce activity. Compilers can combine business-register or administrative information on firms' economic activity and turnover, output or employment with evidence of their digitalisation and likely use of digital ordering drawn from industry knowledge, media reports, company websites and consultation with firms or industry bodies. Consultation or survey questions would then establish their use of digital ordering, including EDI-type ordering, and the value of the resulting sales. This constitutes partial coverage of the industry, which should be clearly communicated to users.

7.19 Overall, industry exclusions should be based on their likely impact on the measured value of business e-commerce, rather than on assumptions about the general level of digitalisation in production. Any exclusions or partial coverage should be documented, periodically reviewed, and clearly communicated to users.

7.1.3 Economic relevance

7.20 More generally, where available resources allow only part of the business sector to be covered, compilers may need to prioritise the economic activities that are most economically significant or most relevant to national policy priorities. This may be appropriate where particular industries account for a large share of output, employment, or exports, or where e-commerce is known or expected to be especially important.

7.21 Such prioritisation should be based on an explicit assessment of likely impact on the measured value of business e-commerce. Industries that are large in overall economic terms may not always account for a large share of e-commerce, while smaller industries may be highly e-commerce-intensive. All available information such as, previous survey results, information from business registers or tax records, or guidance from industry experts should be used to inform any potential exclusions.

7.22 As an example, in Singapore, services account for around three quarters of economic output. SingStat therefore prioritises resources toward measuring e-commerce sales by services sector firms.

7.23 Where coverage is limited to selected industries, the resulting scope should be clearly documented and communicated to users, and the figures arising should not be

presented as total business e-commerce unless appropriate adjustments have been made or the uncovered industries are assessed to be immaterial.

7.1.4 Policy priorities

7.24 In some cases, coverage may be influenced by national policy priorities. For example, government interventions to promote e-commerce may target firms in particular industries, leading statistical efforts to focus on those industries so that policy impacts can be monitored. Such prioritisation may be appropriate where it responds to clearly identified user needs, but it should not be confused with comprehensive measurement of business e-commerce. Compilers should assess whether the industries covered are likely to capture a material share of e-commerce value and should clearly communicate the extent to which resulting estimates can, or cannot, be interpreted as representing total business e-commerce.

7.1.5 Legal and institutional constraints

7.25 Coverage may also be shaped by legal mandates or institutional arrangements. For example, the NSO may not have authority to survey financial institutions where this falls under the mandate of the central bank, or legislation may exempt firms below a specified employment or turnover threshold from statistical surveys. Such restrictions may be difficult to avoid, but they can materially affect the completeness and international comparability of statistics on the value of business e-commerce.

7.26 Where such constraints apply, compilers should assess their likely impact as far as possible and consider whether complementary data sources, targeted cooperation with other institutions, or model-based adjustments could reduce the resulting gaps. Remaining limitations should be clearly documented and communicated to users, including their implications for interpretation and comparability.

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7.27 The features and specificities of different industries and groups of firms should be carefully considered when deciding whether they should be included in, or excluded from, the statistical base. Coverage decisions should be informed by available evidence, including business survey results, business register information, administrative data and other relevant sources. Where necessary, compilers may also seek advice and insights from industry experts, major firms or sector regulators to understand, for example, whether particular firms or subsectors make significant use of e-commerce even where the wider industry appears less digitalised.

7.28 Where industries, firms below certain size thresholds, or other groups are excluded from the measurement of e-commerce value, compilers should help users understand the likely implications for completeness and interpretation. This may include providing contextual information on the excluded population, such as its share of the total number of firms, turnover, employment, value added or other relevant economic aggregates, as well as any available evidence on its likely contribution to e-commerce activity.

7.29 Overall, the aim should be to ensure that any limits to coverage are intentional, evidence-based and transparent. Where comprehensive coverage is not feasible, compilers should prioritise coverage that is most material for measuring the value of business e-commerce, while

clearly documenting the scope of the resulting statistics and any limitations affecting their use or international comparability.

7.30 This includes clarifying the coverage of registered or otherwise formalised unincorporated household market enterprises. Where the target population also includes informal-sector unincorporated household market enterprises, this should be stated explicitly, and compilers should consider whether complementary sources are needed to capture their e-commerce activity (see Section 2.4.1).

7.2 Targeting e-commerce transactions

7.31 Because e-commerce cuts across firms in all industries and of all sizes, including unincorporated household market enterprises (see Section 2.4.1), a data collection targeting only certain industries or groups of firms may not deliver a robust and comprehensive measure of the value of business e-commerce.

7.32 One way to address this is to complement seller-based business surveys with data collection from entities that operate digital ordering interfaces. These include operators of online marketplaces, other DIPs, and businesses operating websites or apps through which their own goods or services are sold. Such entities can be strategically important for measurement because they may hold structured information on transaction values, ordering channels, seller characteristics and, in the case of marketplaces, transactions involving many different sellers.

7.33 This approach has been adopted by the National Bureau of Statistics of China, which surveys "e-commerce operators" of websites and apps that facilitate e-commerce sales. These include not only third-party online marketplaces, but also websites and apps directly operated by sellers. Such operators can be identified from business register information, responses to other surveys, or targeted efforts to collect information from company websites, for example by identifying shopping-cart functionality or other keywords and features related to digital ordering.

7.34 The approach has several potential benefits. In particular, it leverages the position of online marketplaces as major nodes through which large volumes of e-commerce transactions are facilitated. Rather than collecting information from the many individual sellers using these marketplaces, compilers may be able to obtain transaction values and related details directly from the marketplace operators.

7.35 It can also help capture e-commerce sales made through online marketplaces by actors that are not incorporated or registered as businesses. This notably includes households and individuals using digital intermediation platforms to engage in business-like activities, such as selling goods or services online. In some economies, such "C2C" or household-based e-commerce activity may be economically significant and otherwise difficult to capture through standard business surveys.

7.36 However, this approach is not equally feasible in all circumstances. It is less useful where the relevant online marketplaces or platform operators are resident abroad and there is no legal or practical basis to compel them to provide information. It also requires compilers to identify resident e-commerce operators and to have the mandate, resources and technical capacity needed to survey them.

7.37 Operator-based data collections can be a useful complement to seller-based surveys, especially where e-commerce activity is concentrated in online marketplaces and other DIPs. However, they do not necessarily provide complete coverage of e-commerce involving resident

businesses, including unincorporated household market enterprises. In particular, collecting data from resident DIP operators is likely to capture sales made through those DIPs by non-resident sellers (potentially without regard to whether the buyers are resident or not). Conversely, sales made by resident sellers through non-resident DIPs may be missed, whether the buyers are resident or non-resident.

7.38 Compilers should therefore be clear about the statistical units and transaction flows covered by each source, and should take care when comparing or combining operator-based data with seller-reported information, particularly to identify and avoid possible double counting or coverage gaps. These residence-related issues are examined further in Section 8.2.

7.39 Used in this way, operator-based data have the potential to strengthen the coverage of e-commerce activity, especially in economies where households and individuals are active in selling online. However, they are best treated as a complementary source whose statistical scope must be explicitly assessed and reconciled with seller-based sources and with reference to the intended target population.

7.3 Statistical units and reporting boundaries

7.40 The statistical unit defines the business entity to which the statistics relate. It may differ from the reporting unit that supplies the information. For example, data may be collected from individual legal units and combined to produce statistics for an enterprise. A legal unit is an entity recognised by law as legally distinct and for which accounts are usually maintained separately. A statistical enterprise comprises one or more legal units producing goods or services with autonomy over operational decisions, particularly the allocation of current resources, even where strategic direction rests with an enterprise group. An enterprise comprised of several legal units is sometimes referred to as a "complex enterprise". Enterprises should be distinguished from enterprise groups, which contain multiple separate enterprises linked by ownership or control.

7.41 An establishment is an enterprise, or part of an enterprise, situated in a single location and undertaking a single or predominant productive activity. Establishments are often used in business surveys where detailed industry or subnational statistics are required. A kind-of-activity unit (KAU), by contrast, comprises an enterprise, or part of an enterprise, undertaking a single or predominant productive activity without restriction to a single location. An enterprise may be comprised of several establishments, KAUs or legal units, whose boundaries need not coincide.

7.42 It is recommended that the enterprise be used as the statistical unit for measuring the value of business e-commerce, consistent with the *Manual for the Production of Statistics on the Digital Economy* (UNCTAD, 2021), which recommends the enterprise for business ICT surveys. The enterprise provides an appropriate level at which to relate digital ordering to sales and purchases, particularly where ordering systems and accounting records are managed centrally across its constituent units. It also supports coherent measurement of e-commerce sales as a subset of total enterprise turnover.

7.43 Where e-commerce measurement is embedded in a business survey, it will generally inherit that survey's methodology, including its statistical unit, coverage, sampling design and reference period. Surveys based on establishments, legal units or KAUs can provide a basis for measurement, but compilers should assess whether respondents can report e-commerce values for the units concerned. Where orders are received or placed centrally on behalf of several units, guidance should explain how the associated sales or purchases are attributed,

consistently with the host survey's treatment of total sales and purchases, to avoid omissions or double counting. Where feasible, links between constituent units and their parent enterprise should support compilation of enterprise-level results.

7.44 Activity-level information can help distinguish different types of e-commerce within an enterprise. For example, a digital intermediation platform (DIP) operator may both intermediate transactions between third-party buyers and sellers and sell goods or services on its own account through the same interface. As set out in Section 6.9, these activities require different treatment when recording e-commerce turnover: intermediation contributes only the operator's fees or commissions, whereas own-account sales contribute the full sales revenue from the goods or services sold, subject to the valuation principles in Chapter 5. Amounts collected on behalf of third-party sellers are not the operator's turnover. Separate KAUs or activity breakdowns within an enterprise-level return can help distinguish these revenue streams and apply the appropriate treatment to each.

7.45 Where an enterprise comprises several legal units, sales between those units should be excluded from its total turnover and e-commerce sales, and corresponding purchases should be excluded from its e-commerce purchases. If enterprise-level figures already exclude these transactions, no further adjustment is needed; if legal-unit returns are combined, compilers should ensure that internal sales are removed consistently from both measures. This does not require a separately published measure of internal transactions. Compilers should document in metadata how internal sales are identified and removed from e-commerce sales and total turnover, including any limitations that prevent their full exclusion. Sales between separate enterprises, including those within the same enterprise group, may qualify as e-commerce and should not be excluded merely because of common ownership.

7.46 The choice of statistical unit also affects business counts, industry and size classifications, sampling and comparability across sources. Compilers should draw on the statistical business register and established national business-statistics practices to identify units and their relationships. Consistent units, concepts and classifications support coherence and linkage with other business statistics, including turnover, purchases and employment. Differences affecting interpretation or comparability should be documented and clearly communicated to users. The implications for valuation are discussed in Section 5.1, while practical reporting and compilation considerations are addressed in Section 8.5.4.

7.4 Recommendations

47) It is recommended that statistics on the value of business e-commerce sales and purchases should, as far as feasible, cover or be representative of the full population of businesses in the economy, so that they support comprehensive measurement of digitally ordered transactions by businesses.

48) Where full coverage is not feasible, compilers should minimise curtailments to coverage as far as resources, legal mandates and respondent burden allow. Decisions to exclude or partially cover particular industries, firm-size classes, institutional groups or other parts of the business population should be based on evidence of their likely materiality for the measured value of business e-commerce, rather than on assumptions about digitalisation alone.

49) In assessing coverage options, compilers should draw on relevant evidence and expertise, including business register information, previous survey results, administrative data, industry knowledge and consultation with major firms, industry bodies or regulators. Relevant factors include the economic weight of the excluded or partially covered group, its contribution to output, turnover, employment, value added or exports, the prevalence and value of e-commerce activity, and the extent to which activity is concentrated among economically significant firms.

50) When surveys originally designed to measure ICT usage or e-commerce uptake are extended to measure e-commerce value, the frame, stratification and sample design should be reviewed to ensure that they can support robust estimation of monetary aggregates, which may be highly concentrated among larger firms, particular industries or specific types of transaction. This review should consider how information identifying enterprises engaged in e-commerce can inform stratification and sample selection.

51) Where appropriate, compilers should consider complementary or targeted data collection to improve coverage of e-commerce transactions. This may include targeted inclusion of economically significant firms in otherwise excluded industries, data collection from resident e-commerce operators, especially online marketplaces and other DIPs, or complementary approaches to cover e-commerce activity by unincorporated household market enterprises.

52) Compilers should clearly document and communicate the scope of the statistics, the rationale for any exclusions or partial coverage, and the likely implications for completeness, interpretation and international comparability. Where possible, this should include contextual information on excluded groups, including unincorporated household market enterprises where relevant, and any available evidence on their likely contribution to e-commerce activity.

53) It is recommended that the enterprise be used as the statistical unit for measuring the value of business e-commerce. Where an enterprise comprises several legal units, sales between those units should be excluded from its total turnover and e-commerce sales, and corresponding purchases should be excluded from its e-commerce purchases.

Chapter 8. Measuring e-commerce value through surveys

8.1 Business surveys are the most widely used source for statistics of e-commerce value (UNCTAD, 2023). Although there are examples of surveys which specifically target the operators of online shops, e-commerce questions are more commonly included within broader business surveys, particularly surveys of ICT usage in business. This section considers the use of enterprise surveys for collecting e-commerce value data.

8.1 Surveys of ICT usage in businesses

8.2 Among survey-based approaches, ICT usage surveys in enterprises are the main vehicle for collecting information on e-commerce sales by businesses (UNCTAD, 2023).

8.3 These surveys can cover a broad range of topics, from use of computers and the Internet, to the adoption of advanced technologies such as data analytics and artificial intelligence, the employment of ICT specialists, cybersecurity practices, and barriers to technology adoption.

8.4 The *UNCTAD Manual for the Production of Statistics on the Digital Economy* (UNCTAD, 2021) presents guidance on implementing these surveys, including conceptual definitions and frameworks, model questions, population frames, sample design, data processing, managing non-response, weighting procedures, and dissemination. The Manual includes the UNCTAD model questionnaire for business surveys on the use of ICT, which are designed to collect the core indicators on ICT usage in enterprises established through the Partnership on Measuring ICT for Development. The Manual also includes The OECD Model Survey on ICT Usage by Businesses (OECD, 2015).

8.5 The annual editions of the European Community survey on ICT Usage and E-commerce in Enterprises also represent a valuable and evolving model, which is complemented by a Compiler's Manual to guide harmonised implementation across countries (Eurostat, 2025).

8.6 Because ICT usage surveys commonly already ask whether enterprises make sales through e-commerce channels, they provide a natural starting point that can be built upon with follow-up questions on the value of those sales.

8.7 Enterprises that report making purchases via e-commerce can similarly be asked to report the corresponding expenditure.

8.1.1 Extending ICT surveys to measure e-commerce value

8.8 Surveys that already identify whether enterprises make e-commerce sales or purchases can be extended to go beyond simple yes/no questions on e-commerce activity to collect information on the value of those transactions.

8.9 The OECD provides a model survey component (**Box 6**) designed to support such an extension (OECD, 2025). This captures the value of e-commerce sales and their disaggregation between domestic and international transactions, thereby measuring digitally ordered exports in accordance with the framework on digital trade (IMF, OECD, UNCTAD, and WTO, 2023). The model is aligned with practice observed across various countries.

8.10 As relevant details are routinely collected on the survey, this model also allows for e-commerce value to be broken down by firm characteristics including economic activity, firm

size and subnational location. Details on firm structure, especially foreign ownership, may also be collected.

Box 6. OECD model survey component on e-commerce sales in enterprises

E-commerce sales of goods or services occur through methods specifically designed for receiving orders. These include web-based interfaces and Electronic Data Interchange (EDI). The payment may be made online or offline.

E-commerce sales **do not include** orders placed via manually typed messages (including but not limited to e-mails), on-premise mechanisms (including but not limited to kiosks or QR codes), and voice or chatbot interactions that do not involve structured, automated ordering mechanisms.

E-commerce encompasses both web-based and EDI-type sales:

- Web sales cover orders, bookings and reservations placed by your customers via:
  - Your enterprise's websites or apps:
    - Online store (web shop);
    - Web forms on the Internet, extranet;
    - Social media or messaging platforms with structured ordering features (e.g., catalogues like WhatsApp Carts, TikTok Shop);
    - Chatbots or voice shopping;
  - E-commerce marketplace websites or apps (used by several enterprises for trading goods or services).

- EDI-type sales cover orders placed by customers via EDI-type messages, including:
  - in an agreed or standard format suitable for automated processing;
  - EDI-type order message created from the business system of the customer;
  - including orders transmitted via EDI-service provider;
  - including automatic system generated demand driven orders;
  - including orders received directly into your ERP system.

  Examples of EDI: EDIFACT, XML/EDI (e.g. UBL, Rosettanet).
  Only orders placed directly using an EDI system should be classified as EDI e-commerce

Orders placed via manually typed messages (including but not limited to e-mails), on-premise mechanisms (including but not limited to kiosks or QR codes) are not considered e-commerce.

Module A	In YYYY, did your enterprise have e-commerce sales of goods or services via:	Yes	No
	a) your enterprise's websites or apps?	□	□
	b) e-commerce marketplace websites or apps used by several enterprises for trading goods or services? (e.g. Amazon, eBay, Alibaba, etc.)	□	□
	c) EDI-type messages	□	□
Module B If both Module A a) and Module A b) and Module A c) = "No" then go to the next section	What was the total value of your enterprise's e-commerce sales?		
	a) In YYYY, what was the total value of your enterprise's e-commerce sales of goods or services?	National currency, excluding VAT if applicable _____	
	OR b) In YYYY, What percentage of your enterprise's total turnover was generated by e-commerce sales of goods or services?	__ __ __ , __ %	
Module C	In YYYY, what was the percentage breakdown of the turnover from e-commerce sales that were placed by customers located in the following geographic areas? *(estimates in percentage of the monetary values in national currency, excluding VAT if applicable)*		
	Own country	__ __ __ , __ %	
	Rest of the world	__ __ __ , __ %	
	TOTAL	100%	

Notes: "YYYY" = year. They have been slightly adjusted and simplified to enhance data collection on the value of total e-commerce sales.

Source: OECD (2025)

8.11 The OECD model module provides a useful baseline approach. It is concise, straightforward to incorporate into existing ICT usage surveys, and focuses on information that respondents should be able to derive from routine sales records. By collecting total e-commerce sales together with the domestic/international split, it focuses on establishing an internationally comparable measure of e-commerce sales and digitally ordered exports, while limiting additional respondent burden.

8.12 Even with this concise approach, additional questions and breakdowns do increase respondent burden, particularly if the requested information is not readily available from business records and systems. Respondents may need to undertake additional processing or make estimates, which can also affect data quality. The detail collected should therefore balance user needs against the ability of businesses to provide reliable information at reasonable cost in terms of time and effort. ICT usage surveys are typically directed to ICT personnel, whereas questions on e-commerce values may require input from financial or commercial staff, particularly in larger enterprises (see Section 8.5.4).

8.13 At the same time, this model does not collect details on several of the relevant sub-classifications of e-commerce sales that were identified as measurement needs in Chapter 2:

Customer type

8.14 No information is collected on the customer type, needed to facilitate the distinction between B2C and B2B/G e-commerce.

8.15 Related to this, although the model asks the respondent whether or not they make sales via EDI-type ordering, it makes no delineation between the value of web sales, and EDI-type sales (with the latter in practice being a component of B2B/G e-commerce). As noted in Section 3.3.1.1, it is important that EDI-type sales are included in statistics on e-commerce value and specifically delineating these sales is recommended as a way to make sure they are captured.

Products sold

8.16 Information on the products sold via e-commerce was identified as of particular importance to business users, in macroeconomic statistical frameworks, for consumer protection, and in the context of negotiating international trade agreements.

E-commerce through online marketplaces and other DIPs

8.17 Digital intermediation platforms (DIPs) are not specifically addressed by the module. While this is aligned with keeping the module focussed on the most important information, policy and analytical needs for information on DIPs were highlighted in Chapter 2, while Section 6.9 outlined the information needed.

8.18 Two scenarios are important to consider. The first is responding enterprises that make sales through DIPs. The size of these sales and their share in total turnover give an indication of the extent to which firms are reliant on DIPs for their business and the need for policy to consider market concentration or dependence on foreign corporations. Information on the fees paid to these platforms further inform this assessment, as well as supporting the compilation of digital supply use tables and digital trade.

8.19 The second scenario is that of DIP operators resident in the compiling economy. Here, specific reporting requirements apply. Notably, with respect to transactions that the DIP intermediates, only the revenue the DIP operator receives from fees or commissions

charged for that digital intermediation service should be reported as the value of e-commerce sales by the DIP. This is aligned with financial reporting standards, under which the DIP is acting as an agent rather than a principal seller.

8.20 The total value of sales intermediated, commonly referred to as gross merchandise value in the case of platforms intermediating sales of goods or gross transaction value for platforms intermediating services, may also be measured but should not be misconstrued as the value of the platform's e-commerce sales.

8.21 Nevertheless, DIP operators can also make direct sales of goods or services through the marketplace or other platform that they operate. This is especially common among operators of online marketplaces intermediating merchandise sales, where the operator buys and resells goods though the same platform. In respect of these transactions, the DIP operator is acting as an online retailer (or "e-tailer"). However, the sales are still made through the online marketplace interface, where the operator's product listings appear alongside, and compete with, those of third-party sellers.

8.22 This situation creates practical difficulties in distinguishing sales through "your enterprise's own websites or apps" from those through "e-commerce marketplace websites or apps used by several enterprises for trading goods or services". Where DIP operators also sell their own goods or services through the platforms they operate, such sales could be classified inconsistently across operators, or worse, be reported twice.

8.23 The DIP operator may also sell services ancillary to the transaction being intermediated. These are often targeted at sellers and include warehousing, logistics, delivery and returns processing. Ancillary services may also be offered to buyers during the ordering process, such as extended warranties or guarantees on goods sold through the platform. Local delivery of meals produced by restaurants or groceries from stores to nearby customers may also be sold as an ancillary service.

8.24 Finally, it cannot be excluded that a DIP operator may also make sales of goods it owns, or services it provides, through a platform operated by another entity.

8.25 To summarise, DIP operators may engage in several types of sales transactions:

- sales of digital intermediation services to buyers and/or sellers (depending on who pays the associated platform fees)
- sales, through the platform they operate, of goods owned or services provided by the DIP operator, other than digital intermediation services
- sales of ancillary services to sellers and/or buyers using the platform
- sales of goods or services through a platform operated by another entity

8.26 Sales made through online marketplaces and other DIPs are, by definition, digitally ordered and should be included in e-commerce statistics. However, the value reported by the DIP operator should be limited to the revenue it recognises from those transactions in its business accounting records, in line with the valuation principles set out above.

8.27 Given the importance of DIPs as nodes in the e-commerce landscape, and the specific reporting requirements associated with them, resident DIP operators should be included with certainty in the survey sample. To support this, compilers should seek to identify DIP operators using business register information, responses to other enterprise

surveys, administrative data, and market or industry research. Survey instruments should include specific questions to identify DIP operators and distinguish revenue from digital intermediation services from revenue arising from goods or services they supply directly.

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8.28 Measuring the Value of E-commerce (UNCTAD, 2023) includes an annex showcasing a wide range of business survey questions related to measuring the value of e-commerce presented exactly as they are in national surveys. This includes examples which collect additional details mentioned.

8.29 A common observation among statistical practitioners is that respondents do not always read conceptual definitions and explanation, even when these are readily accessible within the survey questionnaire. This risk is especially relevant for e-commerce, a term widely used in media, policy and business discourse to refer broadly to "selling online". Within responding enterprises, it may similarly be used as a blanket term for all sales activities through digital channels. Respondents may therefore assume that they already understand what is meant by "e-commerce" and report on the basis of their own interpretation, rather than applying the more precise statistical definition. This creates a risk that sales made through channels outside the definition, such as manually typed messages, will be incorrectly reported as e-commerce.

8.30 One pragmatic mitigation strategy is to entirely forego use of the phrase "e-commerce" within the questionnaire, while still capturing the components needed to correctly measure it. Questions can instead ask separately about sales received through the specific ordering channels included in the definition, namely websites and apps, with orders through online marketplaces and other DIPs separated, and EDI-type messages.

8.31 Chapter 4 highlighted the relevance of ordering via unstructured messages sent back-and-forth in manually typed or recorded voice or video form. Referred to as "other remote online orders", these do not meet the definition of e-commerce and are therefore not addressed by the OECD model. However, they are an important way of selling online in certain countries, especially developing economies. This introduces not only a policy interest in these sales but also a risk for the collection of robust data on e-commerce.

8.32 While the primary focus should remain on measuring e-commerce sales, an approach centred on specific ordering channels can be extended to capture additional channels of policy or analytical interest without requiring respondents to determine the boundary between e-commerce and other forms of remote online ordering. Such an extension may be desirable where justified by user needs, where the necessary resources are available, and where respondent burden can be managed.

8.33 In this context, separately identifying other remote online orders may also improve the quality of e-commerce statistics by reducing the risk that such orders are incorrectly reported as sales through e-commerce ordering channels.

8.34 Several economies have demonstrated approaches that allow for other remote online orders to be covered while also facilitating their exclusion for the purpose of compiling internationally comparable e-commerce figures.

8.35 For example, the Economic Census of Mexico distinguished orders placed by e-mail and social networks alongside orders through the company's own website, third party websites (i.e. online marketplaces) and EDI orders (INEGI, 2024).

8.36 The Value of e-Commerce Survey in Thailand 2024 (ETDA, 2024), asked for a percentage breakdown of total sales revenue across the following channels:

- Storefront / Branch
- Telephone / Fax
- Mail order or direct sales to customers
- Company website / Business application
- Social media platforms (e.g. Facebook, LINE, Instagram)
- Domestic e-marketplaces (e.g. Shopee, Lazada, TikTok Shop, Grab, Lineman)
- International e-marketplaces (e.g. eBay, Amazon, Alibaba)
- Department store or modern retail websites (e.g. Central Online, HomePro)
- Electronic Data Interchange (EDI) systems between businesses (e.g. SAP Business Connector, Oracle GoldenGate, Microsoft BizTalk Server)
- Government e-procurement systems (e.g. e-Bidding, eMarket)
- Other (please specify)

8.37 This approach allows for various aggregates to be computed according to differing analytical needs and with the strength of a single, coherent view of the firm's sales activities.

8.38 The 2021 Digital Economy Survey conducted by the United Kingdom Office for National Statistics made a similar distinction of "sales via the business' own social media" from sales via websites or apps and EDI (Office for National Statistics, 2023).

8.39 These examples show that it is feasible to collect information on additional ordering channels in ways that still allow the core e-commerce aggregate to be compiled separately. One observation, however, is that all three treat orders through "social media" as a single category. As noted in Section 6.10, orders through social media, including messaging apps, cut across the boundary between e-commerce and other remote online orders. This is because such platforms are commonly used both as tools for sending unstructured messages, through which orders may be agreed, and as platforms incorporating structured ordering through product listing features coupled with shopping carts or "buy now" functions handled through the platform.

8.40 As clarified in *The 2025 OECD definition of e-commerce and guidelines for interpretation* (OECD, 2025), orders placed through these structured ordering features meet the definition of e-commerce. Survey categories referring to social media therefore need to distinguish, where feasible, between orders agreed through unstructured messages and orders placed through structured ordering features embedded in the platform.

8.1.2 UNCTAD model survey module on e-commerce sales in enterprises

8.41 Drawing the above together, **Annex A** proposes an UNCTAD model survey module on e-commerce sales in enterprises which is designed to facilitate the collection of all details identified in as important by TG-eCOM (**Table 2**). The model:

- Avoids specific reference to or reliance on the term "e-commerce" by focusing on sales through online marketplaces and other intermediation platforms, other websites and apps, and EDI e-commerce.
- Uses these to calculate the total value of e-commerce sales (though not labelled as such) as a basis for requesting a breakdown by customer type, and product sold, as well as by customer location for digitally ordered exports.

- Emphasises the relationship between EDI ordering and the enterprise resource planning or business management software into which it is often integrated.
- Draws upon business accounting terminology, to help respondents relate the questions asked to the financial records they keep
- Facilitates the collection of relevant information on DIP transactions, including from resident DIP operators.
- Includes an additional category for sales through orders received or agreed through online message conversations, which can **optionally** be implemented to capture other remote online orders.
- Presents an approach that can optionally be used to identify trading partner economies to which digitally ordered exports are sold.

8.42 The approach of categorising products sold via e-commerce into digitally delivered goods or services, other services and physical goods has been shown to work successfully in Canada (Statistics Canada, 2023). Notably, this wording differs from the framework for measuring digital trade (IMF, OECD, UNCTAD, and WTO, 2023) under which only services can be digitally delivered. However, referring to "digitally delivered goods or services" is recommended in survey instruments to reduce the risk that respondents under-report digitally delivered products because they perceive them as goods rather than services. The same product breakdown has also been adopted in the 2025 European Community survey on ICT usage and e-commerce in enterprises (Eurostat, 2025a).

8.43 In a similar vein, the model draws on the experience of Türkiye (TICARET and TURKSTAT, 2025), where respondents were found to have difficulty understanding and identifying EDI ordering but could readily understand the idea of orders placed from within enterprise resource planning (ERP) or other business management software.

8.44 More generally, the model draws on business accounting terminology, including revenue recognised from sales of goods and services and the distinction between principal and agent roles in transactions, so that respondents can relate the questions to their business records and systems. As a general principle, it is recommended that survey questions should, as far as possible, use language that respondents can readily understand and map to their own accounting and operational terminology.

8.45 As a result of covering all the above elements, the model module is considerably longer than a basic e-commerce value module. Compilers are therefore recommended to implement the parts most relevant to the needs and priorities of key stakeholders. Periodic implementation may also be considered as a way to manage respondent burden, for example by including the module in every second or third edition of the survey. In the case of an annual survey vehicle, this would mean implementing the module every two or three years.

8.46 Although the model does not prescribe a reporting period, practices observed across many countries suggest that a one-year reporting period, aligned with either the calendar year or the business financial year, is strongly recommended for questions relating to e-commerce value.

8.47 Where surveys of ICT usage in businesses are already in place, they provide the natural starting point for measuring the value of business e-commerce. They usually already identify whether enterprises make or receive e-commerce orders and can often be extended, with

relatively manageable additional burden, to collect the value of e-commerce sales and purchases and relevant breakdowns. Where no such survey exists, compilers need to decide whether to establish one or instead enhance another existing business survey to include e-commerce questions, as discussed under other business surveys. This choice should take into account survey infrastructure, coverage, periodicity, respondent burden, user needs and the extent to which existing surveys already collect turnover, purchases or other accounting variables needed to support robust valuation.

8.2 Surveys of e-commerce operators

8.48 The most specialised survey option for e-commerce statistics targets businesses operating websites or apps facilitating e-commerce ordering. This includes businesses selling goods or services through their own websites or apps, as well as operators of online marketplaces and other digital intermediation platforms facilitating transactions by third-party sellers.

8.49 Under this approach, each reporting business should report only the value of orders placed through the website or app it operates. For online marketplaces and other DIPs, this includes orders placed with third-party sellers, meaning that the operator reports the gross merchandise value or gross transaction value of all orders facilitated through that website or app.

8.50 The approach can be particularly useful where many businesses, especially MSMEs (micro, small and medium-sized enterprises), sell online exclusively through DIPs. In such cases, collecting data from the DIP can avoid the need to identify and survey large numbers of small sellers individually, while drawing on structured transaction records held by the platform.

8.51 However, where businesses selling through DIPs also sell through websites or apps, they operate themselves, they would still need to be identified and surveyed in their capacity as e-commerce operators.

8.52 Provided the operators of websites and apps that facilitate e-commerce ordering can be correctly and exhaustively identified and surveyed, the approach has the potential to yield robust statistics on e-commerce sales transactions through websites and apps within the economy. **Box 7** presents a case study of the e-commerce operator survey in China.

8.53 Targeting e-commerce operators may also allow for more detailed questions than would be feasible in a broader business survey covering many topics. However, by targeting only businesses that already operate e-commerce ordering channels, this approach foregoes the opportunity to collect information from non-sellers on barriers to e-commerce adoption. It also limits the ability to ask businesses selling only through DIPs why they do not operate their own websites or apps. Such information can be valuable for identifying constraints and informing policy measures to support broader participation in e-commerce.

8.54 There are also important caveats and limitations relating to the coverage of e-commerce activities in the economy for which statistics are being compiled. The resulting totals will not necessarily correspond to e-commerce sales by businesses resident in the compiling economy as would be measured through a survey of ICT usage and e-commerce in enterprises.

8.55 First, sales reported by the covered websites or apps will likely include e-commerce sales by households and individuals, including unincorporated household market enterprises. Covering this activity may be desirable, especially where sellers operate in the informal sector without registering as businesses and the aim is to capture their sales in e-commerce statistics.

This represents an important difference from statistics covering sales by incorporated enterprises only.

8.56 Second, coverage depends heavily on the residence of the e-commerce operator. Statistical regulations allowing surveys to be served, or responses to be compelled, usually apply only to resident entities. In economies where the operators of widely used e-commerce marketplaces and other DIPs are resident abroad, this is likely to lead to reduced coverage of overall e-commerce compared with surveys targeting the resident business population.

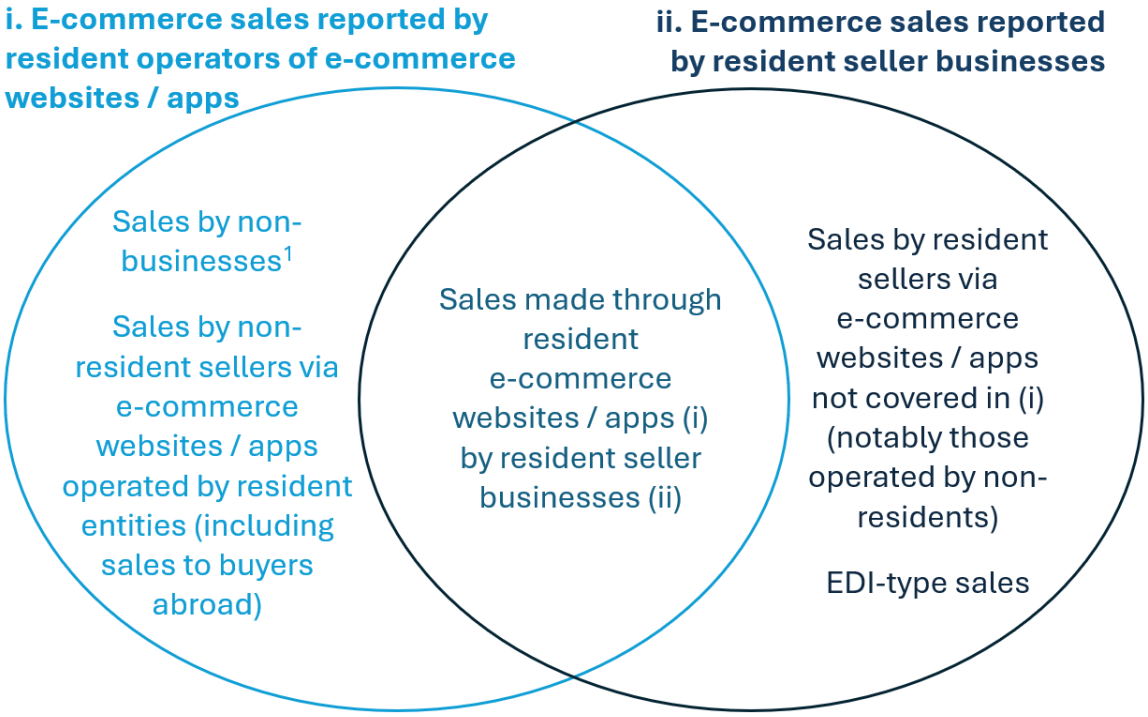
8.57 Conversely, resident marketplaces and other DIPs may facilitate transactions involving non-resident sellers, non-resident buyers, or both. The full value of an intermediated sale should be counted toward the e-commerce sales of the compiling economy only where the seller is resident. Counting the full sale value where the seller is non-resident would overstate e-commerce relative to seller-based statistics. In such cases, only the fee or commission earned by the resident DIP for providing digital intermediation services should be recorded as domestic e-commerce output, although the full transaction may still be relevant to e-commerce purchase statistics if the buyer is resident. Compilers therefore need information on the residence of sellers and buyers using resident platforms to correctly characterise these transactions and avoid overstating domestic e-commerce sales or purchases.

8.58 Third, surveys of website and app operators will not cover EDI-type ordering. Since EDI-type sales often account for a major share of e-commerce by value, this important limitation, and the resulting under coverage of e-commerce sales in the economy should be clearly recognised.

8.59 Differences and overlaps in the coverage of e-commerce achieved through business ICT surveys and surveys of e-commerce operators are visualised in **Figure 10**. Overall, surveys targeting e-commerce operators can be a useful source, especially as a complement to surveys representative of all selling businesses resident in the economy. They are particularly valuable where operator records can improve the coverage of e-commerce by MSMEs selling through DIPs.

8.60 However, totals compiled from surveys of resident e-commerce operators should be constructed and presented with particular care. A total value of orders placed through websites or apps operated by resident entities, including resident DIPs, is not equivalent to either total e-commerce sales by resident sellers or total e-commerce purchases by resident buyers. It may include sales by non-resident sellers through resident DIPs, whether to resident or non-resident buyers, while excluding sales by resident sellers through DIPs operated by non-resident entities. Compilers should therefore clearly describe the coverage of such totals and avoid presenting them as a measure of overall e-commerce in the economy.

Figure 10. Comparing the coverage of surveys targeting operators of e-commerce websites and apps to e-commerce sales reported by seller businesses



Source: UN Trade and Development, based on China National Bureau of Statistics
Notes: [1] also sales by any businesses excluded from the sample of (ii). e.g. due to employment or turnover thresholds.

Box 7. Surveying e-commerce operators in China

In recent years, China's platform economy has developed rapidly, playing an increasingly important role in economic and social development. From 2015 to 2025, the value of e-commerce transactions increased from 21.7 trillion yuan to 46.7 trillion yuan.

The composition of the market is diverse, gathering large enterprise groups, MSMEs, individual businesses and various types of flexibly employed persons. The e-commerce business model has been continuously enriched, covering not only consumption-related business forms such as physical commodity sales, transportation, food delivery and personal second-hand transactions, but also production-related scenarios such as bulk commodities trading, industrial goods procurement, freight transportation, and cloud services, deeply integrated into production and daily life.

In 2015, the National Bureau of Statistics of China (NBS) officially established a statistical survey program for "e-commerce platforms" based on enterprise surveys. The survey targets the operators of websites and apps facilitating e-commerce sales, both where these function as the sellers' own apps or as DIPs facilitating transactions between third-party buyers and sellers. Websites and apps owned by enterprises above designated size and those with an annual transaction value of RMB 10 million and above are covered. Over 4,000 e-commerce platforms submit data directly to the NBS on a regular basis.

The core survey indicators include the aggregate transaction value and multiple breakdowns: by transaction counterparty, giving B2B, B2G, B2C, and C2C transaction value; second, by goods or services products traded; third, by seller location, under which provincial-level transaction value data are collected to grasp the geographical distribution of e-commerce operator seller market entities and assess regional development trends of the platform economy.

In addition, statistics are compiled on platform operational conditions including the number of active merchants and active users on platforms, as well as the development of new models and forms of business such as livestream e-commerce, cross-border e-commerce and rural e-commerce.

Compared with traditional enterprise ICT surveys, e-commerce operator surveys have multiple advantages. From the perspective of statistical coverage, the survey covers both e-commerce sales by enterprises above designated size and online transactions of market entities below designated size, households, individuals and diverse social organizations, enabling a fuller depiction of the overall e-commerce market.

The major e-commerce platforms operating in China are mainly domestically resident and the survey approach yields statistics that better reflect the actual situation of the Chinese market and have high practical value.

From the perspective of implementation, the survey can deliver efficient and high-frequency monthly statistics because data from e-commerce platforms are centralized with accurate and convenient data extraction, obviating one-by-one surveys of massive market entities. It also allows the design of more granular survey questions for grouped data collection, so as to fully explore the operational characteristics of e-commerce platforms.

Results can be found in the NBS table "E-commerce Transaction Value and Growth Rate" available at https://data.stats.gov.cn/dg/website/page.html#/pc/national/en/yearData

8.3 Other business surveys

8.61 Various additional forms of business survey have been used to gather information on the value of e-commerce sales by businesses (UNCTAD, 2023).

8.62 The collection of ICT usage and e-commerce variables may be conducted alongside those on other specific business activities such as innovation and research and development, as in the Business Characteristics Survey conducted by the Australian Bureau of Statistics.

8.63 In other cases, e-commerce sales are incorporated in sectoral or general business surveys designed to collect monetary information on businesses revenues and expenditures. In Singapore, the services industry survey is used. In the United States, until 2022, separate surveys were implemented covering manufacturing, wholesale trade, retail trade, and services (including utilities), though this has now been superseded by an Annual Integrated Economic Survey. The Annual Survey of Philippine Business and Industry provides results covering e-commerce across economic activities from agriculture to arts, entertainment and other services.

8.64 Although these are not surveys of ICT usage, the questions used are usually similar to the model shown in **Box 6**, with explanation of the transactions covered, yes/no questions to establish if the firm engages in e-commerce sales, followed by the collection of values.

8.65 A key advantage of using these kinds of surveys is that they are designed to produce representative economic statistics on business revenues and expenditures. It is a logical extension to identify the portions of those monetary flows that arise from e-commerce transactions.

8.66 This approach may also pose less of a reporting challenge for respondents compared to ICT usage surveys: moving from total revenues and expenditures to e-commerce revenues and expenditures may be more natural than moving from yes / no questions on ICT use to monetary reporting, especially where e-commerce value is one of the few monetary variables included in an ICT usage survey. This consideration is especially relevant where ICT usage surveys are addressed primarily to ICT departments, since sales, finance or accounting departments are better placed to respond to questions on e-commerce value.

8.67 General or sectoral business surveys can therefore provide an attractive alternative where a dedicated ICT usage survey is not in place, or where existing ICT survey infrastructure is not well suited to collecting monetary values. They may offer better alignment with business accounting records and other economic statistics, but generally provide less scope to collect detailed information on ICT use, digital capabilities, barriers to adoption, or specific e-commerce channels. The choice between enhancing an ICT usage survey and adding e-commerce questions to another business survey should therefore reflect national survey infrastructure, respondent burden, user needs, differences in response rates, and the reliability with which monetary and contextual information can be collected.

8.4 Combining the strengths of different surveys

8.68 Surveys designed to collect business revenues and expenditures have the advantage of being broadly representative and of producing robust monetary statistics. They can therefore provide a strong basis for compiling reliable totals for e-commerce sales and purchases. However, because these surveys often have large samples and collect a wide range of economic

information, the scope to add detailed follow-up questions beyond identifying e-commerce revenues and purchases may be limited.

8.69 Where both survey types are available, compilers may be able to combine their strengths. Monetary totals from surveys of business revenues and expenditures can provide robust benchmarks, while ICT usage surveys can supply more detailed breakdowns or contextual indicators.

8.70 Such an approach can be particularly attractive where no single survey can meet all user needs. However, differences in survey scope, sample design, reference periods, target populations, definitions and valuation need to be carefully managed. Calibration, reweighting, modelling or other statistical integration methods may be required to ensure coherence between sources. Compilers should clearly document the role of each source and the methods used to combine them, so that the resulting statistics are coherent, transparent and interpretable by users.

8.5 Practical measures to support quality

8.71 Collecting data that can support robust statistics on the value of e-commerce sales and purchases requires careful survey design and implementation, whether compilers are establishing a new survey or adapting an existing one. Compilers should therefore consider several practical measures to support data quality and coherence.

8.5.1 Sample design

8.72 The design of the survey sample should reflect the specific objective of measuring the value of e-commerce sales and purchases. Where an existing survey is being extended, the sample should be reviewed against this objective; where a new survey is being established, it should be developed with this objective in mind from the outset.

8.73 General guidance on sample design for ICT usage surveys is provided in the Manual for the Production of Statistics on the Digital Economy 2020 (UNCTAD, 2021), including on the definition of target populations and statistical units, preparation of population frames, and sample design and selection. The Manual recommends widely used statistical practices including probabilistic sampling for representative estimates, with stratification by at least economic activity and business size, and notes that important strata, such as large businesses, should ideally be completely enumerated.

8.74 These principles apply equally to e-commerce value statistics, but the sample should give particular attention to the distribution of monetary values and to units likely to account for a large share of e-commerce sales or purchases. Such units may not always be the largest firms in the economy when size is defined by employment, meaning that employment-based size classes alone may not be sufficient to identify them.

8.75 The business register or sampling frame used for a survey will not always identify whether enterprises make or receive e-commerce orders. Where this information is not already available, a two-stage approach may be useful. A broad business survey can include simple screening questions to identify enterprises that make e-commerce sales or purchases and, where possible, the channels used. Enterprises identified in this way can then be incorporated in the sampling frame for a more detailed ICT usage or e-commerce value survey.

8.76 Beyond identifying enterprises engaged in e-commerce for inclusion in the sampling frame, compilers should ensure that the survey sample itself covers all units likely to materially affect aggregate estimates of e-commerce value if omitted. This includes known major online sellers, firms expected to have substantial EDI-type transactions, and the operators of online marketplaces and other DIPs. Such units should be actively included in the sample, rather than left to random selection. Where appropriate, they may also be managed through large-case arrangements (see Section 8.5.4 below).

8.77 Identifying relevant units may require supplementing business registers or sampling frames with additional sources. Administrative data, tax records, industry knowledge, web searches, payment data, information from regulators and engagement with business associations can all help identify enterprises with e-commerce activity that is likely to be material, even where they are not among the largest employers in the economy. This includes identifying firms with substantial EDI-type sales or purchases, which may not be widely recognised as e-commerce actors because their transactions take place through private business systems and supply-chain arrangements rather than public-facing online storefronts.

8.78 Given the importance of online marketplaces and other DIPs in the e-commerce landscape, compilers should make specific efforts to identify platform operators that are resident in the compiling economy and include them in the survey. This supports coverage of digital intermediation activity and the use of targeted questions on DIP operations, such as those suggested in **Annex A**.

8.79 Overall, the sample design should combine representative coverage of the business population with deliberate coverage of units likely to have a disproportionate effect on e-commerce value estimates. This balance is especially important because e-commerce activity may not be well captured using sampling approaches based solely on size and economic activity. A related coverage issue arises where material e-commerce activity is carried out outside the formal business population, as discussed in the following section.

8.5.2 Unincorporated household market enterprises

8.80 Unincorporated household market enterprises engage in commercial sales of goods or services without incorporating as enterprises, including through online marketplaces and other digital channels. As discussed in Section 2.4.1, they include sole traders and other registered or otherwise formalised businesses as well as informal-sector unincorporated household market enterprises. Some may be covered through business surveys, while others require complementary identification and measurement. Measuring their online sales activity can shed light on small-scale online income generation, entrepreneurship and business formalisation. Decisions on their inclusion should reflect national legal frameworks, market conditions, policy and other user needs, measurement feasibility, respondent burden and available resources.

8.81 If unincorporated household market enterprises can be identified from administrative sources, such as tax records, business registration systems below the corporate threshold, social security records or platform reporting, it may be feasible to include them in the sampling frame and treat them in a similar way to formalised enterprises, subject to appropriate questionnaire design and respondent guidance.

8.82 Where unincorporated household market enterprises cannot be identified from existing sources, they may first need to be detected through screening. One option could be to use household or individual surveys to identify respondents who sell goods or services online. For

example, surveys on ICT access and use in households and by individuals, such as models from the ITU, OECD and Eurostat include questions on whether individuals sell online. Respondents answering yes could, in principle, be treated as potential unincorporated household market enterprises and included in a follow-up collection or in the sampling frame of a survey targeting online sellers.

8.83 Either at initial screening, or during follow up, it will be necessary to distinguish commercial market activity such as producing goods for sale, providing paid services or buying goods for resale, from selling personal possessions previously acquired for the household's own use. Selling a used personal item does not, by itself, establish an unincorporated household market enterprise, even where the transaction qualifies as e-commerce. Conversely, small receipts or infrequent sales do not in themselves exclude an activity from market production. Questions about what respondents sell and whether goods were acquired or produced for sale can help establish this distinction.

8.84 Once identified for coverage, household respondents may have difficulty reporting the value of online sales, especially over an annual reference period, because they are unlikely to keep business-style accounts. However, this constraint should not be overstated. In contrast to online purchases by households, which are often dispersed across many websites, apps and platforms and recorded mainly transaction by transaction, online sales by an unincorporated household market enterprise are more likely to be concentrated through a small number of DIPs relevant to the goods or services they are selling. These platforms commonly provide transaction histories, earnings summaries, dashboards or payout statements to help sellers monitor income, fees and payments. These records can provide a practical basis for reporting online sales, even where household respondents do not keep formal business-style accounts. Nevertheless, they may focus on net amounts received, rather than the gross sales value needed to align reporting with the turnover concept used for formal enterprises.

8.85 Survey questions and guidance should therefore encourage respondents to consult such records where available. Where respondents can only report the amounts shown in platform statements or the net amounts paid out by the platform, compilers should seek to understand how these amounts are derived and, where feasible, apply adjustments to align them with the target turnover concept.

8.86 It follows from the above that unincorporated household market enterprises are likely to require a distinct measurement approach, whether through adapted questions, a dedicated module or a separate survey. Where a household or individual survey is used to identify potential unincorporated household market enterprises, it may be more straightforward and effective to administer a short follow-up module on the value of online sales within that survey, rather than attempting to transfer respondents into a survey primarily targeting enterprises. Such a module should focus on a small number of concepts that respondents can reasonably report, supported by clear guidance on how to use platform records and how reported amounts will be adjusted to the target turnover concept where needed.

8.87 Perhaps more importantly, unincorporated household market enterprises, and especially those in the informal sector, may be reluctant to disclose online sales activity because of concerns about taxation, benefit eligibility, licensing requirements or other administrative consequences. This risk is likely to be greater where public trust in statistical institutions, or in government more generally, is weak. It should therefore be addressed through clear assurances of statistical confidentiality and purpose limitation, consistent with the United Nations

Fundamental Principles of Official Statistics (United Nations, 2014). In practice, such assurances depend not only on communication with respondents, but also on a sound legal framework for official statistics, making clear that individual data collected for statistical compilation are to be kept strictly confidential and used exclusively for statistical purposes. Where supported by effective institutions, including trustworthy courts and accessible legal recourse, such protections can provide a stronger basis for respondent confidence. Compilers can also reduce sensitivity by keeping questions simple, allowing approximate reporting or value bands where appropriate, using shorter reference periods, and explaining how the information will be used. Nevertheless, reluctance to disclose may still affect response and should be treated as a potential source of non-sampling error.

8.88 Given these challenges, alternative approaches or data sources may be useful. Where unincorporated household market enterprises sell predominantly through a limited number of DIPs, reporting by platform operators may provide a viable avenue for measuring or estimating the value of these sales, especially where the operators are resident in the compiling economy. Information reported by platforms to tax authorities may offer a further route, subject to legal access and confidentiality safeguards. Payment data may also be useful where transfers from platforms to resident household enterprises can be identified. However, these transfers are likely to reflect net payouts rather than gross sales values and may require adjustment for platform fees and other deductions. Moreover, receipt of payment from a non-resident DIP does not establish that the underlying sale is an export: this depends on the residence of the buyer and seller. Section 9.6 discusses these reporting opportunities and the limitations of payment-based estimates. In all cases, compilers should avoid double counting where the same sale is captured through several sources.

8.5.3 Incentivising response

8.89 High response rates are essential for e-commerce value statistics, especially because non-response among large firms, major e-commerce sellers or DIPs can have a disproportionate impact on aggregate estimates.

8.90 Where the legal and institutional framework allows it, mandated response is generally preferable for surveys collecting data as a basis for official economic statistics. Compulsory response can improve coverage, reduce non-response bias and support the production of reliable estimates, although it requires foundations of clear statistical legislation, strict confidentiality protections and transparent communication with respondents (UNSD, 2025).

8.91 Even where response is mandatory, compilers should still seek to make participation as straightforward and useful as possible for respondents. Efforts should be made to explain why the information is being collected, how it will be used, and how confidentiality will be protected. Communication should emphasise the value of e-commerce statistics for policy, business development, market understanding and international comparison.

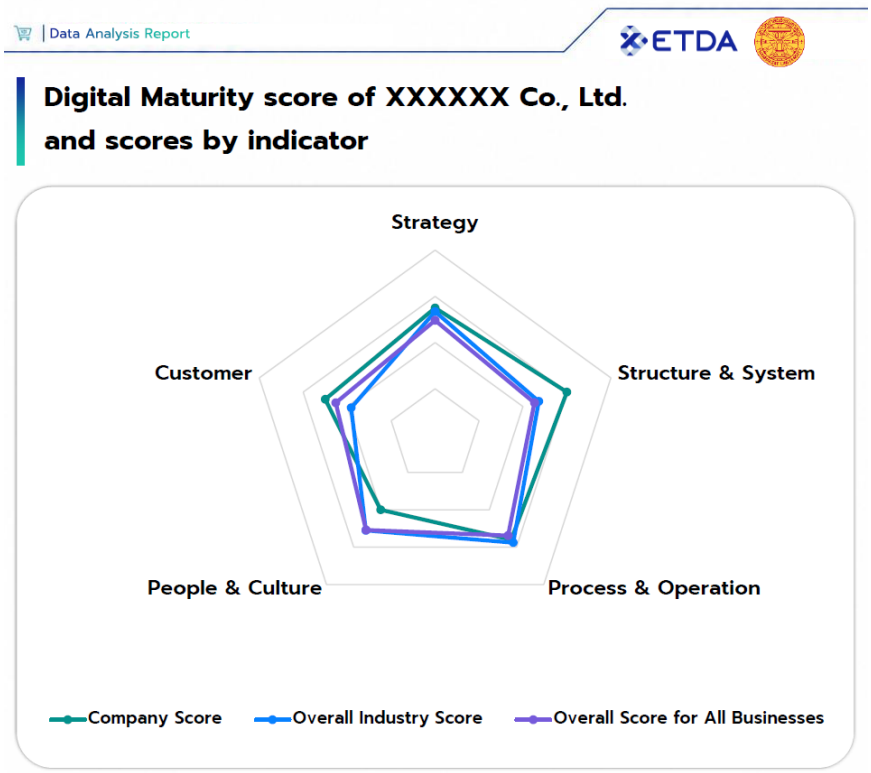
8.92 Compilers can also improve response by providing clear instructions, reducing unnecessary burden, pre-filling information where possible, using online questionnaires with built-in checks, offering helpdesk support and engaging with business associations or major platforms.

8.93 Respondents may be more willing to participate when they understand that the statistics can help identify barriers to e-commerce adoption, support digital economy policies and provide market information relevant to businesses themselves.

8.94 Going a step further, the Electronic Transactions Development Agency of Thailand (ETDA) offer respondents a "Digital Maturity Assessment Report" contextualising their responses against those of other businesses in the same industry and the business population at large. Responses to various questions are used to score the respondent across five indicator dimensions, with detailed explanations and recommendations for enhancing digital maturity. **Figure 11** provides an illustrative example of the overview visualisation included in the report.

8.95 These reports are provided, free of charge, within a few weeks of responding to the survey. ETDA has noted improved respondent engagement following implementation of this "feedback mechanism", with increased willingness among firms to participate in the survey contributing to response rates. This approach is notable because it provides respondents with a direct and personalised benefit from participation. Furthermore, as the assessment and recommendations depend on the information reported by each firm, respondents have a direct incentive to complete the questionnaire carefully and accurately.

Figure 11. Illustrative excerpt from a Digital Maturity Assessment Report sent to respondents in Thailand



Source: Electronic Transactions Development Agency of Thailand

8.5.4 Gaining quality responses

8.96 Compared with reporting whether a business makes sales or purchases via e-commerce, providing e-commerce values is significantly more demanding. It requires access to sales or financial records and calculations to arrive at the value to be reported. Furthermore, while sales and financial reporting are often undertaken or monitored centrally within firms, purchasing may be delegated to individual departments which choose independently whether to place orders via e-commerce. This can complicate reporting purchases by channel in all but the least complex enterprises.

8.97 These challenges make questionnaire design and respondent guidance especially important. Questionnaires should use terminology that respondents can relate to their business records and systems. In particular, references to turnover, revenue recognised from sales of goods and services, gross transaction value, platform fees, and principal versus agent roles, which accord with financial reporting phraseology, can help respondents understand the value to be reported and identify where the information is held.

8.98 Several further areas for consideration are set out below.

Clarifying reporting boundaries

8.99 Questionnaires should clearly identify the business unit for which information is requested, following the statistical-unit guidance in Section 7.3. Where an enterprise comprises several legal units, instructions should specify which units are covered and whether respondents should provide consolidated figures or separate returns for subsequent combination by compilers. Total turnover, e-commerce sales and their breakdowns should cover the same units and reference period.

8.100 Where separate legal-unit returns are combined to produce enterprise-level results, sales between those units should be identified and removed consistently from total turnover and e-commerce sales, and the corresponding internal purchases should be removed from e-commerce purchases. If respondents provide figures that already exclude these internal sales, no further deduction is needed. Sales to separate enterprises within the same enterprise group should not be excluded.

8.101 Where enterprise-level results are compiled from separate returns, compilers should check that these collectively cover the whole enterprise without overlap. After excluding internal sales, the combined turnover should reconcile with the corresponding enterprise total, and e-commerce sales and their breakdowns should be compiled on the same reporting basis. Reporting arrangements and any limitations in identifying or removing internal sales should be documented.

Targeting the right respondent within the enterprise

8.102 Reporting the value of revenue from orders received via e-commerce will require reference to records held in financial, accounting, sales or ERP systems. It is therefore important to be clear to the person filling in the survey on behalf of the enterprise that they may need to seek input from colleagues with access to these systems and knowledge of the information they hold.

8.103 This is especially important where e-commerce value questions are added to ICT usage surveys. Such surveys are dominated by yes/no questions on the use of technologies and are therefore typically directed to individuals or departments within the responding enterprise that are responsible for ICT systems. These contacts are well placed to report on the enterprise's use of digital technologies, including ordering through websites, apps, and EDI systems, but they may not be best placed to report monetary values.

8.104 At a minimum, survey instructions should explicitly acknowledge that information may need to be gathered from different areas of the enterprise. It is recommended that questionnaire should encourage the primary respondent to consult colleagues responsible for sales, finance, accounting or procurement where needed. For larger enterprises, it may be useful to identify separate contacts for ICT-related questions and monetary reporting, or to allow different modules of the questionnaire to be completed by different personnel.

8.105 This is particularly relevant where the questionnaire asks respondents to distinguish between sales through the enterprise's own website or app, sales through online marketplaces and other DIPs, EDI-type sales, customer type, market or product breakdowns, or to report e-commerce purchases. These details may be stored in different operational systems and therefore not be visible to a single person or department within the responding enterprise.

Large case units

8.106 Large case units are used by statistical agencies to manage reporting from the largest and most complex enterprises, especially multinational enterprises (MNEs). They involve specialised teams or dedicated staff who maintain regular contact with major respondents, understand their corporate structures and reporting systems, and coordinate data collection across statistical domains (Hussain, Peltola, & Mahajan, 2018).

8.107 Such arrangements can be valuable for e-commerce value statistics. MNEs and other large enterprises can often account for a substantial share of e-commerce sales or purchases, and may operate multiple websites or apps, use EDI extensively, operate DIPs, or have complex structures. Complex activities may be challenging to report on a "one-size-fits-all" survey questionnaire, and these enterprises can benefit from tailored support to establish the optimal way to report e-commerce across different business units withing the structure and ensure that the relevant concepts and reporting requirements are correctly understood and applied.

8.108 Through large case units, compilers can clarify reporting concepts and requirements with major enterprises, identify the correct reporting contacts, understand how e-commerce channels map to accounting and operational systems, and check unusual movements or inconsistencies in reported values. They can also support the identification of major marketplace and DIP operators and could help determine whether operator records can be used to complement seller-based reporting.

8.109 In countries where the statistical agency operates a large case unit or similar arrangement, it is recommended that they should be engaged to support the collection of e-commerce values.

Respondent engagement

8.110 The need for direct engagement is not limited to large case units. More generally, collecting e-commerce values requires respondents to understand the concepts being measured, relate them to their business records and systems, and know where to seek clarification if needed. Respondent engagement should therefore be treated as an important component of survey implementation, especially where questions on e-commerce value are added to ICT usage surveys that were previously focused mainly on the uptake of digital technologies.

8.111 While it is standard practice to provide phone or email contacts so that responding enterprises can seek clarification on specific issues they encounter, more active forms of engagement can be beneficial. Workshops, briefing sessions or other direct exchanges can offer opportunities to explain the concepts, show how the requested information may relate to enterprise records and systems, anticipate common reporting difficulties, and also to raise awareness among respondents of how the resulting statistics may be useful to them. By making the value of the statistics clearer to reporting enterprises, as well as helping reduce frictions when filling in the survey, such engagement can also support willingness to respond.

8.112 A useful example is provided by Türkiye, where TurkStat and the Ministry of Trade have combined business consultations, guidance in Turkish and an instructional video to help customs declarants understand digital ordering and report transactions correctly. Follow-up by telephone and email with approximately 1,000 companies examined their ordering processes, including use of ERP and EDI systems used for high-volume B2B transactions. This work highlighted both conceptual misunderstandings, such as treating digitally delivered products or electronically invoiced transactions as e-commerce, and gaps in declarants' knowledge of their companies' ordering practices. It also showed the need to distinguish ERP used solely for internal business management from systems used to place or receive orders electronically with trading partners. These findings underline the importance of practical training and guidance for respondents to help them understand how to report different transactions, and direct them to obtain information from colleagues responsible for sales or procurement where necessary. Türkiye conducts continued training for online marketplace operators, express courier companies and customs brokers, alongside updating guidance. Although developed for customs-based measurement, this experience is also relevant to supporting survey respondents to give accurate responses. **Box 8** in Section 9.3 provides further insight into this initiative.

Business systems and automated reporting

8.113 Enterprise resource planning, accounting, ordering, invoicing and other business information systems may provide structured inputs for e-commerce statistics that have the potential to support automated completion of survey returns or even direct statistical reporting. Such an approach is described in **Box 7** in Section 8.2. Where ordering-channel information can be linked to recognised sales revenue or purchases, these systems may help businesses produce the required totals and breakdowns with less manual compilation. Electronic processing alone does not establish digital ordering: records must identify how the relevant order was placed, following the distinctions in Sections 6.1 and 6.4.

8.114 Developing such reporting requires collaboration with businesses and software providers to map system fields to statistical definitions and establish interoperable reporting formats. Testing should assess coverage, valuation, recording periods, statistical-unit boundaries and consistency with accounting totals. Secure transmission and confidentiality safeguards are essential. Implementation and maintenance costs for businesses, software providers and statistical agencies should be weighed against potential reductions in reporting burden, with alternative reporting options retained for businesses whose systems cannot provide suitable inputs.

8.6 Data processing, estimation and quality assessment

8.115 After collection, survey data need to be processed to produce coherent estimates and indicators that represent the target population and are suitable for publication. This involves validating and editing responses, treating missing or inconsistent data and misclassified units, calculating and applying weights, and assessing the quality of the resulting estimates. Checks may require further follow-up or correction, so processing is iterative rather than a fixed sequence.

8.116 General guidance for surveys of ICT usage in business is provided in the *Manual for the Production of Statistics on the Digital Economy 2020* (UNCTAD, 2021). This is also relevant to e-commerce value indicators, with additional considerations.

8.117 In the ideal case, all sampled enterprises respond and provide complete, valid information. Where enterprises report e-commerce sales as a percentage of turnover, compilers should first multiply the corresponding enterprise's turnover by that percentage (divided by 100) to obtain its e-commerce sales value.

8.118 It is then necessary to "gross up" the e-commerce values reported by respondents to yield an estimate of the e-commerce turnover generated by the target population as a whole.

8.119 Total e-commerce sales can be estimated using design weights, which reflect enterprises' probabilities of selection. Where enterprises have equal selection probabilities within a stratum, the design weight is Nh ÷ nh, where Nh is the number of enterprises in stratum h and nh is the number sampled from that stratum. There are therefore Nh ÷ nh times as many enterprises in the stratum as in its sample. Multiplying the sampled enterprises' combined e-commerce sales by this factor gives an estimate of total e-commerce sales for all enterprises in the stratum, including those not surveyed. Total turnover is estimated similarly: each respondent's reported turnover from sales of goods and services is multiplied by its design weight and the weighted values are summed. The resulting population totals remain estimates subject to sampling (and non-sampling) error.

8.120 Dividing estimated total e-commerce sales by estimated total turnover gives the estimated aggregate share of turnover generated through e-commerce. Enterprises contribute to this share according to their turnover and design weights. The share can be calculated for the target population or relevant breakdowns.

8.121 Where reliable population turnover totals are available, ratio estimation may be used to adjust the design-weighted estimates of e-commerce sales. Within suitable estimation groups, such as strata, the estimated e-commerce share is multiplied by the corresponding known population turnover. Equivalently, the design-weighted e-commerce sales total can be adjusted by the ratio of known population turnover to design-weighted estimated turnover. This is a form of calibration, not an additional expansion from the raw sample. This ratio-estimation approach may improve precision where e-commerce sales and turnover are approximately proportional within each group. The turnover benchmark should cover the same target population of enterprises and use the same reference period and valuation basis as the survey estimate. Group estimates are then summed to obtain the overall total.

8.122 Although the explanation above focuses on e-commerce sales, the same estimation principles apply to e-commerce purchases. Where calibration is used, the auxiliary variables should be relevant to purchases, for example a corresponding population total for purchases or expenditure, with coverage, reference period and valuation aligned with the survey measure.

In practice, not all sampled enterprises provide complete responses. Unit non-response occurs when an enterprise provides no usable response to the survey. Item non-response occurs when an enterprise responds but does not provide usable information for one or more required items, notably its e-commerce sales value or share of sales revenue, or its overall sales of goods and services. Missing answers should not be treated as zero values.

8.123 The main variables in e-commerce value statistics are monetary rather than categorical. Where sales or purchases are concentrated among relatively few enterprises, errors or missing responses from even a small number of units have the potential to materially affect the resulting measures.

8.124 For both types of non-response, the first step should be to follow up with the enterprise to obtain or clarify the missing information. Follow-up should prioritise enterprises whose missing responses could materially affect estimated totals or important breakdowns. Where necessary, compilers should help the survey contact involve colleagues able to provide the required financial information. If follow-up is unsuccessful, the remaining non-response requires appropriate treatment in compilation.

8.125 Data editing involves applying checks to identify missing, invalid or inconsistent responses and investigating potential errors so that corrections can be made where justified. The aim is to improve the completeness, accuracy and coherence of the survey data. Checks can examine individual enterprise records (micro-editing) or estimated totals and breakdowns (macro-editing). Selective editing prioritises cases according to their potential impact on published estimates. Relevant methodological guidance on statistical data editing methods and techniques is available from UNECE (2019) and Eurostat (2024).

8.126 For individual enterprises, checks should flag influential values, abrupt changes from previous periods, inconsistencies between totals and breakdowns, and reported e-commerce sales or purchases that exceed the corresponding total turnover or purchases. A flagged value is a reason for investigation, not automatic correction: large values and changes may be genuine. At the aggregate level, compilers should compare estimated totals and key breakdowns with previous survey rounds, related business statistics, administrative sources, payment or platform data where available, and relevant market intelligence. These checks should guide follow-up and correction towards potential errors most likely to affect published estimates.

8.127 For unit non-response, both the number of missing enterprises and their expected contribution to e-commerce value should be assessed. Large enterprises, major online sellers, firms with potential for substantial EDI-type transactions and DIP operators warrant particular attention in follow-up, using large case units where available. Where non-response remains unresolved, any estimation or adjustment should be documented.

8.128 Where selection probabilities are equal within stratum h, and respondents can reasonably be assumed to represent non-respondents' e-commerce activity within that stratum, a simple non-response adjustment replaces the design weight Nh / nh with Nh / mh, where mh is the number of respondents. This increases respondents' weights to account for the sampled enterprises that did not respond (Eurostat, 2025). However, simply increasing the weights of respondents within strata may be insufficient if non-respondents differ systematically from respondents in their e-commerce activity.

8.129 For item non-response, values still missing after follow-up may require imputation by assigning a replacement value using available information. Where enterprises report e-commerce sales or purchases but do not provide values, any required imputation should follow established best practices and draw on information closely related to e-commerce value. Relevant information would include total turnover or purchases, previous responses, reported e-commerce shares, information on e-commerce channels used (including marketplace and EDI activity), economic activity and size class. Particular care is needed for enterprises expected to have material e-commerce activity, for which obtaining a response remains the priority. However, Eurostat guidance for surveys of ICT usage and e-commerce in enterprises states that "Numerical variables shouldn't be imputed" (Eurostat, 2025) and any decision to engage in imputation should be carefully considered.

8.130 In compiling statistical breakdowns such as by e-commerce channel, customer type, market, product and enterprise size, component values should reconcile with the relevant totals, or any differences should be clearly explained. Where respondents provide percentages rather than monetary amounts, values should be derived consistently from the relevant total or subtotal, and distributions should be checked for completeness, coherence and additivity. Where exact details are not available and approximations are accepted, this should be reflected in quality assessment and metadata.

8.131 Quality assessment should cover both sampling and non-sampling errors. Sampling error remains relevant for estimates derived from sample surveys, but non-sampling error may be especially important for e-commerce value statistics because of difficulties in interpreting concepts, identifying the correct records, reporting purchases by channel, distinguishing gross sales values from net platform payouts, and avoiding double counting across sources. Checks of individual enterprise records and comparisons of estimated totals with other sources should inform assessment of the reliability of the estimates. Quality assurance should be guided by the United Nations National Quality Assurance Frameworks Manual for Official Statistics (United Nations, 2019). Beyond accuracy and reliability, it should address relevance, timeliness and punctuality, accessibility and clarity, and coherence and comparability, taking account of the user needs and dissemination considerations discussed elsewhere in these Guidelines.

8.132 Published statistics should also be accompanied by sufficient metadata to allow users to interpret the results and assess their fitness for purpose. This should include:

- the target population and coverage;
- treatment of micro-enterprises and unincorporated household market enterprises;
- survey frame and sample design;
- response rates overall and for different strata;
- treatment of non-response and imputation;
- weighting and calibration methods;
- valuation basis;
- any deviation from guidelines on the valuation of e-commerce (e.g. if sales tax, discounts, returns, etc. have not been netted off); and
- any known limitations affecting comparability over time or across countries.

8.133 Where estimates are based on multiple sources, such as survey responses, administrative data, platform reporting or payment data, metadata should explain how the sources were combined and what steps were taken to avoid double counting.

8.134 Overall, while e-commerce value statistics are a logical extension of binary indicators on whether businesses make e-commerce sales or purchases, their different nature needs to be reflected in survey design, statistical processing and quality assessment. The aim is to produce estimates that users can interpret and use appropriately, with methods and limitations clearly explained.

8.7 Recommendations

8.135 Surveys are the most established route for measuring the value of business e-commerce sales and purchases, but their effectiveness depends on careful implementation. With appropriate design, surveys of ICT usage in business have proven themselves as a valuable source for statistics on e-commerce value, though other survey vehicles may be more feasible in

some national contexts. Compilers must decide which survey vehicle to use, how to ensure coverage of high-impact units and relevant ordering channels, how far to extend data collection beyond core value measures, and how to support respondents in reporting values that align with business records.

8.136 The recommendations below therefore focus on the practical design and implementation choices needed to produce robust, comparable and useful survey-based e-commerce value statistics.

54) Where surveys of ICT usage in business are in place, or being implemented, it is recommended that they be used as the natural starting point for collecting e-commerce value data, by adding follow-on questions on the value of e-commerce sales and, where feasible, purchases.

55) Where ICT usage surveys are not in place, or are not well suited to collecting monetary variables, compilers should consider adding e-commerce value questions to existing business surveys that collect revenues, expenditures or other accounting variables. Such surveys may provide a strong basis for estimating monetary totals, while ICT usage surveys may remain better suited to collecting detailed information including on ordering channels, customer type and location (digitally ordered trade).

56) Surveys targeting e-commerce operators, including operators of online marketplaces and other DIPs, as well as operators of other websites or apps facilitating ordering through methods specifically designed for the purpose of placing or receiving orders, can provide a useful complementary source, especially where many MSMEs or unincorporated household market enterprises sell through online platforms rather than operating their own sales websites or apps. However, totals from operator surveys are not equivalent to total e-commerce sales by resident businesses or total e-commerce purchases by resident buyers and accordingly should be interpreted and communicated with clear explanation of their coverage.

57) Survey instruments should, as far as possible, be designed around ordering channels and value concepts that respondents can relate to their business systems and accounting records. Questions should avoid relying on respondents' own interpretation of the term "e-commerce", for example by focusing on relevant ordering channels including online marketplaces and other DIPs, other websites and apps that implement methods specifically designed for the placing and receiving of orders, and EDI-type ordering. They should also use terminology that aligns with business records, such as turnover, revenue from sales of goods and services, gross transaction value, platform fees, and principal versus agent roles.

58) EDI-type ordering should be explicitly addressed in survey instruments and guidance. Where feasible, EDI-type sales should be separately identified from other e-commerce sales, with explanation of the relationship between EDI ordering and ERP or other business management systems, to reduce the risk that high-value B2B e-commerce transactions are missed.

59) Compilers should identify and ensure coverage of units likely to have a material effect on e-commerce value totals and breakdowns, including major online sellers, firms expected to have substantial EDI-type transactions, and resident operators of online marketplaces and other DIPs. Sampling frames may need to be supplemented using administrative data, tax records, industry knowledge, payment data, regulator information, web searches and engagement with business associations.

60) Compilers should assess whether unincorporated household market enterprises are likely to make a material contribution to online commercial sales. Where this is the case, appropriate complementary methods should be considered, such as identification through household or individual surveys or administrative data sources with suitable survey-based follow-up, or alternatively platform reporting or the use of payment data. Where they are outside the scope of the statistics, this limitation should be clearly communicated.

61) Where the legal and institutional framework allows it, mandated response can help improve coverage, reduce non-response bias and support reliable estimates for surveys used to produce official economic statistics. It should be accompanied by practical support for respondents, including clear communication on the purpose of the survey, confidentiality and use of the data; accessible help channels; structured respondent engagement such as workshops or briefing sessions; and, where feasible, feedback mechanisms that provide respondents with useful information in return for participation.

62) Survey implementation should ensure that the right people within the enterprise are involved in providing information or completing the survey. Instructions should make clear that monetary e-commerce value questions may require input from sales, finance, accounting, procurement or business analytics staff, not only ICT contacts. For large or complex enterprises, separate contacts or questionnaire modules may be needed, and large-case units or similar arrangements should be used where available.

63) Compilers should apply validation, editing, imputation, weighting, grossing-up and quality-assessment procedures appropriate for monetary business statistics, in accordance with established best practices. Particular attention should be given to influential values, non-response by high-impact units, consistency between totals and breakdowns, calibration to relevant auxiliary variables where available, avoidance of double counting across sources, and metadata explaining coverage, valuation, methods and limitations.

Chapter 9. Measuring e-commerce value through non-survey sources

9.1 Given the costs and operational challenges associated with conducting representative business surveys, as well as the response burden placed on enterprises, the potential to use non-survey sources should be carefully considered, either as primary sources for specific components of e-commerce value or as complements to survey-based estimates. These sources may additionally offer advantages in timeliness and transaction-level detail or coverage of activity that is difficult to capture through surveys. However, because they are rarely designed for statistical purposes, their coverage, valuation, residence basis, ordering-method information and statistical units may not align with the concepts required for e-commerce value statistics. Their use therefore requires careful assessment, adjustment where feasible, and clear communication of scope and limitations.

9.2 Access to privately held data for official statistics requires an appropriate legal and institutional framework. Compilers should assess whether existing statistical legislation provides a sufficient basis for obtaining and using the required data, alongside applicable data-protection and sector-specific provisions. UNECE (2018) *Guidance on Modernizing Statistical Legislation* provides a reference for reviewing these arrangements, including the mandate for data collection, statistical confidentiality and the use of data exclusively for statistical purposes. Practical agreements with data holders should clarify the information required, delivery arrangements, security safeguards and permitted uses, consistent with the applicable legal framework.

9.1 Web-scraped data

9.3 As e-commerce, by definition, involves orders placed over the Internet (or other computer networks), “web scraping” may immediately come to mind as a potential non-survey source. In this technique, software systematically retrieves web pages - often using “web crawlers” - and extracts and records in selected formation, producing a large dataset of website contents that can then be processed for statistical purposes.

9.4 Web scraping may be useful for identifying websites or pages that facilitate (or appear to facilitate) e-commerce ordering, for example through the presence of a shopping cart, booking form or other ordering functionality. This can support the development or improvement of survey frames by helping to identify enterprises that appear to offer online ordering and could therefore be considered for follow-up or inclusion in the sample. It also has the potential to support the classification of web shops by activity, product range or ordering functionality.

9.5 However, web scraping is unlikely on its own to provide a robust measure of e-commerce value. Publicly visible web pages usually show product listings and prices, not completed transactions or quantities sold. Nor do they normally provide the information needed to adjust or interpret transaction values, such as cancellations, returns, discounts, taxes, delivery charges or the residence of buyers. Even where web analytics or traffic data are available, visits to product pages or shopping carts cannot be reliably converted into sales values without strong assumptions.

9.6 As such, it is necessary to rely on value information from other sources. For example, Statistics Netherlands (Meertens, Diks, van den Herik, & Takes, 2018) used web scraping to find the websites of foreign companies that had filed VAT returns in the Netherlands, and further to

assess whether those websites had a shopping cart. Those that did were classified as "webshops" and the sales reported on their VAT returns were therefore treated as cross-border Internet purchases by residents of the Netherlands. The value of total cross-border Internet purchases within the European Union by Dutch consumers was found to be over 1.3 billion euro in 2016.

9.7 This example illustrates the further limitation that web scraping can cover only publicly accessible web pages. EDI-type ordering, which often accounts for a large share of e-commerce sales by value, takes place through private business systems and has no visibility on the open web. Similarly, ordering activity that takes place inside mobile apps, logged-in platform environments, extranets, or private marketplaces may not be observable through web scraping.

9.8 More generally, web scraping requires specialised technical, legal and statistical capabilities. Websites may restrict access by crawlers, use dynamic content or anti-bot measures, or change their structure over time, requiring ongoing maintenance of scraping tools. Compilers also need to consider legal permissions, terms of use, data protection and ethical issues associated with automated access to websites.

9.9 Matching scraped websites to resident enterprises listed in a business register can be difficult unless the company information shown on the website closely matches the identifiers held in the register. Names, trading styles, addresses, domains and legal entities may differ, while information on ownership or residence may be incomplete or presented inconsistently. The process is likely to be considerably easier where enterprises are required to display a unique company or registration number on their websites, provided that the same identifier is available in the business register.

9.10 For these reasons, web-scraped data are likely to be most useful as an auxiliary source for identifying and characterising e-commerce activity, rather than as a primary source for estimating the value of e-commerce sales or purchases.

9.2 Financial reports

9.11 Given the limitations of web scraping for measuring transaction values, the financial reports of enterprises making e-commerce sales, or operating online marketplaces and other DIPs, may appear to offer a more promising source. Financial reports can provide useful information on listed companies and other large firms required to publish financial statements, especially where they disclose e-commerce revenue, platform fees, gross merchandise value, gross transaction value or other relevant operating metrics (UNCTAD, 2024).

9.12 For example, Stojkoski, Koch, Coll, & Hidalgo (2024) combined machine learning methods with data on the corporate revenues of thousands of large online firms to create bilateral estimates of trade in products that are both digitally ordered and delivered such as video games, digital advertising and digital intermediation services. This approach yielded insights on the rapid growth of these exports and the concentration of their production among a limited number of economies. However, as the authors note, because this approach is built bottom-up from available firm revenue data, which do not cover all companies or allow transactions between parent companies and their subsidiaries to be tracked, the resulting estimates are not representative of all digital trade flows.

9.13 Not all firms are required to publish financial reports, and those that do are generally not required to report e-commerce revenue separately from other sales. Disclosures may also follow

company-specific reporting practices and may focus on global group results rather than the activity of resident units in the compiling economy. As a result, financial reports can, at best, provide a partial and potentially biased picture of e-commerce sales, especially if they mainly cover large listed enterprises or well-known platform operators.

9.14 Financial reports may therefore be most useful as an auxiliary source, for example to identify major e-commerce actors, understand business models, inform large-case engagement, validate survey responses, or provide market intelligence. They should not generally be treated as a standalone basis for the comprehensive measurement of business e-commerce unless coverage, residence, valuation and statistical-unit issues can be managed, or reporting rules are modified to require the systematic delineation of e-commerce revenue within total revenue from sales of goods and services.

9.3 Postal and customs data

9.15 Postal and customs data can offer insights related to e-commerce. In particular, data show "an explosion in low-value and lightweight [...] pieces" being transported via parcel post, with e-commerce identified as the driving factor (Universal Postal Union, 2025).

9.16 However, parcel flows are not equivalent to e-commerce transactions. E-commerce includes digital ordering of services; although some services may be delivered by post, many services either cannot be or are not commonly delivered this way (e.g. transport, accommodation; entertainment services, health services). Measures of parcel post also omit orders of merchandise shipped in palletised, containerised or freight form. As such, statistics on parcel post will under-represent the scale of e-commerce as a whole.

9.17 Conversely, not all parcels arise from e-commerce orders: they may also relate to gifts, returns, samples, documents, shipments ordered through non-digital channels, or other non-e-commerce activity. Treating all parcels, or all parcels falling below a certain value threshold, as "e-commerce shipments" is a blunt assumption that will overstate the true volume of parcels resulting from e-commerce orders.

9.18 Even if these limitations are accepted, moving from parcel volumes to estimates of the value of the underlying e-commerce transactions remains challenging. Postal data generally record the movement and handling of parcels, rather than the commercial value of the goods they contain.

9.19 Where parcels cross international borders, however, postal or customs processes may capture declared values. These could provide a basis for estimating the value of the parcel component of digitally ordered merchandise trade (i.e. international e-commerce of goods sent by parcel). Nevertheless, parcels falling below de minimis or other reporting thresholds, or subject to simplified declaration procedures, may have limited or no detailed customs information available (IMF, OECD, UNCTAD, and WTO, 2023).

9.20 Customs declarations also cover merchandise shipments beyond parcels, including goods transported on pallets, in containers or in bulk. Across these different types of shipment, the central challenge is to identify which customs declarations relate to merchandise that was digitally ordered. However, most customs systems do not routinely record whether the underlying order was placed through e-commerce.

9.21 The World Customs Organization (WCO) "Framework of Standards on cross-border e-commerce" promotes a legal and regulatory framework for advance electronic data exchange

along international e-commerce supply chains to enhance facilitation and control measures applied to e-commerce shipments. Although the Framework primarily addresses B2C and C2C transactions, it encourages Members to apply the same principles and standards to B2B transactions. Furthermore, Standard 15 specifically states that *"customs administrations should work with relevant government agencies in close cooperation with e-commerce stakeholders to accurately capture, measure, analyse and publish cross-border e-commerce statistics in accordance with international statistical standards and national policy, for informed decision making"* (WCO, 2022).

9.22 It is recommended for compilers of e-commerce statistics to work with customs authorities to implement the systematic identification of merchandise shipments that were ordered via e-commerce as a basis for measuring the digitally ordered merchandise trade component of overall e-commerce, in accordance with the Handbook on Measuring Digital Trade (IMF, OECD, UNCTAD, and WTO, 2023).

9.23 Where digitally ordered merchandise shipments are flagged with specific customs procedure codes or other digital ordering indicators, digitally ordered imports and exports can, in principle, be directly identified and compiled as a subset of international merchandise trade statistics. However, integrating information from different sources may be necessary to obtain a comprehensive measure of digitally ordered merchandise trade. Where technically and legally feasible, compilers should consider linking customs records with tax or e-invoicing records and payment data to complement information unavailable from any single source. Differences in coverage, timing and valuation should be assessed, and double counting avoided.

9.24 **Box 8** illustrates Türkiye's experience in adding ordering-method fields to customs declarations and using business consultation and validation to improve the identification of digitally ordered merchandise trade.

9.25 In addition to values, customs declarations capture product details standardised according to the World Customs Organization (WCO) Harmonized Commodity Description and Coding System ("HS"). This information can facilitate the integration of statistics on digitally ordered trade with wider merchandise trade statistics and support policy analysis by product and trading partner. Guidance on compiling merchandise trade statistics from customs records, including on partner-country attribution, is provided in *International Merchandise Trade Statistics: Concepts and Definitions 2026* (United Nations et al., 2026).

9.26 The key opportunity is therefore to connect information on the movement of goods with information on how they were ordered. Parcel counts alone cannot establish the full scale of e-commerce, let alone its value, but enhancing customs records to identify digital ordering can provide a substantive basis for measuring its international merchandise component.

Box 8. Measuring digitally ordered merchandise trade using customs data in Türkiye

Türkiye's Ministry of Trade and the Turkish Statistical Institute (TurkStat) have developed customs-based measures of digitally ordered merchandise trade. Their experience illustrates how administrative records can be enhanced to identify digital ordering, while highlighting the importance of guidance, business engagement and validation. Conventional and simplified customs declarations provide two complementary sources.

Identifying ordering methods in conventional declarations
In 2019, a question was added to conventional customs declarations asking: "Is this import/export related to electronic commerce (e-commerce)?" Responses were analysed and consultations held with businesses to assess implementation. Guidance was prepared in Turkish along with an instructional video for those completing declarations.

In January 2023, reporting was extended by introducing an "Order Type Code" field distinguishing four categories:

- **Code 1: EDI and other closed systems:** orders placed through electronic data interchange or connected business systems, including ERP-based ordering.
- **Code 2: Websites, platforms and applications:** orders placed through businesses' own websites or apps, online marketplaces or other digital ordering interfaces.
- **Code 3: Fulfilment arrangements:** goods sent to warehouses, distribution centres or other fulfilment facilities before a final customer order is placed, to support subsequent online sales.
- **Code 9: Other methods:** orders placed through non-qualifying channels, including face-to-face interactions, telephone calls, manually typed messages and emails, or on-premises ordering mechanisms.

Codes 1 and 2 provide a basis for identifying digitally ordered transactions, subject to validation of the ordering method. Code 3 identifies a different situation: goods may cross the border before an online order exists.

Checking how businesses actually place orders
Declarations reported under Code 1 were matched with information on companies using ERP systems obtained from the Ministry of Industry and Technology and analysed by sector. The analysis highlighted extensive use of ERP/EDI ordering in the automotive industry, where firms handle large volumes of inputs and spare parts.

Approximately 1,000 companies were contacted by telephone and email to verify their ordering and trading processes. These exchanges helped establish whether these systems were used to place or receive orders electronically with trading partners, rather than solely for internal accounting, procurement or resource management.

A central lesson was that **ERP use alone does not establish digital ordering**. Compilers need to understand how systems connect the trading parties and whether the order itself is placed through qualifying digital methods. Direct engagement with businesses can help resolve this distinction and improve declaration quality.

Using simplified customs declarations
Simplified customs declarations, introduced in 2012 and submitted electronically by authorised express air-cargo companies, provide a complementary source for smaller-scale cross-border transactions. They distinguish transactions identified as e-commerce ("ET") from those identified as not e-commerce ("ETD").

Data have been available regularly since the beginning of 2021 and are incorporated into Türkiye's international merchandise trade statistics. They include country of origin for imports, destination country for exports, transaction value, quantity and product detail at the six-digit Harmonized System level. These variables support analysis by firm, country and product.

Validation, challenges and further development
Since 2023, regular quality checks have examined customs data for individual companies and declarations, broken down by ordering method, country and product group (HS chapter), and compared across quarterly periods to identify unusual values or changes. Statistical indicators are used to flag unusual values and volatility. Customs procedure codes, payment codes and transaction codes provide additional information for assessing consistency.

A persistent challenge is that customs declarants may know the clearance procedures but lack detailed knowledge of how the business received or placed the underlying order. Some have also interpreted "e-commerce" as trade in electronic products or transactions accompanied by electronic invoices. Neither establishes digital ordering. Guidance and training therefore need to explain the statistical definition and encourage declarants to obtain information from those responsible for sales or procurement.

Planned improvements include comparisons with payment information and results from TurkStat's enterprise ICT usage survey, alongside continued training for marketplaces, express courier companies and customs brokers, and updated guidance.

Türkiye's experience shows that adding ordering-method fields to customs declarations can create a practical foundation for measuring digitally ordered merchandise trade. However, reliable results depend on more than collecting an indicator: clear definitions, informed reporting, business consultation and continuing validation are essential.

Source: Ministry of Trade and Turkish Statistical Institute (TurkStat), Türkiye.

9.4 E-invoices

9.27 A considerable number of countries have introduced, or are moving towards introducing, "e-invoicing". At its most basic, e-invoicing refers to a requirement that invoices are sent and received between parties in a structured digital format that can be processed automatically by software. However, national e-invoicing systems may be designed in a way that requires invoices to be shared with, to pass through, or to be validated by tax authorities or other government agencies.

9.28 Where government has access to e-invoicing data, this has potential as a basis for statistics. Data items will typically include information on the seller and buyer, the transaction date, the products ordered, the transaction value and its components including VAT and charges for delivery or other ancillary items.

9.29 However, e-invoices do not usually explicitly identify the channel by which the order was placed such as in store, by phone or via e-commerce i.e. website/app, online marketplace or other DIP, or EDI-type ordering. Nevertheless, it is feasible that such identification could be incorporated into e-invoicing requirements and systems.

9.30 It is therefore recommended that statistical agencies engage with tax authorities and other bodies responsible for designing or operating e-invoicing systems, so that the potential statistical uses of e-invoice data can be taken into consideration. In particular, where feasible,

e-invoicing systems should include structured information on the ordering channel, distinguishing orders placed through online marketplaces and other DIPs, other websites or apps, EDI-type ordering systems, and non e-commerce channels such as in-store or by phone. This would greatly increase the future usefulness of e-invoicing data for compiling e-commerce value statistics, while reducing the need for retrospective assumptions or supplementary data collection.

Where e-invoicing systems cover cross-border transactions, statistical agencies should also explore whether fields can identify or proxy the country of economic residence of the buyer and seller and the type of good or service involved, and, where feasible, seek structured information to fill any gaps. Together with the ordering channel, these details could support measurement of digitally ordered international trade, particularly in services, for which customs records are generally unavailable.

Box 9. Measuring e-commerce using e-invoices in Brazil

Over the past decade, enterprises in Brazil have experienced significant progress in digitalisation, including the adoption of emerging technologies and the expansion of digital business online activities, including e-commerce and e-invoicing. According to the survey of ICT use in enterprises (Cetic.br/NIC.br, 2026), Internet use has become virtually universal among small, medium-sized and large enterprises.

Brazil operates an extensive system of electronic fiscal documents covering transactions in goods and services. For transactions involving goods, businesses use the Nota Fiscal Eletrônica (NF-e), a structured electronic fiscal invoice that records detailed information on the transaction, including the seller and purchaser, products, values, taxes and characteristics of the transaction. NF-e is not specific to e-commerce and covers both sales and certain other movements of goods. The NF-e system is administered by Brazil's state tax authorities within a nationally coordinated electronic fiscal-document system involving the Federal Revenue Service of Brazil (Receita Federal do Brasil, RFB).[i]

The Ministry of Development, Industry, Commerce and Services of Brazil uses data from the NF-e system to measure and monitor domestic B2C e-commerce sales of goods. B2C transactions are identified from the tax registration numbers recorded on the invoice (known as NCM which is the Common Nomenclature of Mercosur based on the Harmonized System), selecting transactions where the issuer is a business and the recipient is an individual. E-commerce transactions are identified using the NF-e "presence indicator", selecting transactions where the buyer is not physically present and the transaction is conducted via the Internet.[ii]

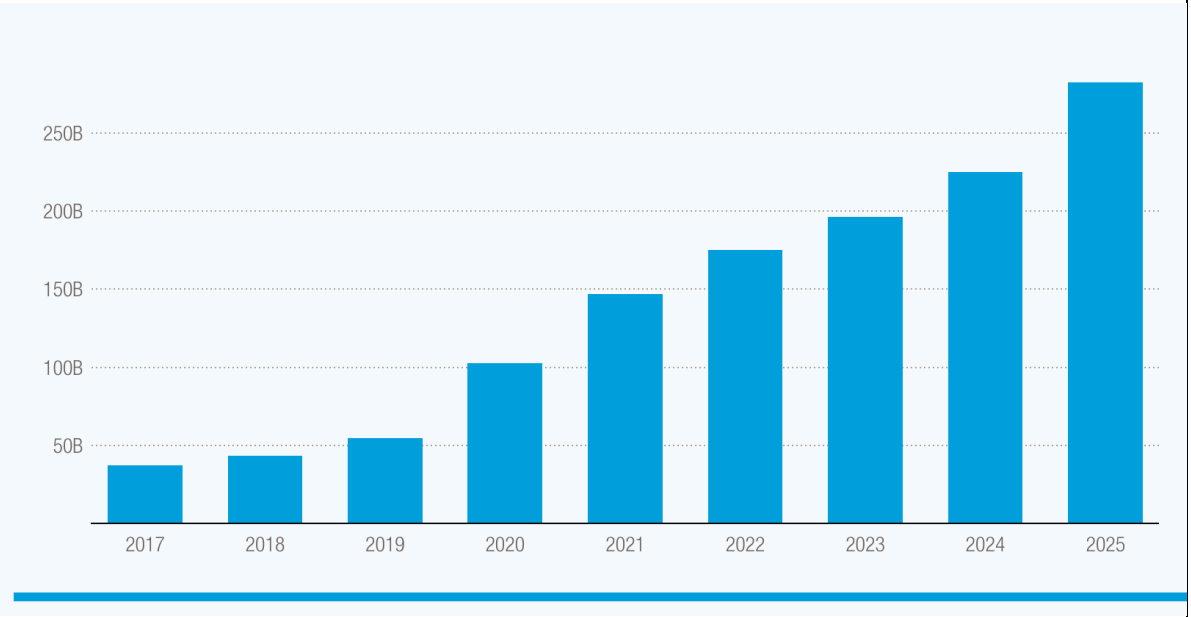
The use of NF-e data provides detailed information on e-commerce transactions without imposing additional statistical reporting requirements on businesses. The transaction-level data allow e-commerce sales to be analysed by product and by their geographic origin and destination within Brazil.[iii] As the data are generated as part of the fiscal process, they can potentially support more timely and frequent measurement than periodic business surveys. The administrative data also provide broad coverage of in-scope formal transactions without being subject to sampling error.

The measure nevertheless has important limitations. Its scope is restricted to domestic B2C e-commerce sales of goods and therefore captures only part of overall e-commerce. While the NF-e "presence indicator" might appear similar to the "card-not-present" indicator available in card payment data (see Section 9.5), it provides a more direct indication of the sales channel, explicitly distinguishing sales via the Internet from telephone and other remote sales. Nevertheless, as the indicator is collected for fiscal rather than statistical purposes, the concept of an Internet sale may not align precisely with the statistical definition of e-commerce, which is based on the method used to place the order. For example, sales through online message conversations over instant-messaging applications or social

networks would be included where the invoice issuer records them as Internet sales. These orders do not meet the statistical definition of e-commerce.[iv]

The resulting statistics (**Figure 12**) show that B2C sales of goods over the Internet within Brazil increased more than eight-fold from 2016 to 2025, reaching 282.5 billion real (US$ 50.6 billion). Product details show that smartphones, books, dietary supplements, and fridge-freezers are among the most valuable e-commerce product categories.

Figure 12. B2C sales of goods over the Internet within Brazil



Source: UN Trade and Development based on Brazilian National Electronic Commerce Observatory (https://www.gov.br/mdic/pt-br/assuntos/sdic/observatorio)

i. Portal da Nota Fiscal Eletrônica, Federal Revenue Service of Brazil: https://www.gov.br/receitafederal/pt-br/arquivos-e-imagens/portais-da-home/nf-e

ii. Ministry of Development, Industry, Commerce and Services, Frequently asked questions on the E-commerce Dashboard: https://www.gov.br/mdic/pt-br/assuntos/sdic/observatorio/perguntas-frequentes

iii. Government of Brazil, Consultar dados do Comércio Eletrônico Nacional: https://www.gov.br/pt-br/servicos/consultar-dados-do-comercio-eletronico-nacional

iv. Ministry of Development, Industry, Commerce and Services, FAQ on sales through instant-messaging applications and social networks: https://www.gov.br/mdic/pt-br/acesso-a-informacao/perguntas-frequentes-faq/secretaria-de-desenvolvimento-industrial-inovacao-comercio-e-servicos/se-uma-empresa-vendeu-por

9.5 Payments data

9.31 The preceding non-survey sources are linked to specific aspects of e-commerce activity: web scraping observes publicly accessible online ordering interfaces, financial reports may reveal how some firms account for e-commerce-related revenue, postal or customs data can shed light on goods ordered via e-commerce, while e-invoices record sales and contain information on how goods or services were ordered.

9.32 Payments data focus on another aspect of e-commerce transactions: the flows of money from buyers to sellers. They can therefore provide a direct observation of transaction values, an aspect where other non-survey sources can face strong limitations. However, it should be emphasised from the start that payment values may not align perfectly with the valuation

principles set out in Chapter 5, for example where a single payment includes sales taxes, or delivery, payment processing, platform or other charges.

9.33 More importantly, because e-commerce is defined by how the order is placed rather than how payment is made, a central challenge is to identify digitally ordered transactions within the broad pool of payments covered by a given payments data source. These include records from card networks; account-to-account payment systems, including instant payment, mobile money payments, credit transfer and direct debit systems, as well as the clearing and settlement infrastructures through which these payments are processed; and, for cross-border flows, international transaction reporting systems or other international payments and settlement records. The scope and exhaustiveness of any payments data-based estimate of e-commerce value will depend crucially on which actors use the payment channel concerned. Each payment data source will cover only a given part of the payments and e-commerce landscape.

9.34 Payment by debit, credit, charge or prepaid card is perhaps the most widely offered remote payment option, at least in cases where the buyer is a private individual rather than a business or other organisation. Each card payment generates a digital record of not only the transaction value but various associated information. These electronic records constitute **card payment data**, which has been identified by TG-eCOM as an especially relevant source of non-survey data for measuring e-commerce value and is therefore the primary focus of this section. Nevertheless, card payment data remain much less widely used than business surveys as a basis for compiling e-commerce value statistics.

9.35 Card payment often goes hand-in-hand with digital ordering. Where the order is confirmed only once card payment has been made online, card payment data may provide a good source for measuring a major subset of e-commerce transactions. Although e-commerce transactions are defined by digital ordering, irrespective of the means and timing of payment, when remote card payment is integrated into the ordering process and required for order confirmation, digital ordering and digital payment effectively become one-and-the-same.

9.5.1 Who uses cards to pay online?

9.36 Across the major payment card networks – American Express, Discover/Diner's Club, Japan Credit Bureau (JCB), Mastercard, UnionPay, and Visa – there were 17.22 billion debit, credit, and prepaid cards in circulation at the end of 2023 (Nilson Report, 2024). UnionPay cards accounted for 56 per cent of total cards, Visa 25 per cent, and Mastercard 17 per cent (Caporal, 2025).

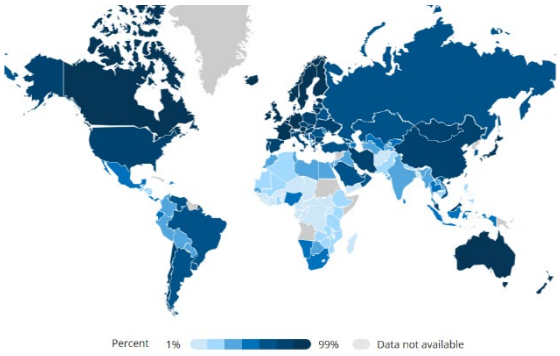
9.37 With a world population of around 8 billion in 2023 (UNFPA, 2025), this implies there are over two payment cards in circulation for every person on Earth, and an even higher ratio relative to the population aged 15 years and over.

9.38 The propensity to hold payment cards, as well as for those who have cards to use them for payments (instead of cash or other means), varies widely between countries. For example, "U.S. consumers have an average of 3.9 active credit cards in their wallets, but older consumers and those with higher [credit] scores will likely have more" (Experian, 2025). Including debit and other payment cards would push this number higher.

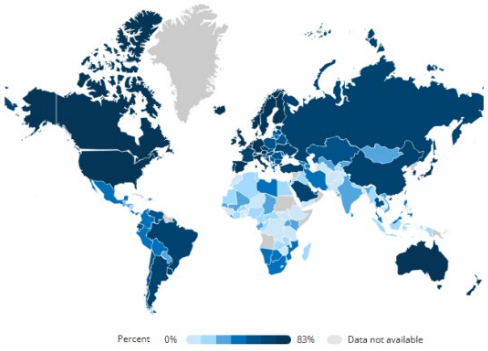
9.39 The World Bank Global Findex Database shows that debit and credit card ownership remain low in Africa, South and Southeast Asia, and parts of Latin America (**Figure 13**).

Figure 13. Payment card ownership among population aged 15 years and over

Debit cards (2024 or latest)



Credit cards (2022 or latest)



Source: World Bank Global Findex Database (*https://genderdata.worldbank.org/en/indicator/fin2-t-a?gender=total*, *https://genderdata.worldbank.org/en/indicator/fin7-t-a?gender=total*)

9.40 But even in countries where payment cards are not widely held, they may still play an important role in the e-commerce that takes place. Individuals with payment cards may make purchases on behalf of those who do not have them, and there is some anecdotal evidence of this becoming a commercial activity, with fees being charged for facilitating online orders.

9.41 When payment card access is widespread, and cards are generally the means of payment used for digital ordering, notably because payment by card is routinely necessary to confirm orders placed via websites and apps, card payment data *might* have the potential to offer good coverage of e-commerce transactions where the buyer is an individual (consumer).

9.42 However, payment cards are not only held and used by individuals. Organisations, especially businesses, also make use of payment cards. Credit cards can be a particularly important means of payment for small businesses, which are less able than large and mid-sized companies to access deferred payment terms from their suppliers. In the United States, 79 percent of small businesses use credit cards to make payments (Visa, 2025).

9.43 Meanwhile, larger firms use payment cards issued to staff to manage smaller purchases including expenses while travelling, entertaining clients, etc. This may well include some e-commerce purchases.

9.44 Card payment datasets are likely to include not only transactions paid on business credit cards, but also employee business expenses paid using their personal payment cards. From the perspective of e-commerce statistics, these should be recorded as B2B e-commerce. However, in practice there is likely to be no way to distinguish these from purchases by individuals (B2C e-commerce).

9.45 Despite the above, card payment is unlikely to be used in the vast majority of e-commerce purchases by businesses and other organisations (at least by value) as businesses tend to use other means of payment such as bank transfers or lines of credit. Orders placed via EDI – which, as noted in Section 3.3.1.1, can account for the majority of e-commerce transactions by value and generally take place among businesses with established commercial relationships – are especially unlikely to be paid for by card.

9.46 For these reasons, card payment data are unlikely to provide precise or exhaustive coverage of e-commerce sales by businesses.

9.47 Furthermore, though cards are a common way for consumers to pay for online purchases, other payment methods such as bank transfers, mobile money payments, or cash on delivery, may also be popular in some economies. Card data will not cover these payments.

9.48 Card payment data should, therefore, not be considered to offer a measure of total e-commerce sales, or of B2C e-commerce sales by businesses, but only of the subset of all e-commerce transactions that is paid using payment cards held by consumers, businesses, and others.

9.49 Compared to the value of business e-commerce sales, a measure of e-commerce sales paid using payment cards will be:

- narrower – because it will exclude e-commerce sales paid by other means
- broader – because it will include any card-paid e-commerce sales made by non-businesses (i.e. by households (consumers), non-profits, and government entities).

9.50 In addition to the above precisions, which apply to card payment data in general, coverage can be further limited by the what specific sources of card payment data available for statistical compilation, which may be limited to only certain types of cards or specific issuers.

9.5.2 Dissecting online card payments

9.51 Online card payments involve multiple actors and it is useful to understand these to identify what data might be available and which entities have access to them.

9.52 Firstly, there is the **customer**, who must also be a **cardholder** (or at least have access to a card) in order to be able to make card payments online.

9.53 The card is provided by a **card issuer** (also referred to as an "issuing bank"), a financial institution which has the ability to provide cards enabling the holder to make payments through one or more card payment networks.

9.54 The **card payment network operator** may issue cards directly to customers, enter agreements allowing financial institutions to issue cards, or both. Examples of card payment networks operating internationally include American Express, China UnionPay, Diner's Club, Discover, Japan Credit Bureau (JCB), Mastercard, Mir (Russian Federation), RuPay (India), Verve (Africa) and Visa. Some countries also have a specific network used for processing transactions where the customer and merchant both use domestic banks, such as Bancontact in Belgium, the CB network in France and MADA in the Kingdom of Saudi Arabia.

9.55 When a payment card is used to make an online purchase, several further actors come into the picture.

9.56 Having chosen the goods and/or services products that they wish to purchase from those offered on a **merchant**'s (i.e. seller's) website or app, usually by placing them into an online shopping cart, customers enter a process through which they make payment and confirm the order.

9.57 Customers enter their card number, name, address, etc. via a **payment gateway**, which then encrypts this information for security. Though from a customer perspective the payment

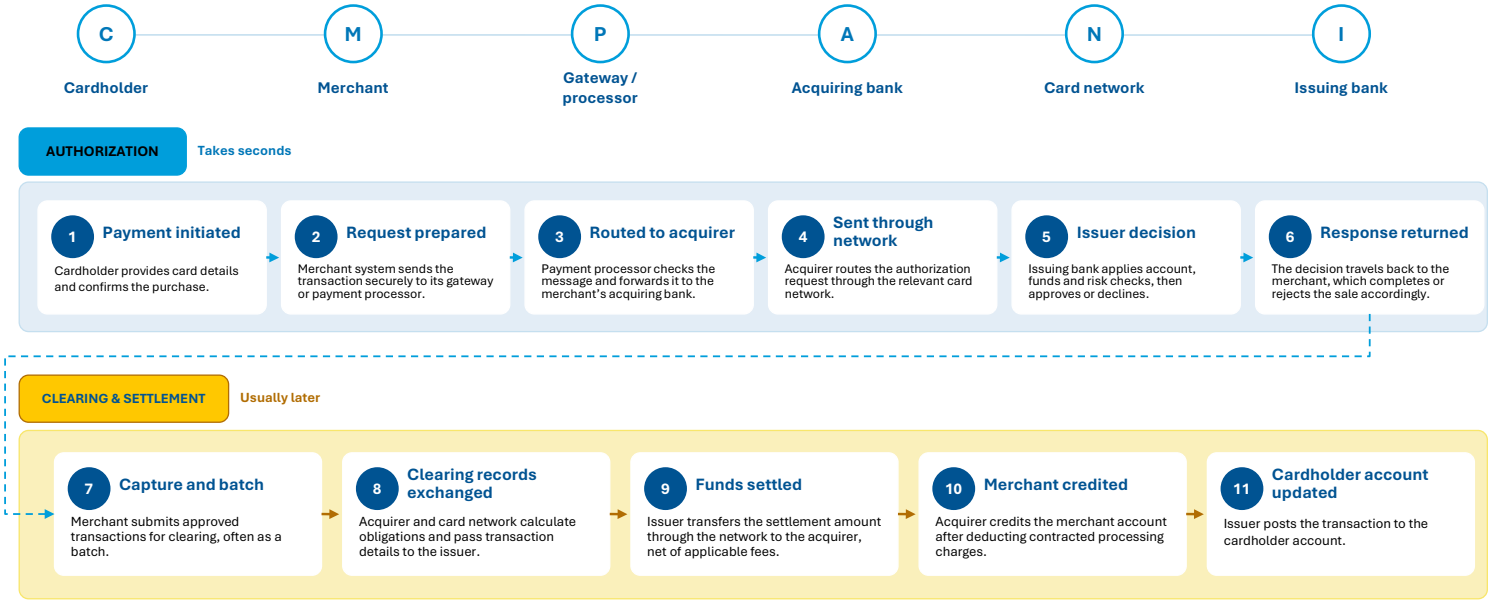
gateway usually appears as a simple online form which they fill in, storing and processing such information is technically complex as well as subject to stringent rules. It is therefore common for e-commerce operators to use a payment gateway provided by a third-party specialist. This can be integrated directly into the merchant's website or app, or involve being directed to a separate website to make payment.

9.58 The payment gateway transmits the information gathered on to a **payment processor**, which manages the technical aspects of transaction handling for merchants, ensuring secure data transmission, fraud detection, and compliance with industry standards. It facilitates communication between the merchant's system and the card payment network, works with the merchant's bank, also known as the "acquiring bank" (Merchant Cost Consulting, 2023) to authorize the transaction, and transfers funds from the customer's bank to the merchant's account. **Figure 14** provides a more detailed overview of the card payment process.

9.59 Though they can be provided by separate service suppliers, payment gateway and processing features are often offered as an integrated solution. Examples of providers include Adyen, Alipay, Flutterwave, Interswitch, PayPal, Paystack, Paytm, Square, Stripe and WeChat Pay. Card payment network operators including American Express, China UnionPay, Mastercard and Visa also offer payment gateway and processing solutions.

9.60 The involvement of an additional party is becoming increasingly common in some markets: providers of "buy now pay later" services, such as Afterpay and Klarna, allowing customers to receive products immediately but pay at a later time or in instalments.

Figure 14. Card payment process overview



Source: UN Trade and Development, based on Payway (2023)

9.61 Given the above, and although some actors may combine multiple roles, an e-commerce transaction paid by card may involve a considerable number of actors:

- Customer / cardholder
- Issuing bank (card issuer)
- Merchant
- Acquiring bank (merchant's bank)

- Payment gateway supplier / payment processor
- Card payment network operator
- Deferred payment provider

9.62 **"Card payment data" refers to the transaction logs held by actors engaging in or facilitating transactions.** However, for a given transaction, the information each actor has access to is likely to vary. Furthermore, in many financial systems there will be multiple providers fulfilling these functions; each will only have access to details for the unique subset of transactions that they facilitate.

9.63 The result is that no dataset provided by any one card issuer, payment processor, or network operator will give a comprehensive view of all card-paid e-commerce transactions.

9.64 It may, however, be possible to secure access to multiple datasets, and to combine these to gain a holistic measure of the value of the e-commerce transactions they cover. In particular, this may be possible through the Central Bank's role in regulating financial services providers including banks issuing cards and processing payments. However, it is necessary to ensure that any reporting includes the information needed to identify (likely) e-commerce transactions.

9.5.3 What information is captured in card payment data?

9.65 Each card payment network issues a set of operational requirements to be followed by those conducting transactions over the network. Although these vary to some degree between the networks, all capture information of potential use for measuring e-commerce value. **Table 8** gives an overview of information that may be recorded at the level of individual transactions, as well as limitations that should be taken into account.

Table 8. Overview of relevant card payment data items

Data item	What it indicates	Limitations
Card present or not present (at place of transaction)	Card not present indicates likely remoteness of buyer and seller at (potential) e-commerce transaction.	Card not present transactions also arise when paying via phone or post. Likewise, when an order is placed in-person or through manually typed messages, but payment is taken via a web link or recurring payments for subscriptions ordered in-person are processed card not present. None of these situations meet the definition of e-commerce
Merchant category code (MCC)	What the merchant sells (and therefore also what industry it may be in).	As merchants are only allocated a single code, the MCC does not provide much product information for merchants selling a wide range of products (e.g. retailers); can be obscured by payment processors (e.g. PayPal) and DIPs [4].
Merchant name	For large / well-known merchants, this information can be useful as a complement to MCC.	Can be obscured by payment processors (e.g. PayPal) and DIPs. Additionally, in some cases the holders of card payment data may refuse to provide information at the level of individual merchants, citing legal or contractual restrictions, or other reasons.
Card issuer country (CIC)	Whether the card is likely to belong to a domestic or foreign resident.	Card issuer country ≠ cardholder residence.

[4] For example, Uber's MCC is 4121 taxicabs and limousines. The same code is applied to UberEats orders, even though the underlying service being intermediated is not passenger transport but food delivery.

Account holder post code	In some cases, the available card payment data may include the account holder's postcode or other information that might help to confirm whether they reside in the CIC or abroad.	Account holders may not inform their card issuer of changes of residence, especially when moving abroad would make them ineligible for a card/account they wish to keep.
Merchant location country (MLC)	Whether the purchase was from a merchant located domestically or abroad.	Can be affected by corporate structures e.g. MLC may be allocated based on headquarters location rather than reflecting the location of the outlet processing payment. In cases where merchants "move around", such as sales for merchants that do not have a fixed location such as mobile food trucks, travelling amusement parks, etc., and also for transactions occurring during transit (e.g. by train, ship, plane), the MLC may be recorded either as the principal place of business or where the transaction actually took place.
Transaction date	Which reporting period the transaction belongs to.	The payment date may not be the same as the date when the order was placed or the date when turnover should be recognised (Under IFRS accrual accounting principles, revenue is recognized when the goods are delivered or the service is performed, which may come long after payment e.g. in the case of a prepaid hotel stay).
Transaction value	The value that should be reflected in e-commerce / digitally ordered trade statistics	A single payment will usually include amounts ancillary to the main goods or services transaction where these apply e.g.: • Sales taxes • DIP or other fees (e.g. for payment processing) • Delivery, even when itemised separately A single transaction may also cover both domestic and international trade transactions e.g. when purchase is through a non-resident DIP. This limits the ability to record transactions correctly for the purpose of e-commerce statistics.

9.5.4 Summary of strengths and limitations of card payment data as a basis for e-commerce statistics.

9.66 From the foregoing sections, it can be concluded that,

If:

- Cards are widely used as payment for e-commerce transactions conducted by sellers and buyers in the economy for which e-commerce is being estimated; and
- It is accepted that card-not-present transactions do not perfectly align with online payments (as other remote payments are included) *and also* that online payment is not in itself indicative of e-commerce (which is defined by digital ordering rather than digital payment); and

- It is also accepted that other card payment data items such as MCC, MLC and CIC have characteristics which limit the ability to accurately map transactions to statistical classifications such as those of economic activities and products; and
- It is accounted for that the value recorded in card payment data may include sales taxes, ancillary charges (e.g. for delivery or for payment by card), and may cover multiple transactions (e.g. relating to both digital intermediation services provided by a DIP and the underlying goods and services being intermediated); and
- Access to a sufficiently representative card transaction dataset can be secured

9.67 *Then* card payment data may be useful as a basis for the compilation of statistics on a subset of e-commerce, especially on trends.

9.68 *Although* results should not be considered to offer a measure of total e-commerce sales, or of B2C e-commerce sales by businesses, but only of the subset of all e-commerce transactions that is paid using payment cards held by consumers, businesses, and others.

9.69 *Advantages* may also be offered by card payment data in comparison to other sources, including:

- Timeliness and frequency (monthly or even daily frequencies may be possible).
- Relatively automated production once set-up.
- Much lower response burden overall compared to establishment surveys (although the impacted financial institutions do face compliance costs).
- May be implemented as an extension to existing reporting by financial sector entities to Central Banks / financial regulators (or may even already be reported to them).
- Considerable product / industry detail (though with limitations).

9.70 Furthermore, the resulting statistics can offer rich insights that are easily understood by users.

9.71 Overall, card payment data are best viewed as a strong but partial source: highly granular and informative, but requiring cleaning, classification, validation and, where possible, integration with other data sources to produce comprehensive and internationally comparable estimates.

9.72 The following section presents examples of producing indicators on e-commerce value using card payment data.

9.5.5 Examples of using card payment data to measure e-commerce

9.73 Several countries have begun using card payment data to develop experimental or complementary indicators. These approaches typically rely on information in card transaction records that distinguishes remote or “card-not-present” payments from payments made at physical points of sale. The resulting indicators are often described as measures of “online spending” by card rather than e-commerce as such, reflecting the fact that payment data identify the payment channel rather than the ordering method. Nevertheless, where cards are widely used to pay for e-commerce orders, card payment data can provide valuable insight into the scale, composition and trends of digitally ordered transactions.

9.74 Such indicators should be interpreted with care. They can capture only the part of e-commerce paid for by card, and therefore mostly represent B2C transactions involving households as buyers. They will omit orders paid in cash or through non-card digital payment systems, which is especially relevant to B2B e-commerce, where digitally ordered transactions are often invoiced and subsequently settled by credit transfer, and which comprises a large component of overall e-commerce value. For these reasons, card payment indicators are best viewed as useful experimental or complementary partial measures, rather than substitutes for comprehensive business e-commerce statistics.

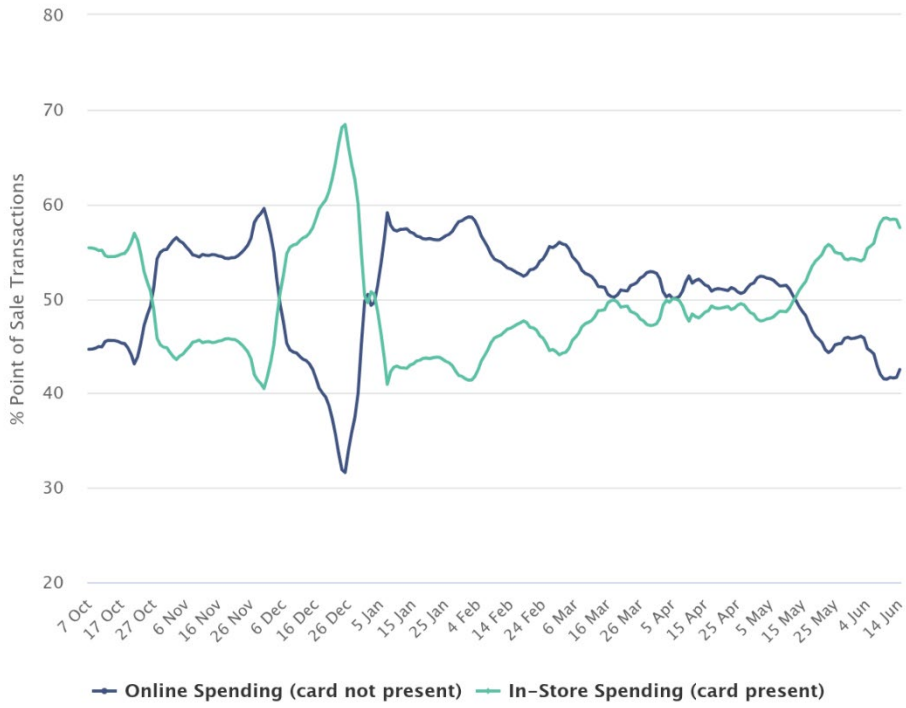
Republic of Ireland

9.75 From 2020 to 2021, the Central Statistical Office (CSO) of Ireland used card payment data available from the Central Bank of Ireland to produce statistics in response to the need for timely insights on e-commerce driven by the disruption of the COVID-19 pandemic. This leveraged two key features of card payment data: its ability to provide a proxy for online spending through card not present payments, and its high frequency nature.

9.76 At the time, the Central Bank published daily Credit and Debit Card Statistics "to better understand the impact of the pandemic on personal expenditure and economic activity". The CSO used these to calculate statistical series in the form of rolling seven-day totals for online (card not present) and in-store (card present) spending. These are presented in **Figure 15**, where online spending can be seen overtaking in-store purchases at various points, largely influenced by variations in pandemic-related restrictions.

Figure 15. Online and in-store spending in Ireland, 7 October 2020 to 14 June 2021

Percent of point of sale transactions, rolling seven-day total



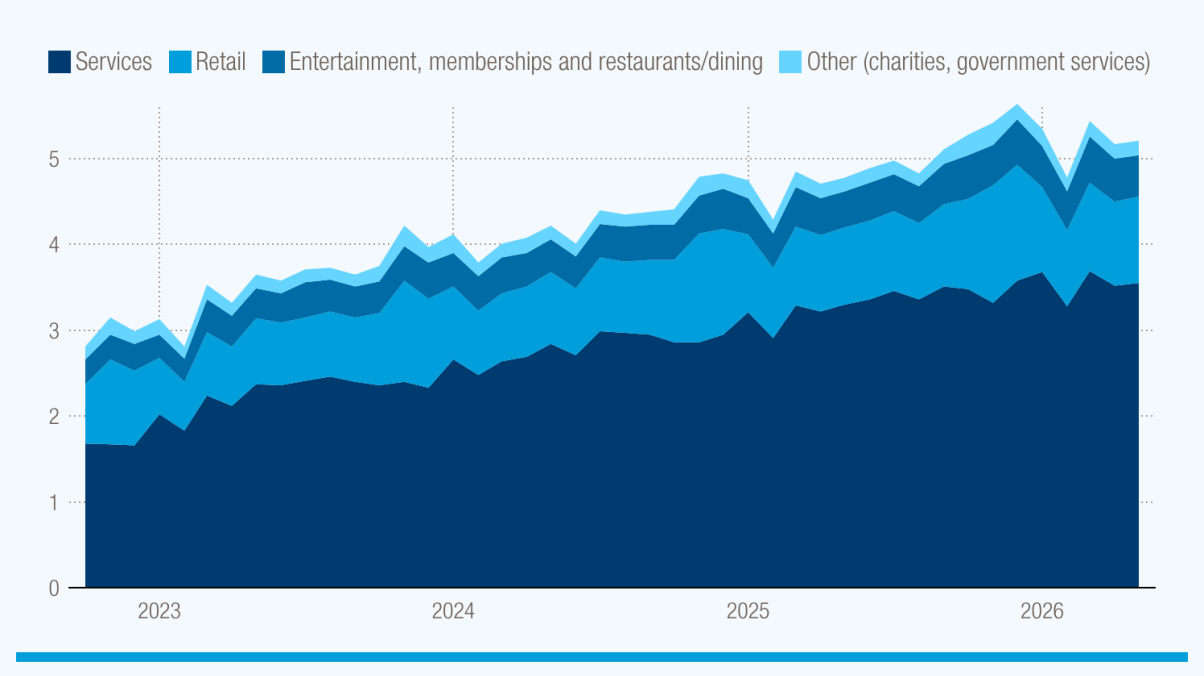
Source: Central Statistics Office of Ireland, based on data from the Central Bank of Ireland (https://www.cso.ie/en/releasesandpublications/br/b-dcp/dailycreditanddebitcardstatistics/)
Note: "point of sale transactions" refers to the total of in-store (card-present) and online (card not present) spending, hence the lines representing their shares mirror one-another.

9.77 From June 2022, both organisations ceased the publication of daily statistics. However, the Central Bank continues to publish Monthly Card Payment Statistics, which remain timely while offering greater additional breakdowns. **Figure 16** shows online card payments by product type, with services accounting for around two thirds of all online payments, while retail sales (merchandise) are one-fifth of the total.

9.78 Meanwhile, **Figure 17** shows that in 2025, across all products, 23 per cent of payments were to merchants located outside Ireland. These flows suggest an international e-commerce purchase resulting in digitally ordered imports of goods and services into to Ireland. This share varies widely between product categories, reaching as much as 40 per cent for retail (merchandise) purchases. But despite the increasing propensity for many types of services to be delivered digitally across international borders (IMF, OECD, UNCTAD, and WTO, 2023), only 17 per cent of card payments to merchants classified as selling services were international.

Figure 16. Services dominate online card spending in Ireland

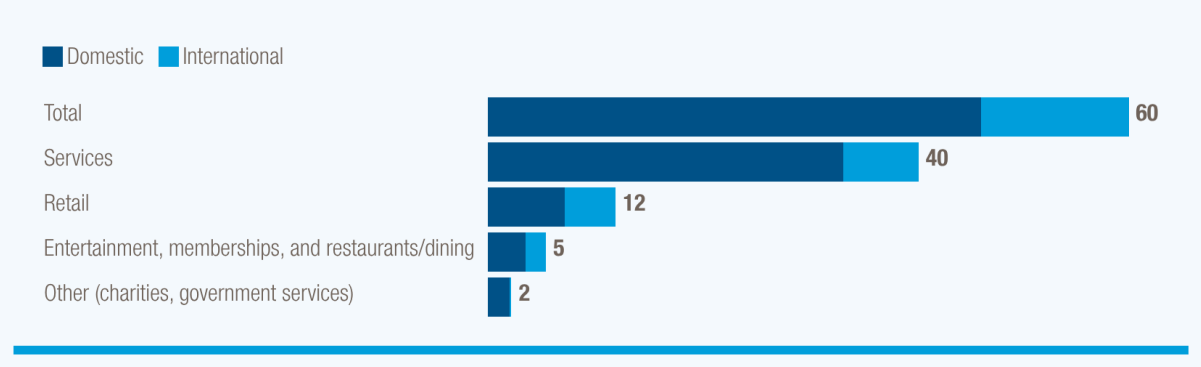
Online card spending in Ireland, by product, in billions of euros (current prices)



Source: UN Trade and Development, based on Central Bank of Ireland Monthly Card Payment Statistics (https://www.centralbank.ie/statistics/data-and-analysis/monthly-card-payment-statistics)
Note: based on card not present transactions.

Figure 17. Around a quarter of payments from Ireland-issued cards in 2025 were to merchants located outside Ireland

Online card spending by product, in billions of euros (current prices)



Source: UN Trade and Development, based on Central Bank of Ireland Monthly Card Payment Statistics (https://www.centralbank.ie/statistics/data-and-analysis/monthly-card-payment-statistics)
Note: based on card not present transactions.

Namibia

9.79 The Bank of Namibia (BoN) uses card payment data reported by commercial banks through the International Transaction Reporting System (ITRS) to support the measurement of international e-commerce. This work was initially developed to address a gap in Namibia's balance-of-payments and digital-trade statistics, particularly for low-value cross-border digital-services transactions that were difficult to capture through traditional data sources. The data cover transactions involving both Namibian-issued cards used at merchants abroad and foreign-issued cards used at merchants in Namibia. This allows the BoN to examine e-commerce-related payment flows in both directions: outward payments by Namibian residents to foreign e-commerce merchants - providing a proxy for Namibia's digitally ordered imports of goods and services – and inward payments by non-residents to domestic e-commerce merchants - a proxy for digitally ordered exports. Both proxies cover only transactions paid for by card, rather than the full value of these trade flows.

9.80 Data on international card transactions have been reported to the BoN on a daily basis since July 2019, allowing the compilation of annual estimates from 2020 onwards. A key advantage of the source is that it covers cross-border card transactions without a reporting threshold, making it well suited to capturing low-value online purchases such as subscriptions for digital services. However, because the card payment data received by the BoN do not yet consistently indicate whether a transaction was in person or remotely (card not present), the Bank uses merchant category codes and merchant names to help identify likely online purchases. Aggregate cross-border card payment data from the national payments system, including information on whether cards were used online, at point-of-sale terminals or at ATMs, are also used to cross-check the estimates derived from the more detailed transaction-level data.

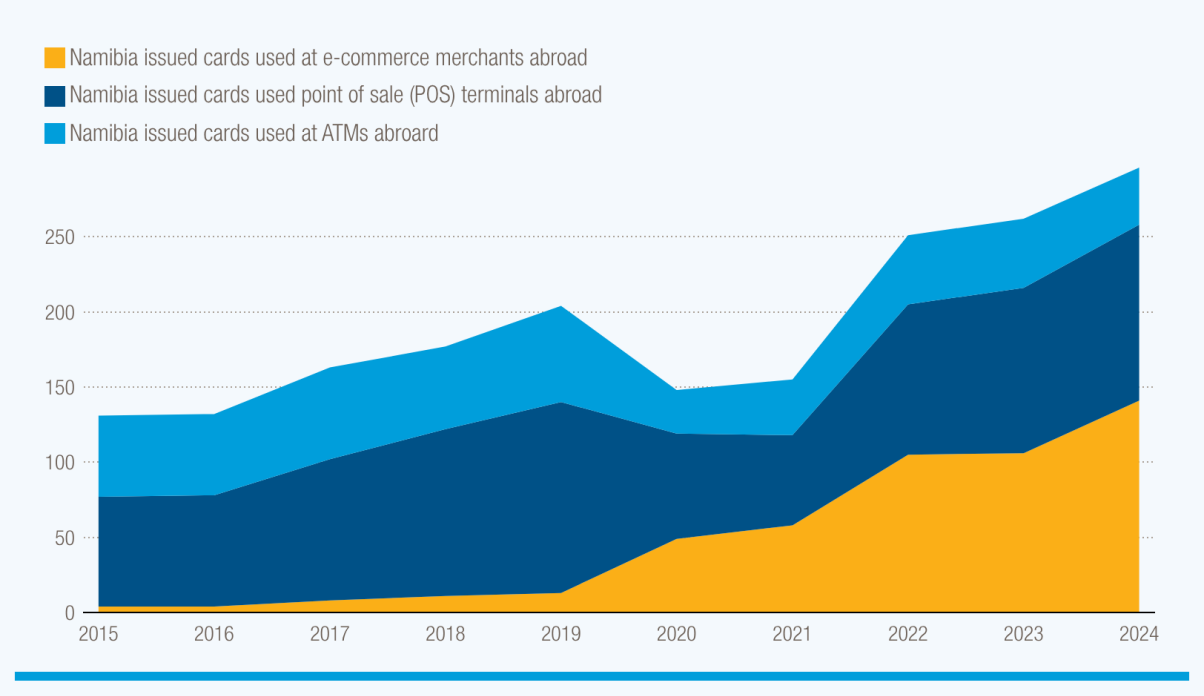
9.81 Given the volume and complexity of transaction-level card payment data, the BoN uses Python for processing. Over 600,000 records per month are extracted from the ITRS, cleaned and transformed, including checks and corrections for missing values, currency conversion issues and text-to-number conversion errors. Transactions are then classified using merchant names and merchant category codes, drawing on the Visa Merchant Data Standards Manual and supplementary research into merchant activity. This classification is used to group transactions into relevant market segments and to identify those likely to correspond to digitally ordered

and/or digitally delivered services, in line with the international conceptual framework for measuring digital trade (IMF, OECD, UNCTAD, and WTO, 2023).

9.82 Merchant classification is an iterative process combining automated processing with manual review, and requires continuous refinement and validation as new merchants and business models emerge. Merchant names are standardised and mapped to categories using exact matching and fuzzy matching, followed by further keyword review within merchant category code groups. Misclassifications are manually corrected and incorporated into the Python code before the estimates are rerun. Transactions that do not meet balance of payments residency criteria are excluded, for example where a payment routed through an international platform is assessed to be resident-to-resident rather than cross-border. The remaining transactions are then classified according to whether they represent digitally ordered services, such as travel or transport services booked online but consumed physically, or digitally deliverable services, such as software, streaming, cloud storage and online gaming. This produces estimates aligned with digital trade and balance of payments concepts, while recognising that not all card transactions are digital trade and that careful filtering is needed to exclude ATM withdrawals, non-digital goods purchases and other non-relevant services.

9.83 The data on Namibian-issued card payments to non-residents showed a strong upward trend between 2020 and 2024, reflecting a structural shift in how households and businesses transact across borders. The most notable change was in payments to foreign e-commerce merchants, which increased from just 6.4 percent of total card outflows in 2019 to 47.5 percent in 2024 (**Figure 18**).

Figure 18. Rising digitally ordered imports: payment cards issued in Namibia are increasingly used at e-commerce merchants abroad
US$ millions, current prices

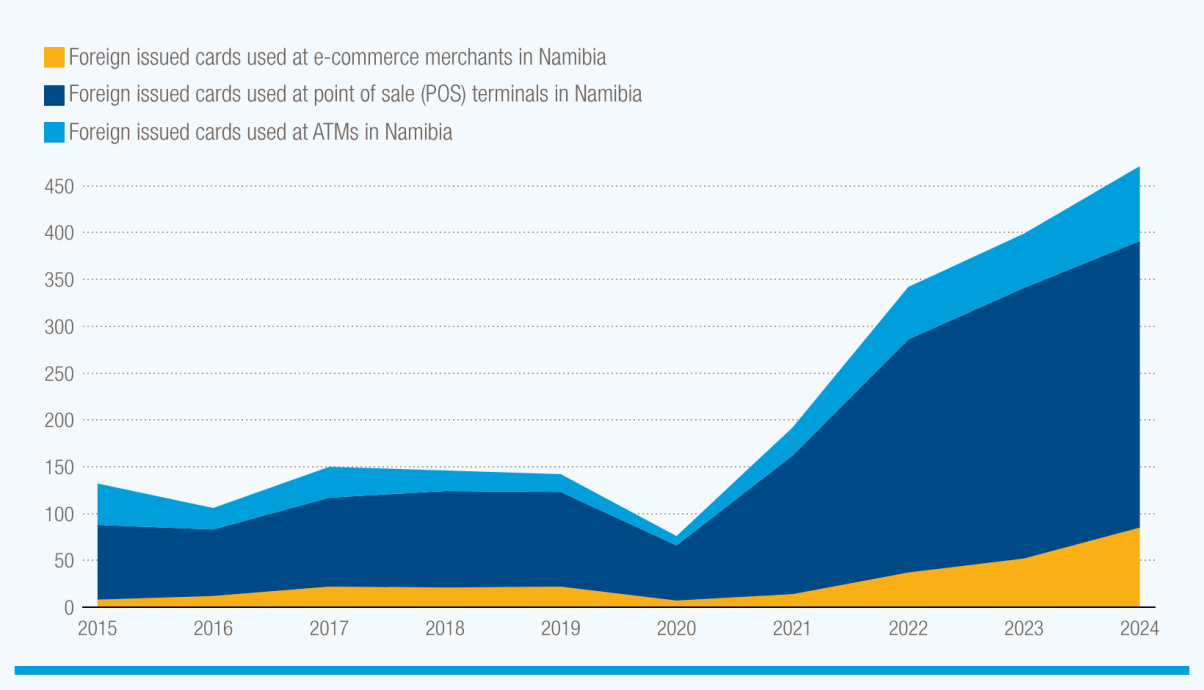


Source: UN Trade and Development, based on Bank of Namibia, National Payment Systems and Financial Surveillance Department (Kagola, et al.)

9.84 From a balance of payments perspective, outward card payments now represented nearly 9 per cent of Namibia's recorded services imports during 2024. However, this total is compiled from other sources, including the international transactions reporting system (ITRS), surveys and administrative records. The inclusion of card data could significantly improve estimates for travel and other service subcomponents, particularly household-level imports of digital services.

9.85 The share of foreign-issued cards used at e-commerce merchants in Namibia has also increased markedly from 8.7 percent in 2020 to 18 percent in 2024 (**Figure 19**). This lower share, compared to Namibian purchases at e-commerce merchants abroad, reflects the limited number of domestic online merchant platforms as well as the presence of only eight licensed payment gateway providers in Namibia.

Figure 19. Growing digitally ordered exports: e-commerce merchants in Namibia are increasing their sales paid with cards issued abroad
US$ millions, current prices

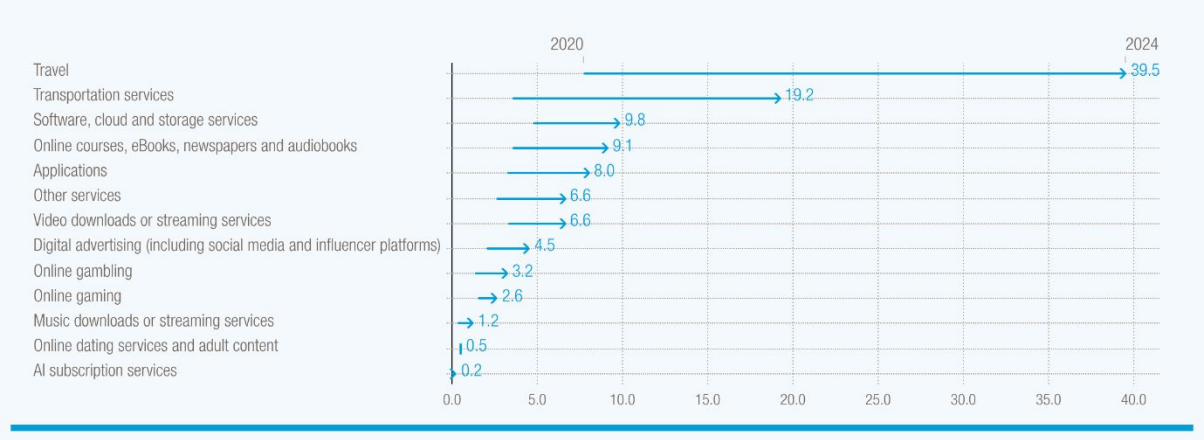


Source: UN Trade and Development, based on Bank of Namibia, National Payment Systems and Financial Surveillance Department (Kagola, et al.)

9.86 The value of payments made using cards issued in Namibia to providers of services outside the country has more than tripled in just four years, from US$34 million in 2020 to US$112 million in 2024. In part, this growth in digitally ordered services imports was driven by the resumption of international travel by Namibians, following the disruption of the COVID-19 pandemic of 2020-2023, which account for over a third of the total. Nevertheless, rapid growth has also been seen in other services products, including a quadrupling of payments for music downloads and streaming, a near tripling of online courses, eBooks, newspapers and audiobooks, and a doubling of payments to video download or streaming services (**Figure 20**).

Figure 20. Digitally ordered imports of services products paid for with cards issued in Namibia, by product, 2020-2024

US$ millions, current prices



Source: UN Trade and Development, based on Bank of Namibia, National Payment Systems and Financial Surveillance Department (Kagola, et al.)

9.87 Namibia's experience shows that card payment data can provide a valuable and relatively timely source for measuring a key component of international e-commerce. Such data are particularly useful for capturing low-value cross-border transactions undertaken by households, including subscriptions and other digitally ordered services that may be difficult to observe through more traditional sources. The approach also offers compilers a practical way to generate policy-relevant estimates and to align emerging digital trade statistics with balance of payments concepts, especially when supported by supplementary sources and validation against aggregate payment system data.

9.88 At the same time, the Bank of Namibia's work highlights that card payment data cannot be used mechanically. Several methodological challenges require careful judgement and adjustment, including the classification of multi-service merchants, the distinction between digitally ordered and non-digital transactions (in the absence of complete availability of the card not present flag), and the treatment of payments routed through digital intermediation platforms or foreign payment gateways. Residency is a particular challenge, since some transactions that appear cross-border in payment data may in economic terms be resident-to-resident, while some cardholders may not be residents of the economy that issued the card. Card data also exclude other relevant payment channels, such as wire transfers and mobile payments, and may not capture orders arranged through chat-based or other informal online channels – which, although they do not meet the definition of e-commerce, can be relevant in the Namibian context.

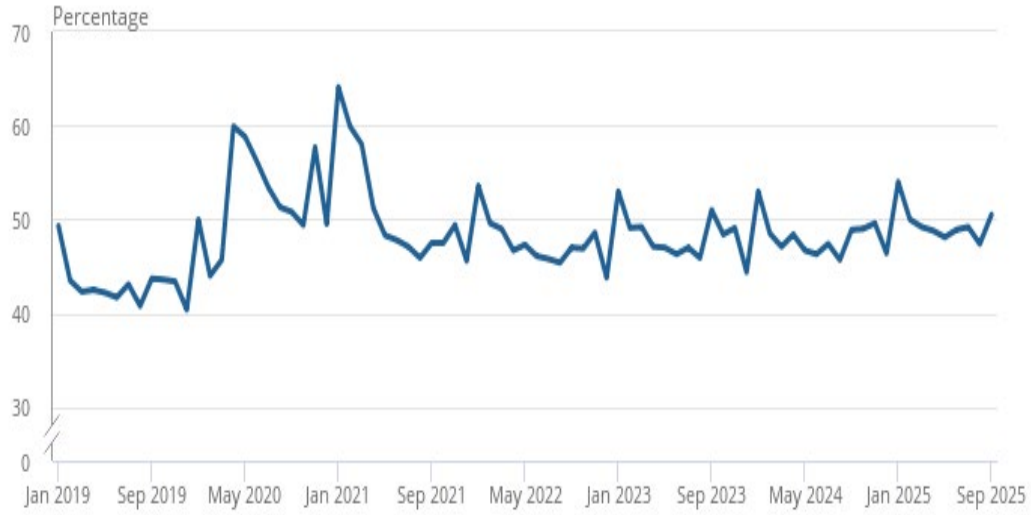
United Kingdom

9.89 The United Kingdom (UK) Office for National Statistics (ONS) has an agreement with Visa Europe to receive aggregated and anonymised data on UK Visa card payments for statistical purposes. This data can provide valuable insights on where and how UK consumers are spending money, including "card not present" transactions, which are treated as measuring online spending (Office for National Statistics, 2026).

9.90 **Figure 21** presents the share of total spend by UK cardholders taking place online, which has risen markedly, from 43.7 per cent in September 2019 to 50.5 per cent in September 2025.

9.91 Although e-commerce is defined by digital ordering rather than digital payment, it is notable that around two thirds of all UK payments are made by card (UK Finance, 2025), and card payment is the default for e-commerce orders by consumers.

Figure 21. Online spending made up 51% of UK card spend in September 2025



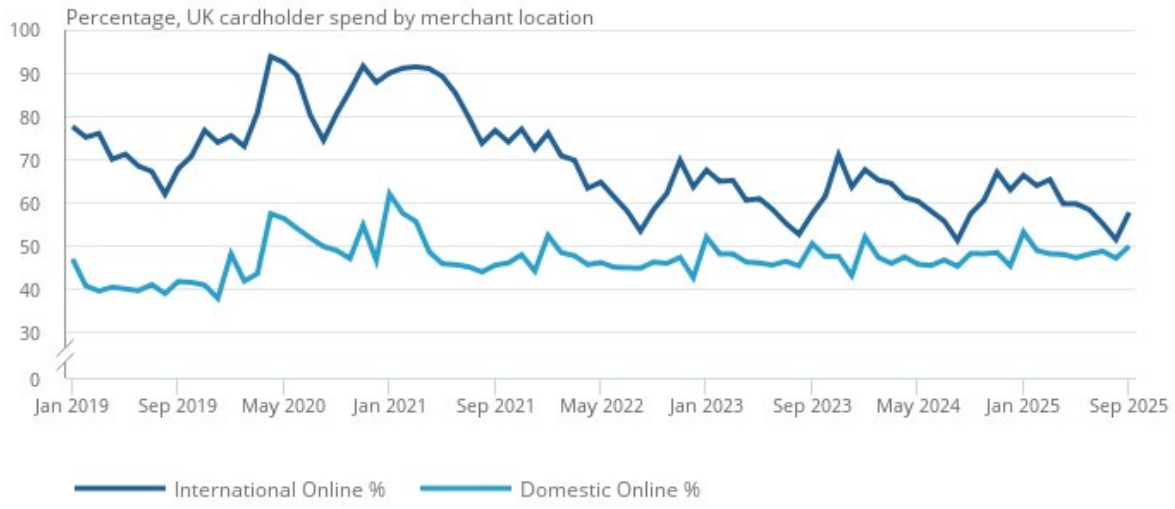
Source: ONS based on Aggregated and anonymised data on UK card payments from Visa Europe Limited (2025)

9.92 Visa provides the ONS with data at the level of cardholder postal areas. The data are aggregated anonymised within Visa's compilation processes. The cardholder's "home" location is predicted based on the locations of merchants that the card is used to make payments at (such as supermarkets where the card is used), so a cardholder's exact home address cannot be determined. Although the data might in principle allow for sub-national analyses, these are impacted by disclosure controls implemented by Visa and so the ONS focuses on indicators at the UK level, compiled by aggregating spend figures across postal areas to estimate total spend by UK cardholders within this dataset.

9.93 Disclosure controls are also applied by Visa to some merchant category groupings deemed "sensitive". As a result of these limitations, all card spending statistics published by the ONS come with the caveat that some amount of the spending has been suppressed and the statistics produced focused on distributions and trends rather than monetary values.

9.94 The merchant location code attached to each transaction indicates whether the merchant is located in the UK or overseas. **Figure 22** presents the online shares of UK cardholder spend with domestic and international merchants.

Figure 22. In September 2025, 58% of UK card transactions with international merchants took place online



Source: ONS based on Aggregated and anonymised data on UK card payments from Visa Europe Limited (2025)

9.95 Clear seasonal trends appear in this dataset, particularly regarding spending at international merchants, with regular troughs in the summer months. This may seem counterintuitive as the summer is a common time for international travel but lags that can occur between the time of purchasing services, such as flights and accommodation, and the time those services are consumed, likely contribute to this pattern. Both changes in the composition of spending and such timing differences should be considered when compiling and interpreting statistics based on card payment data.

9.96 It is also important to note that the merchant location recorded on the transaction is assumed to equal residency. However, for online transactions the merchant location can be influenced by factors such as the merchant's principal place of business or where the transaction took place and which may not align with the residency concept applied in trade statistics. This may cause distortions in the international trade flows estimated from card payment data.

9.97 Although Visa card payments represent only one slice of UK card spending, by applying proportions based on this data, such as the percentage of Visa card spend that took place online and abroad, to aggregated total card spend values from the Bank of England, more complete estimates can be derived of e-commerce and digitally ordered trade by UK cardholders. On this basis, it is estimated that that household digitally ordered imports have increased from £42.3bn in 2019 to £50.5bn in 2025 (Office for National Statistics, 2026a). Despite limitations on the detail available, the agreement with Visa has therefore provided ONS with sufficient granularity to develop novel insights that complement other statistics on e-commerce and digital trade.

9.6 Data about digital platforms

9.98 Digital intermediation platforms (DIPs) are key nodes in the e-commerce landscape. By connecting multiple buyers and sellers, they can facilitate participation in online markets, especially for MSMEs and unincorporated household market enterprises. Their operators hold structured information on transactions, buyers, sellers and fees, making them a potentially valuable source for measuring both sales through these platforms and the associated digital intermediation services.

9.99 Similarly, providers of services that are both digitally ordered and digitally delivered, such as online streaming subscriptions and self-service cloud services, are another potential data source. Major providers may account for a substantial share of imports of these services in many economies. Their records of customer locations and sales values could therefore be valuable for measuring trade that is both digitally ordered and digitally delivered.

9.100 Data from these platforms and providers are not, however, a shortcut to measuring total e-commerce. Information from them will cover only the e-commerce transactions that they are involved with. As discussed in Sections 3.2, 3.3.1.1 and 6.4, business-to-business transactions account for most e-commerce by value in many economies, and EDI-type sales - often the largest component - generally take place outside DIPs. Results based on selected platforms and providers should therefore be described as measures of a key component of e-commerce, not as total e-commerce.

9.101 Where an operator is resident in the compiling economy, statistical compilers may be able to survey it or gain access to administrative data, subject to the national legal framework. Guidance on identifying and surveying resident DIP operators is provided in Sections 6.9, 7.2, 8.1 and 8.2. The operator may hold gross transaction values, fees or commissions, seller and buyer characteristics and location indicators, but these items must be aligned with the statistical concepts in Chapter 6, particularly the distinction between the underlying sale and the DIP's intermediation service, and between location indicators and economic residence.

9.102 A multinational platform may have a resident marketing, technology or payment-processing office while its intermediation service is supplied by a non-resident entity. Compilers should therefore identify the entity supplying that service and establish its economic residence, rather than assume it is resident because the platform has a local office. Contracts with platform users, financial statements and information on responsibility for supplying the service and bearing the associated economic risks can help establish the relevant producing entity. No single indicator is necessarily decisive; compilers should consider the overall economic substance of the arrangements. The IMF *Compilation Guidance Note on Digital Intermediation Platforms* provides indicative questionnaires for platform operators, households and businesses using platforms, which may inform targeted data collections (IMF, 2026).

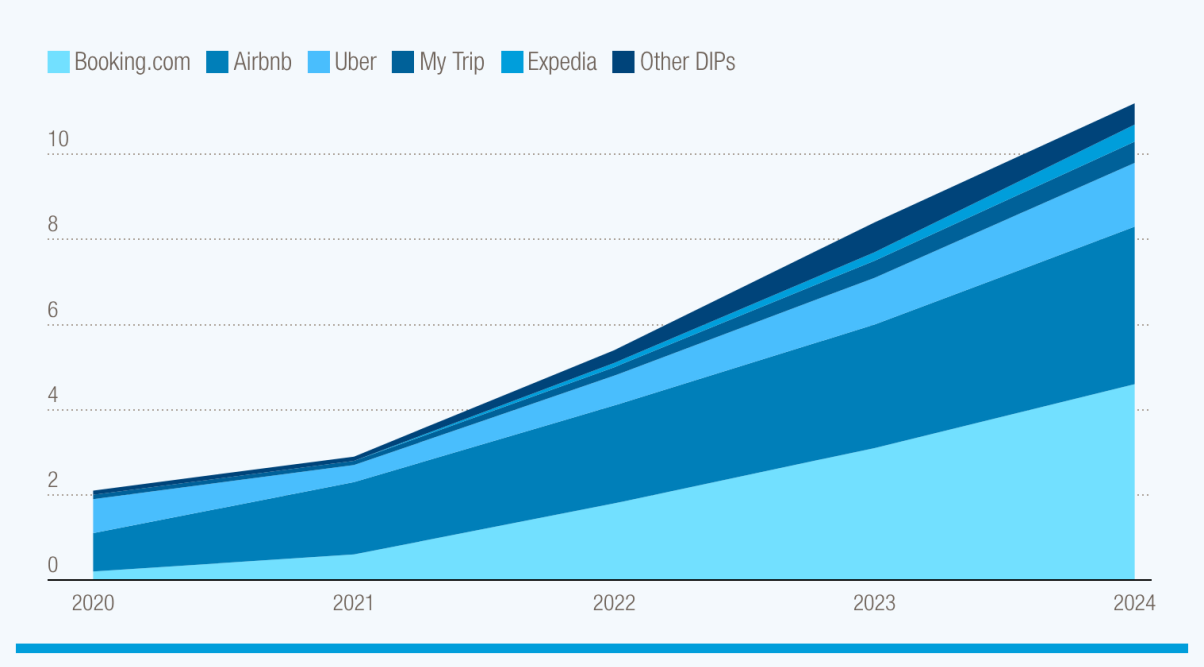
9.103 The position is more difficult when the operator is non-resident. Statistical legislation generally does not give compilers authority to compel reporting by an entity resident abroad, and practical access often depends on voluntary cooperation. International organisations might have the potential facilitate common requests and reduce duplication, but they likewise lack a legal mandate to require private platforms to provide data. Negotiation can be lengthy and the information obtained may cover only selected operators, markets and indicators. International cooperation could therefore be pursued as a potentially useful complement, but should not be treated as a substitute for national compilation efforts.

9.104 Eurostat's statistics on short-stay accommodation provide a prominent example. Following an agreement concluded in 2020 between the European Commission and four major accommodation platforms, Eurostat has published harmonised data from 2018 onward. Current releases use data supplied directly by Airbnb, Booking and Expedia and provide monthly and quarterly counts of guest nights, with annual national, subnational region and city detail. These data offer valuable and timely indicators of platform-mediated accommodation activity. However, the published datasets do not include the monetary value of bookings, host income or

platform fees. The example therefore demonstrates both the potential of sustained cooperation with major platforms and the partial nature of the resulting measurement.

9.105 Where direct reporting by non-resident operators is unavailable, payments data may provide complementary evidence. Compilers can identify payments by residents to selected well-known platforms or direct providers as a proxy for a component of digitally ordered imports, and payments from platforms to resident sellers as a proxy for a component of digitally ordered exports. International transaction reporting systems may support this work, as illustrated by Namibia's use of transaction-level card data, described in Section 9.5.5, to isolate payments to major travel-related DIPs (**Figure 23**).

Figure 23. Payments to major travel-related DIPs, from cards issued in Namibia
US$ millions, current prices



Source: UN Trade and Development, based on Bank of Namibia, National Payment Systems and Financial Surveillance Department (Kagola, et al.)

9.106 Merchant identification requires substantial cleaning, exact and fuzzy matching and continuing expert validation across very large transaction volumes. Coverage also remains partial: a single platform may facilitate both domestic and cross-border transactions, and payment processors such as PayPal can obscure the underlying merchant. Furthermore, payments through such processors can include person-to-person transfers and other transactions unrelated to e-commerce or digitally ordered trade of goods and services. Such measures should therefore be presented as estimating carefully defined components of these rather than representative totals.

9.107 Tax systems offer a further and potentially more systematic route. As they systems are adapted to better cover online sales of goods and services through DIPs and by non-resident digital suppliers, including through the imposition of reporting obligations (OECD, 2019a), statistical agencies should engage with tax authorities so that information collected through tax frameworks can, where legally permissible, support statistical purposes. Priority should be given to structured fields identifying the supplier or seller, buyer or destination, value and date of the transaction, type of good or service, platform or direct-sale status, fees or commissions, and

indicators relevant to residence and ordering channel. Reuse for statistics must remain subject to legal access, confidentiality, proportionality and quality assessment, and the resulting coverage and valuation should be reconciled with the concepts in these Guidelines and clearly communicated to users.

9.7 Recommendations

9.108 The sources outlined show that non-survey data has the potential to make a useful contribution to measuring e-commerce value, but also that no single source is likely to provide a comprehensive or conceptually perfect measure. Their usefulness depends on the specific component or aspect of e-commerce being measured, the national data environment, and the extent to which key statistical requirements – such as ordering method, residence, valuation, transaction value and statistical unit – can be identified or approximated. The following recommendations therefore emphasise the careful, transparent and complementary use of non-survey sources rather than their unqualified adoption as substitutes for surveys.

64) Non-survey sources should be assessed as potential inputs to e-commerce statistics, either as primary sources for specific components of e-commerce value or as complements to survey-based estimates. Their suitability should be evaluated against the concepts required for e-commerce statistics, including coverage, valuation, residence, ordering method, transaction value and statistical unit.

65) Card payment data are recommended as a particularly promising source for measuring an important subset of e-commerce, especially where card payments are widely used to confirm online orders and transaction-level data include information such as card-present/card-not-present status, merchant category codes, merchant location, card issuer country, merchant name and transaction value. Such data can offer advantages in timeliness, frequency, granularity and reduced respondent burden.

66) Before adopting card payment data for e-commerce measurement, compilers should assess the role of payment cards in the national e-commerce ecosystem. This should include card ownership and usage among households, businesses and other organisations, and the extent to which cards are used by these customer groups to pay for e-commerce orders, and the coverage of the available card payment dataset across issuers, acquirers, payment processors, networks and merchant types.

67) The coverage of statistics based on card payment data should be carefully assessed and clearly described to users. They should not be presented as measures of total e-commerce sales, or of total B2C e-commerce sales by businesses, unless supported by additional sources and adjustments. Card payment data will cover only the subset of e-commerce transactions that are paid by card and will exclude orders paid by credit transfer, mobile money, cash on delivery, wire transfer or other payment channels. In particular, this is likely lead to substantial under-coverage of B2B e-commerce.

68) Compilers using payments data should work closely with central banks, financial regulators, payment system operators, card issuers, acquiring banks, payment

processors and card network operators to secure access to suitable data and improve the statistical usefulness of reporting. Particular attention should be given to obtaining or developing indicators that help identify likely digitally ordered transactions, merchant activity, buyer and seller location or residence, and the treatment of intermediary fees, taxes and ancillary charges.

69) Where card payment data or other payments data are used, compilers should combine automated processing with validation and expert review, and should clearly document the classification rules, assumptions and adjustments applied. Particular care is needed in relation to card-not-present transactions, merchant category codes, large multi-service merchants, digital intermediation platforms, residence of the merchant and buyer and transactions that can appear cross-border in payment data but are resident-to-resident in economic terms.

70) The identification of digitally ordered merchandise shipments is a promising approach for measuring (the bulk of) international e-commerce in goods. It is recommended for compilers of e-commerce statistics to work with customs authorities to implement the systematic identification of merchandise shipments that were ordered via e-commerce as a basis for measuring the digitally ordered merchandise trade component of overall e-commerce, in accordance with the Handbook on Measuring Digital Trade (IMF, OECD, UNCTAD, and WTO, 2023).

71) Statistical agencies should engage with tax authorities and other bodies responsible for e-invoicing systems to ensure that, where feasible, structured information on the ordering channel is incorporated into e-invoice requirements. In particular, systems should allow e-commerce orders to be distinguished from non-e-commerce orders and, ideally, identify whether orders were placed through online marketplaces and other DIPs, other websites or apps, or EDI-type systems.

72) Other non-survey sources may be most useful in a complementary role. For example, web-scraped data may be helpful to identify the operators of websites that have e-commerce features, so that these can be included in survey frames or classified accordingly in payment data.

Chapter 10. Analysis and dissemination of statistics on e-commerce value

10.1 E-commerce value statistics products should be designed to address specific user needs, especially those of the key users identified in Chapter 2: policymakers, businesses, research and analysis users, international organisations, and journalists. Different user groups, and different use cases, call for different forms of statistical output. Some users primarily need clear visual summaries, headline indicators and key analytical insights derived from the statistics. Others need access to detailed statistical series so that they can undertake their own analysis or integrate the data with other sources or into statistical frameworks such as digital supply and use tables, digital trade statistics or national accounts.

10.2 This means that dissemination should not be understood narrowly as the release of a single publication or table. Rather, it should involve a set of complementary outputs designed to make e-commerce value statistics understandable, accessible and usable for different audiences. In line with the Fundamental Principles of Official Statistics (United Nations, 2014), statistics that meet practical user needs should be made freely available to all, accompanied by information on sources, methods and procedures to support correct interpretation. For e-commerce value statistics, this is especially important because the concept is often misunderstood in public and policy discussion, and because differences in coverage, valuation, ordering channels and breakdowns can materially affect interpretation.

10.3 TG-eCOM members identified two main dissemination vehicles for e-commerce value statistics: analytical reports and online databases or downloadable data tables. These are complementary rather than substitutes. Analytical reports help users understand the main messages emerging from the data, while databases and tables enable more detailed analysis, reuse and integration with other statistical information.

10.4 **Analytical reports** are well suited to presenting the main findings from e-commerce value statistics in an accessible way. They can combine narrative explanation with charts, maps, tables, infographics and case-specific interpretation. Such reports are particularly useful for policymakers, journalists, businesses and general users who need to understand the scale, structure and evolution of e-commerce without necessarily working directly with detailed datasets. Reports can highlight key indicators such as the total value of business e-commerce sales, e-commerce as a share of turnover, the relative importance of different e-commerce channels, especially online marketplaces and other DIPs, compare domestic and international e-commerce, or highlight differences by industry, firm size, customer type and product. They can also explain limitations and context, helping to avoid incorrect interpretations such as treating e-commerce as a "sector" when it is a means of making sales that cuts across all sectors of the economy, or assuming that all online buying and selling is included.

10.5 Where statistics on other remote online orders or on-premises online orders are also compiled, analytical reports can help situate these complementary measures alongside the core e-commerce concept without blurring the distinction between them. This interpretive function is particularly important in economies where unstructured online ordering through e-mail, messaging apps or social media is economically significant.

10.6 However, analytical reports are often presented in formats, such as PDF, that can limit data exploration and re-use. Even where detailed tables are included, they are not always easy to

extract, combine with other sources, or use for further analysis. Analytical reports should therefore be complemented by online databases or downloadable data tables that give users direct access to the underlying statistical series.

10.7 **Online databases and downloadable data tables** address a different set of user needs. They allow users to access detailed statistical series, choose breakdowns relevant to their own analysis, compare results across time and integrate the data into research, policy monitoring, business analysis or statistical compilation. Such outputs are especially important for researchers, international organisations, statistical compilers and advanced policy users. They also support transparency by allowing users to move beyond the headline messages in analytical reports and examine the underlying data directly.

10.8 Databases and downloadable tables should therefore be designed with reuse in mind. They should provide stable time series, clear variable labels, consistent classifications and machine-readable formats where feasible. Metadata should be available alongside the data in a format designed to minimise barriers to users correctly understanding limitations and interpreting the statistics.

10.9 A further question is whether **microdata** access should form part of dissemination. Where legal frameworks, statistical capacity and disclosure control arrangements permit, access to anonymised or de-identified microdata may be valuable for accredited researchers or approved analytical users. Such access can support deeper analysis of firm-level relationships, for example between e-commerce activity, productivity, exports, firm size, digital technology use or employment. It may also help evaluate policy interventions aimed at supporting business digitalisation or SME participation in e-commerce.

10.10 Any microdata access should be subject to strict confidentiality protection, in accordance with international guidelines and practices (UNECE, 2007; OECD, 2012; UNSD, 2014; OECD, 2021). This may involve secure research environments, controlled remote access, accredited researcher schemes, statistical disclosure control procedures and clear rules on outputs. In general, where statistical organisations have arrangements for making business microdata available it is recommended that e-commerce value data should be included to promote novel analyses incorporating e-commerce value.

10.11 Together, analytical reports, online databases, downloadable tables and, where appropriate, controlled microdata access can serve different but complementary dissemination purposes. A good dissemination strategy should ensure that headline messages are clear and accessible, detailed data are available for users who need them, metadata are sufficient to support correct interpretation, and confidentiality is protected throughout.

10.12 In all cases it is crucial that the statistical products incorporate clear explanation of:

- the e-commerce concept as defined in international statistical guidance (OECD, 2025) and any limitations or deviations therefrom (especially in relation to orders placed via unstructured messages such as those sent via email or messaging services, which are not covered by the e-commerce concept);
- the e-commerce ordering channels covered, including online marketplaces and other DIPs, orders via other websites and apps, and EDI-type e-commerce and any omissions from coverage;

- the population covered by the figures, especially exclusions that may not be obvious to users, such as exclusions of enterprises below size or revenue thresholds or in specific industries, the coverage of e-commerce sales by household unincorporated enterprises, potential coverage of sales by non-resident sellers;
- the valuation basis, especially any deviation from the recommendations on the treatment of sales taxes such as VAT, discounts, rebates, returns, delivery charges and other ancillary charges;
- the statistical unit and reporting basis, including whether figures refer to enterprises, establishments, legal units, enterprise groups, platforms or another unit;
- the reference period and release status, including whether figures are final, provisional, experimental or subject to revision;
- the breakdowns available, including the classifications used for industry, product, firm size, customer type, market, ordering channel or subnational location, and any limitations in their comparability;
- the data sources and compilation methods used, including whether the figures are based on surveys, administrative data, or a combination of sources, and whether estimation has been used;
- the quality of the statistics, including response rates, sampling or non-sampling error where relevant, imputation, undercoverage, known biases, breaks in series and comparability over time;
- confidentiality treatment, including suppressions, aggregation or other disclosure control measures that affect published detail.

10.13 Metadata should identify the statistical unit used and, where relevant, explain how legal-unit returns are combined and how sales and purchases between legal units belonging to the same enterprise are treated. Changes in statistical units or consolidation practices may affect measured turnover, e-commerce sales and purchases, business counts and breakdowns even where the underlying activity has not changed. Any resulting breaks in series should be identified, with their effects explained and, where feasible, quantified. Differences in statistical units and consolidation practices should also be considered when comparing sources or economies.

10.14 Where other remote online transactions are measured, these figures should be published separately from those on e-commerce, with clear explanation of both concepts and the relationship between them. It is not recommended to publish a total incorporating other remote online orders alongside the value of e-commerce orders.

10.15 More generally, dissemination should follow established statistical standards and good practices. Practical guidance is provided by the *Handbook on Management and Organization of National Statistical Systems* (United Nations, 2025), which addresses release calendars, accessibility, open data, metadata, dissemination methods and user-oriented presentation and the Generic Statistical Business Process Model (UNECE, 2025), which treats dissemination as an integral phase of statistical production covering the release of statistical products, promotion and user support. Quality and metadata frameworks are also relevant, such as the *European Statistical System Handbook for Quality and Metadata Reports* (Eurostat, 2020), which emphasises accessibility, clarity, comparability, coherence and user-oriented documentation. Taken together, these references imply that e-commerce value statistics should be released

through transparent and predictable practices, made freely and easily accessible where possible, accompanied by sufficient metadata and quality information, and provided in formats that support both interpretation and re-use.

10.1 Analysing and comparing e-commerce value statistics

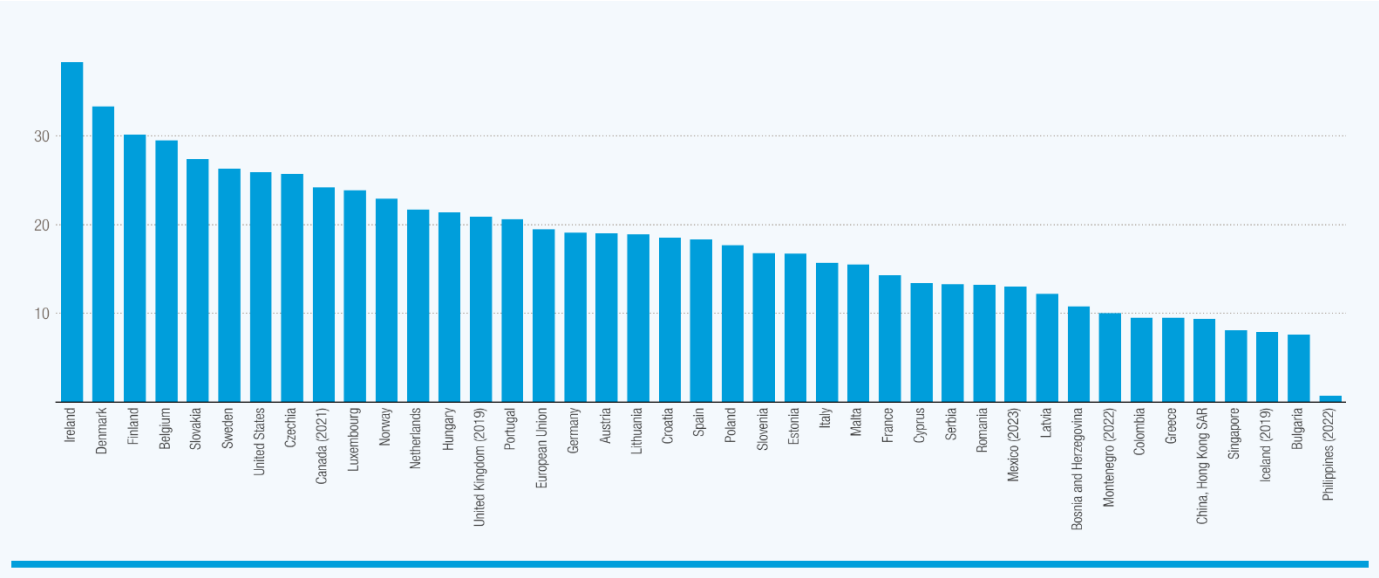
10.16 E-commerce value statistics are not an end in themselves. Insights come from making comparisons in the scale and make-up of e-commerce across groups of firms, including different economic activities and firm size bands, as well as across economies.

10.17 Simply comparing the monetary value of e-commerce across these groups is of limited analytical use. Higher values may reflect the overall size of an economy, industry or firm-size class rather than a greater relative role for digital ordering. Meaningful comparison therefore requires e-commerce value to be normalised against suitable reference variables. This helps distinguish differences in the scale of e-commerce that reflect the size of the underlying economy or industry from differences in the relative importance of digital ordering within it.

10.18 The logical starting point is total enterprise turnover. Since e-commerce sales form part of enterprise turnover, the share of turnover generated through e-commerce provides a direct and interpretable measure of digital ordering intensity. This makes it a useful normalising variable for comparing industries, firm-size classes and economies of different sizes, while also linking e-commerce statistics to a core aggregate already used in business statistics and macroeconomic statistical frameworks. **Figure 24** presents e-commerce sales as a percentage of business turnover, with an average of 18 per cent across the economies with figures available.

10.19 Additionally, practitioner experience has shown that monetary value figures on e-commerce sales and purchases can be subject to volatility arising from various factors. Figures expressed as a share of turnover can be useful in contextualising monetary figures and assuring quality. Furthermore, monetary values and turnover shares can both be useful when it comes to incorporating with other statistical sources and frameworks. It is therefore recommended that e-commerce value statistics should be published both in monetary values and shares of enterprise turnover.

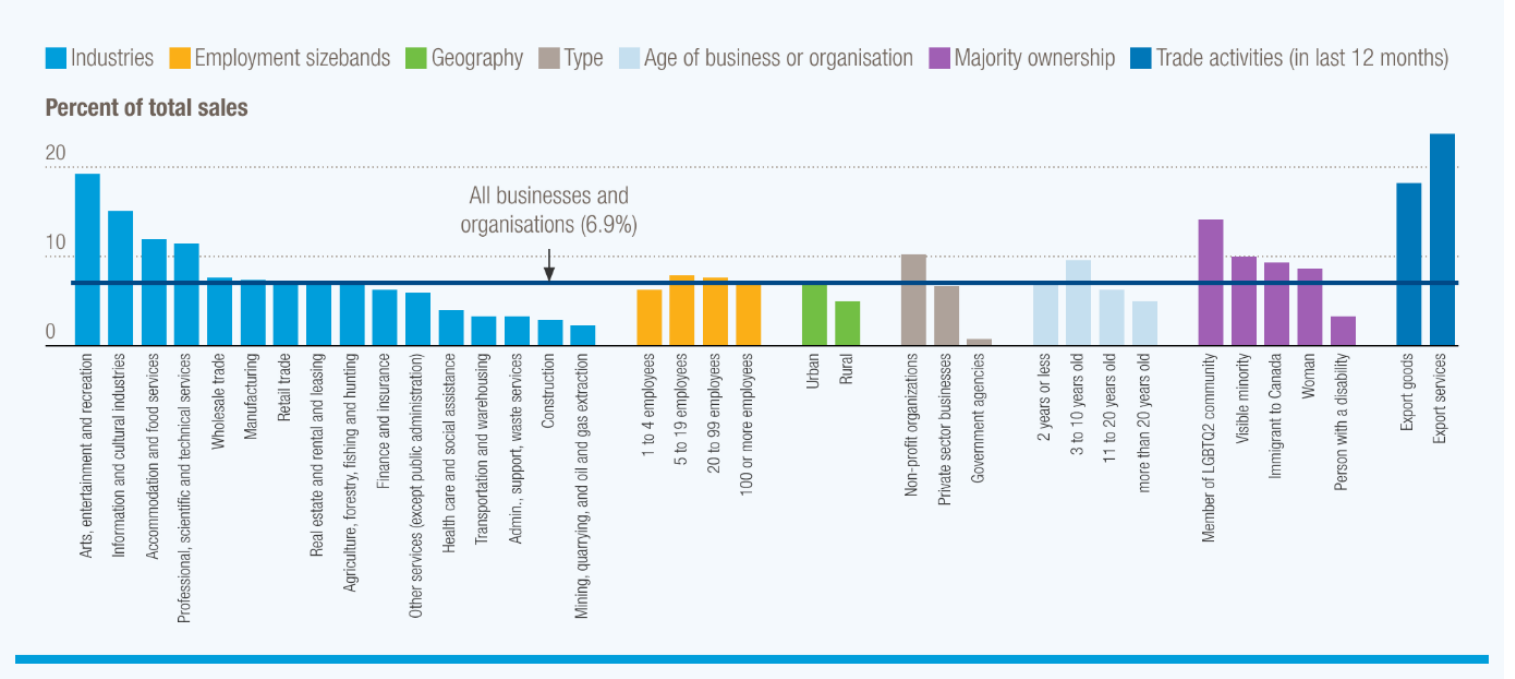
Figure 24. E-commerce sales as a percentage of business turnover, 2024 or latest



Source: UN Trade and Development E-commerce value database (https://unctadstat.unctad.org/datacentre/dataviewer/US.ECommerceTotal), based on Eurostat digital economy and society database and national sources.
Note: The economic activities and firm sizes represented vary across economies. See source for details.

10.20 A further business-based reference variable is the number of enterprises in a given industry, firm-size class or economy. Relating e-commerce sales or purchases to the total enterprise population gives an indication of average e-commerce value per enterprise in the relevant group, and can be useful where differences in aggregate values partly reflect differences in the number of firms covered. Alternatively, where the number of enterprises making e-commerce sales or purchases is known, e-commerce value can be related only to those enterprises, giving an indication of the average value among firms actually engaging in e-commerce. These two denominators answer different questions and should be clearly distinguished. As with other normalised measures, such indicators should be interpreted as contextual measures rather than as measures of e-commerce intensity unless the business population, e-commerce participation measure and value statistic are well aligned. An example is shown in **Figure 25**, where the percentage of sales by e-commerce is compared across firms in Canada of different industries, sizes, and other characteristics.

Figure 25. E-commerce: average percentage of total sales, by various business categorisations Canada, 2024



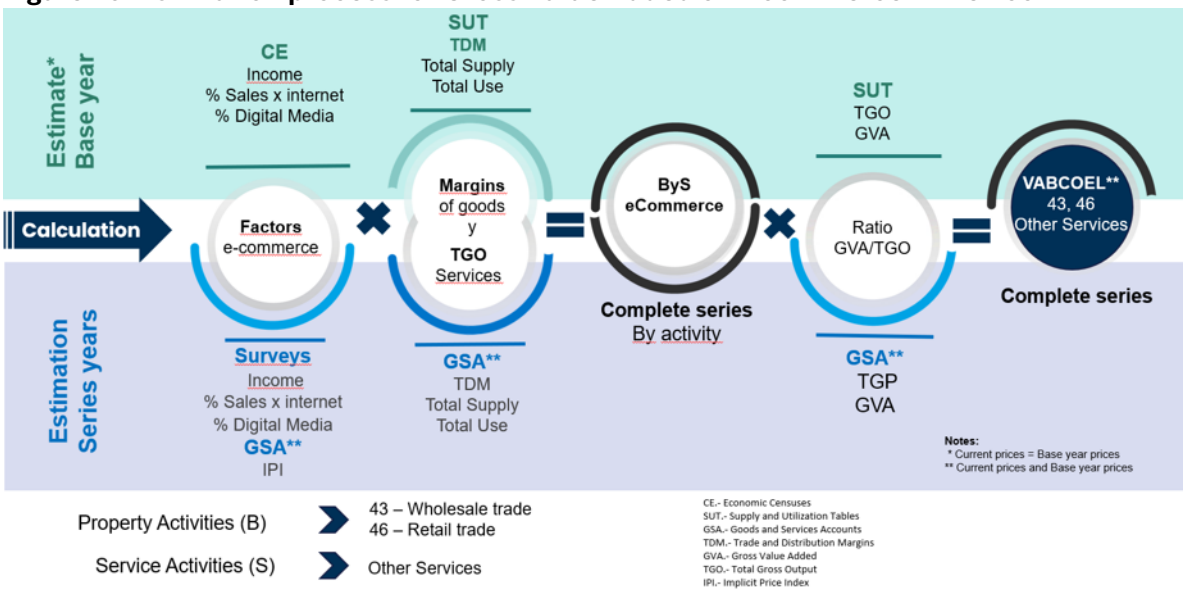
Source: UN Trade and Development based on Statistics Canada, Canadian Survey on Business Conditions, first quarter of 2025 (https://www150.statcan.gc.ca/t1/tbl1/en/tv.action?pid=3310092501&pickMembers%5B0%5D=3.13)
Note: Employment includes all employees who would receive a Statement of Remuneration Paid (T4). Business owners, contract workers and other personnel who would not receive a T4 are excluded.
Majority ownership is defined at 51% or more and self-reported for private sector businesses only. The term LGBTQ2 refers to persons who identify as "lesbian, gay, bisexual, transgender, queer or two-spirited".
Respondents were asked if the business or organization identified as being majority owned (51% or more) by any visible minority, with reference to the following identities: Arab, Black, Chinese, Filipino, Japanese, Korean, Latin American, South Asian, Southeast Asian, West Asian or from another visible minority.

10.21 To assess the economic scale of e-commerce, it may be considered to express e-commerce sales or purchases, as a share of GDP, business-sector value added, or the value added of a given industry or other group. Such comparisons can be informative, but should be interpreted with care because GDP and value added are net measures of production, whereas e-commerce sales and purchases are turnover-based measures. The same product, or its component inputs, may be digitally ordered multiple times along a supply chain before reaching the final customer. Ratios of e-commerce turnover to GDP or value added may provide contextual indicators of scale, but they should not be interpreted as measuring the contribution of e-commerce to those aggregates. Such a contribution can be estimated only through a value-added measure constructed on a basis consistent with national accounts, as illustrated in **Box 10**.

Box 10. Measuring Gross Value Added of E-Commerce (VABCOEL) in Mexico

In 2018, Mexico's statistical office (INEGI) published Gross Value Added of Electronic Commerce (GVA of E-commerce), known as "VABCOCEL", as a digital economy indicator. Its purpose is to help understand the economic role of e-commerce, including its contribution to GDP, employment and economic development. **Figure 26** depicts the estimation process.

Figure 26. Estimation process for Gross Value Added of E-commerce in Mexico

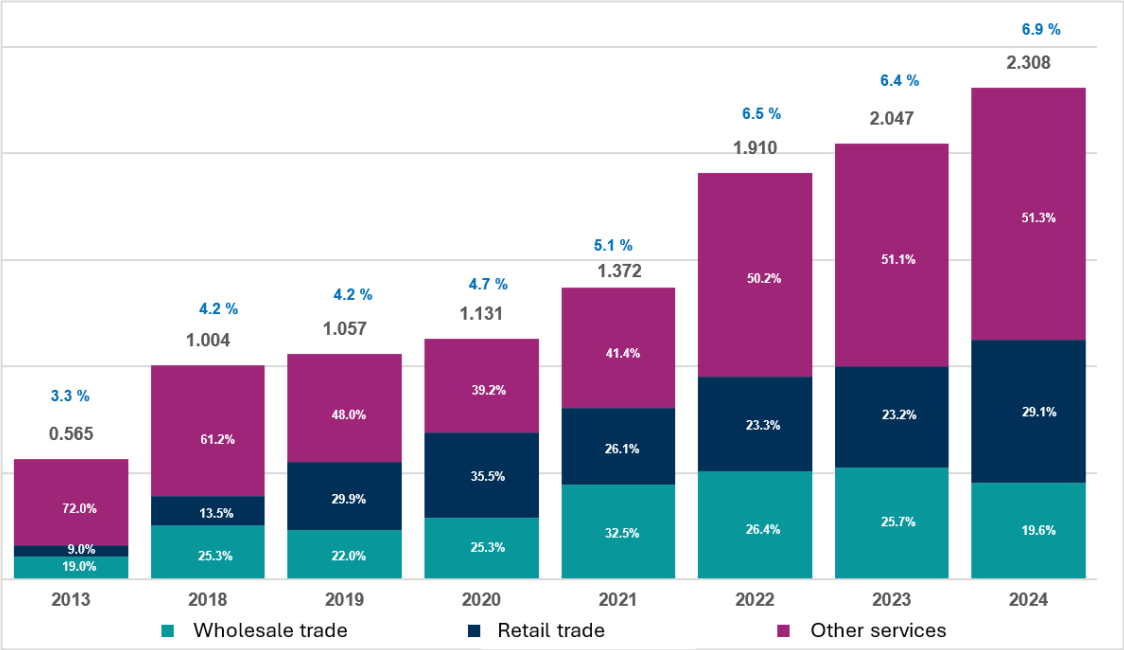


The VABCOEL measure covers retail and wholesale trade margins, along with "other services" including financial and non-financial services, as well as services associated with agriculture, mining and construction, among others. It covers all e-commerce channels according to the OECD (2011; 2025) definition, although orders placed by email or through online message conversations are also included.

Results show that e-commerce accounted for seven per cent of Mexico's GDP in 2024 and had grown almost 2.5 times faster than GDP in current prices. This increases to almost six times faster when assessed in constant prices (base year: 2018). Online wholesale and retail sales generated only a minority of e-commerce value added between 2013-2024 (**Figure 27**).

In 2024, the results reflect the behaviour of Internet commerce in the economy, with a considerable increase in the use of services through B2C transactions. The increase in the share of Retail Trade is a consequence of the increase in purchases made by users through social networks and instant messaging.

Figure 27. Gross value added of e-commerce in Mexico, by contributor, 2013-2024
Trillions of pesos (in current prices), contribution to GDP and percentage structure



Source: INEGI. Value Added of Electronic Commerce (VABCOEL), 2013 TO 2024.
Note: The sum of the percentages may not match the totals due to rounding.
"Other services" refers to service activities that made sales electronically, other than wholesale and retail trade.
Source: INEGI. Value Added of Electronic Commerce (VABCOEL), 2013 TO 2024

Source: INEGI. Value Added of Electronic Commerce (VABCOEL), 2013 TO 2024 (https://www.inegi.org.mx/app/tabulados/default.aspx?in=3&opc=p&pr=35&tp=20&vr=1&wr=1&). Results can be consulted at: https://www.inegi.org.mx/programas/vabcoel/2018/ and https://www.inegi.org.mx/temas/vabcoel/

10.22 E-commerce value can also be related to labour measures, such as employment in a given industry, firm-size class or economy. This may provide some context on the scale of digitally ordered activity relative to the workforce associated with the relevant group. However, such ratios should be interpreted carefully. Unless the number of workers directly engaged in e-commerce activities can be identified - which itself requires clear criteria for what it means to work "in e-commerce" - e-commerce turnover per employee should not be treated as a measure of the labour intensity or productivity of e-commerce itself.

10.23 For international e-commerce, expressing digitally ordered exports or imports relative to total exports or imports of goods and services provides a relevant measure of digitally ordered trade intensity. This comparison is more direct than ratios to GDP or value added because, like e-commerce value measures, trade statistics are also based on gross transaction values rather than value added. Where e-commerce figures distinguish goods and services, digitally ordered trade intensity can be calculated separately for merchandise trade, services trade, and total trade in goods and services, as promoted in the Manual on Principal Indicators for Business and Trade Statistics (UNSD, 2026).

10.24 Comparisons with population measures should be used with particular caution. While e-commerce value per capita may appear to offer a simple indicator of scale, total e-commerce includes B2B transactions, which are a large component (often the majority) of e-commerce

value. As such, the conceptual link between total e-commerce turnover and the resident population is weak. Population-based ratios may be more meaningful when restricted to B2C e-commerce, especially where sales to non-resident consumers can be excluded, and where the population denominator is chosen to reflect the relevant consumer base, such as adults or persons above a specified age threshold.

10.25 Overall, no single reference variable can fully characterise the scale or importance of e-commerce. The appropriate denominator depends on the analytical question, the scope of the e-commerce statistic, and the comparability of the reference total. Compilers should therefore present normalised indicators with clear explanations of what they measure, what they do not measure, and any limitations arising from differences in coverage, valuation or statistical concept.

10.2 Dissemination in international statistical databases

10.26 Databases maintained by international organisations support comparisons and analyses across economies and so are a key avenue for the dissemination of e-commerce value statistics. By bringing national figures together in a common dissemination environment, such databases make it easier for users to compare levels, trends and breakdowns across economies, identify differences in e-commerce development, and assess how national patterns relate to regional or global developments.

10.27 International databases can also support transparency and harmonisation by presenting national data together with comparable metadata. This is important because published e-commerce value statistics differ across economies in terms of the e-commerce definition applied, the population covered, valuation practices, survey thresholds, available breakdowns and reference periods. International dissemination therefore not only collates available figures but also documents methodological features and comparability limitations affecting their interpretation.

10.28 However, international databases depend on the availability, quality and clarity of national data. National statistical offices and other competent agencies should therefore consider international organisations in their dissemination strategy, with a view to providing e-commerce value statistics in formats that allow international organisations to ingest, verify and further disseminate them efficiently. This includes providing machine-readable tables, stable series identifiers, clear metadata, and information on revisions or breaks in series. Where possible, use of international data and metadata exchange standards, such as Statistical Data and Metadata eXchange (SDMX), can support more efficient and consistent transmission of e-commerce value statistics for international dissemination.

10.29 The Eurostat Digital Economy and Society Database includes tables on ICT usage in enterprises covering EU Member States and additional countries participating in the European Statistical System. Separate tables present series on e-commerce value as a percentage of turnover and in euros.

10.30 The OECD database on ICT Access and Usage by Businesses constitutes a key destination for internationally harmonised e-commerce statistics, drawing on the OECD definition and ensuring comparability across countries. It incorporates relevant figures collected by Eurostat along with additional submissions to cover the OECD membership, as well as a number of partner countries. The database presents e-commerce sales expressed as a share of

total sales value (turnover) with a breakdown by channel (Internet orders, EDI-type messages) and customer type (households/individuals, enterprises and government).

10.31 The UN Trade and Development E-commerce Database draws upon both these databases as well as statistics published by additional economies to compile tables on the value of e-commerce sales by businesses. The figures are collated from reports, statistical tables and other outputs published by NSOs and other competent bodies. As of 2026, the database includes figures from over 50 developed and developing economies.

10.32 In contrast to an approach based on requesting countries to submit data for inclusion in the database, which can be affected by resource constraints, competing priorities and limited awareness of the collection at the country level, the UNCTAD E-commerce Database is developed and maintained through active identification and assessment of e-commerce value statistics published online. This reduces reliance on ad hoc data submissions and allows published national statistics to be incorporated on an ongoing basis.

10.33 At the same time, it requires sustained effort by UN Trade and Development to identify sources of e-commerce value figures, assess their coverage and comparability, develop metadata that correctly contextualise figures across countries, and keep the database up to date over time. This includes both maintaining existing series and continuing to identify and incorporate statistics for additional economies where relevant figures exist and are appropriate for inclusion, including from sources published in different languages or requiring detailed interpretation.

10.34 According to their availability in the underlying source, e-commerce sales are presented in shares of turnover and monetary values, both US$ and national currency in millions. The latter facilitates compilers in comparing to their published figures.

10.35 E-commerce sales are broken down according to customer (B2C/B2B/B2G) and channel (online marketplaces/other websites and apps/EDI-type. A market dimension distinguishes domestic and international e-commerce sales – where the latter comprises digitally ordered exports. In some cases, further detail on customer markets is available from the source, such as customer country or world region. The table also includes breakdowns by enterprise size and economic activity. **Table 9** presents the structure of this database for reference when designing data collections and outputs.

10.36 For each economy, the availability of any given item depends on the underlying figures as published by the statistical agency. Furthermore, the total on the Economic Activity dimension – labelled “Total (all available)” – depends on the economic activity coverage of the source e-commerce figures, which varies across economies. These differences are carefully detailed in the accompanying metadata, with visualisations to aid understanding of coverage differences across economies.

10.37 The database does not include any figures estimated by UN Trade and Development. However, some figures are calculated, for example by summing published components or applying shares available from the published source data. All such figures are labelled “Derived by UNCTAD”.

10.38 Extensive attention is paid to understanding the underlying sources and reflecting their features in metadata at the cell, economy, dimension, and table levels. Furthermore, the database is accompanied by a metadata file that provides detailed information including

visualisations of data availability, coverage in terms of economic activities and enterprise sizes, details on the mapping of economic activities to ISIC where relevant, explanation of variations in valuation and definitions used, and details of calculations applied.

10.39 The database is used to underpin data insights on e-commerce that are published on the UN Trade and Development Data Hub.

10.40 International databases complement, rather than replace, national dissemination. They increase the visibility and usability of national e-commerce value statistics by making them available in a common environment for cross-country comparison, analysis and reuse. They also help reveal where further harmonisation is needed, by exposing differences in definitions, valuation practices, population coverage, breakdowns and metadata across economies. For this reason, national dissemination and international dissemination should be treated as mutually reinforcing. National statistical offices and other competent agencies should seek to publish e-commerce value statistics in ways that meet domestic user needs while also facilitating their incorporation into international databases. This requires clear metadata, standardised structures and formats, stable series identifiers, transparent revision information and sufficiently detailed breakdowns to support international comparison without obscuring national specificities.

Table 9. UNCTAD E-commerce sales database structure

	Dimensions				
	E-commerce sales	**Market**	**Enterprise size**	**Economic Activity**	**Indicator**
Components	Total	Total	All enterprises	Total (all available)*	- US$ at current prices in millions - National Currency at current prices in millions* - Percentage in total turnover
	- B2C - B2B+G -- B2B -- B2G -- EDI-type sales* - Web sales -- via own websites or apps -- via e-commerce marketplaces	- Domestic - International -- Further detail varies based on partners available from publishing economy	- Micro (0-9 persons employed) - SML (10+ persons employed) -- Small (10-49 persons employed) -- Medium (50-249 persons employed) -- Large (250+ persons employed) - SMEs (10-249 persons employed)	- breakdown according to ISIC Rev.4 (see below). Where source figures do not follow ISIC, they are mapped.	
Comments	* EDI-type sales are treated as a sub-component of B2B+G sales as EDI messages are not an ordering channel used by consumers [5]			* The scope of economic activities represented by this total varies with the coverage of the underlying source figures.	* National currency facilitates compilers in comparing to their published figures

Hierarchy of economic activities
(based on ISIC Rev. 4; the database will be enhanced to accommodate ISIC Rev. 5 as that classification is adopted in source statistics)

Aggregates	**ISIC sections**	**ISIC divisions**
Total (all available)	A. Agriculture, forestry and fishing B. Mining and quarrying C. Manufacturing D-E. Electricity, gas, steam and air conditioning supply; Water supply; sewerage, waste management and remediation activities F. Construction	
G-I. Wholesale and retail trade; repair of motor vehicles and motorcycles; Transportation and storage; Accommodation and food service activities.	G. Wholesale and retail trade; repair of motor vehicles and motorcycles.	G45. Wholesale and retail trade and repair of motor vehicles and motorcycles G46. Wholesale trade, except of motor vehicles and motorcycles G47. Retail trade, except of motor vehicles and motorcycles
	H. Transportation and storage I. Accommodation and food service activities. J. Information and communication K. Financial and insurance activities	
L,N77. Real estate activities; Rental and leasing activities	L. Real estate activities	
M-N. Professional, scientific and technical activities; Administrative and support service activities	M. Professional, scientific and technical activities N. Administrative and support service activities	
P-Q. Education; Human health and social work activities; Arts, entertainment, and recreation; Other service activities	P. Education Q. Human health and social work activities	
R-S. Arts, entertainment and recreation; Other service activities	R. Arts, entertainment and recreation S. Other service activities	
L-N,S951. Real estate activities; Professional, scientific and technical activities; Administrative and support service activities; Repair of computers and communication equipment	L, M, N as above, and S951 Repair of computers and communication equipment	

[5] In the absence of figures for B2B+G sales in total or separately, B2B+G can therefore be calculated as web sales to businesses and government entities (and other organisations, if covered) *plus* EDI-type sales

10.3 Recommendations

10.41 The preceding discussion set out a user-oriented approach to the analysis and dissemination of e-commerce value statistics. It emphasises the need for complementary dissemination products, clear metadata and quality information, reusable data, appropriate confidentiality protection, and consideration of both national and international dissemination needs. The following recommendations draw these points together as practical guidance for statistical organisations compiling and disseminating e-commerce value statistics.

73) The dissemination of e-commerce value statistics should be designed around the needs of different key user groups, using complementary products such as analytical reports, online databases and downloadable data tables. Analytical reports should be used to communicate key findings, visualisations, narratives and interpretation, while databases and tables should provide direct access to the underlying statistical series for reuse and further analysis.

74) Online databases and downloadable tables should be designed with reuse in mind, including stable time series, clear variable labels, consistent classifications, machine-readable formats where feasible, and metadata presented alongside the data. Relevant international guidelines and best practices should be followed, such as those in the Handbook on Management and Organization of National Statistical Systems (United Nations, 2025) and the Generic Statistical Business Process Model (UNECE, 2025).

75) All statistical products on e-commerce value must include sufficient explanatory information to support correct interpretation. This should cover, at minimum, the e-commerce concept used; ordering channels covered; population, statistical units and reference period; valuation basis; available breakdowns; data sources and compilation methods; quality limitations; confidentiality treatment; and any deviations from international guidance.

76) Statistics on other remote online orders, where compiled, must be published separately (i.e. as separate items) from statistics on e-commerce, with clear explanation of both concepts and the relationship between them. It is not recommended to publish a total incorporating other remote online orders alongside the value of e-commerce orders.

77) It is recommended that e-commerce value statistics be published both in monetary values and as shares of enterprise turnover. Where legal frameworks, statistical capacity and disclosure control arrangements permit, controlled access to anonymised or de-identified microdata including e-commerce value variables should also be considered for accredited researchers or approved analytical users.

78) When presenting e-commerce value statistics as ratios or other normalised indicators, compilers should choose denominators suited to the analytical question at hand and as closely aligned as possible with the scope, valuation and statistical unit of the e-commerce measure. Total enterprise turnover is the recommended starting point for comparisons across industries, firm-size classes and economies.

Other denominators, including the number of enterprises, GDP, value added, employment, trade flows or population, should be used with care and accompanied by clear explanation of their interpretation and limitations.

79) It is recommended that national statistical offices and other competent agencies take account of international dissemination needs when designing national outputs. This includes providing machine-readable tables, stable series identifiers, clear metadata, information on revisions or breaks in series, and sufficient detail to support ingestion, verification and re-dissemination by international organisations. Where feasible, international data and metadata exchange standards such as SDMX should be used to support efficient and interoperable transmission.

Annex A: Model survey module on the value of e-commerce sales [and optionally other remote online transactions]

This annex presents a model survey module that can be used to collect data on e-commerce uptake and the value of e-commerce sales.

Its design is based on practices and experiences observed across countries, with the aim of capturing a wide range of details and breakdowns relevant to established user needs. As a result, the model module is considerably longer than a basic e-commerce value module proposed by the OECD (2025). Compilers are therefore recommended to implement the parts most relevant to the needs and priorities of key stakeholders. Periodic (e.g. biennial or triennial) implementation may also be considered to manage respondent burden.

Part 1 establishes whether the business engages in e-commerce sales. Because "e-commerce" is a term that is susceptible to misinterpretation by respondents, it is not used as a guiding frame in the model (though it is mentioned in reference to "e-commerce marketplaces", following wording shown to work in various countries). Instead, the focus is on relevant ordering channels: e-commerce marketplaces and other digital intermediation platforms, other websites or apps, EDI-type system-to-system messages. Optionally, this part can also establish if the respondent makes sales through online message conversations, with the aim of capturing 'Other remote online orders'.

Part 1 also identifies whether the respondent operates a digital intermediation platform, so they can be served additional targeted questions: 1.1a(ii), 2.2a(i), 2.2a(ii), part 5.

Part 2 gathers information on the sales turnover arising from orders received via the channels covered in Part 1 and summarises these into totals representing web sales and total e-commerce sales to facilitate the reporting of breakdowns in the following part.

Part 3 collects web sales by customer (B2C, B2B/G), and of total e-commerce sales broken down into domestic and international sales, with a possible extension to gather information on digitally ordered exports by partner country. A breakdown by product (digitally delivered services, other services, goods) is also collected.

Part 4 focuses on fees paid for sales through e-commerce marketplaces and other digital intermediation platforms and should only be served to respondents that indicated making such sales in Part 1. Two approaches are proposed and it is recommended to carry out cognitive testing with respondents to establish whether one or both should be offered.

Finally, Part 5 can optionally be implemented to ask the operators of digital intermediation platforms to report the gross value of goods and services made through those platforms by third parties.

The below includes various notes to compilers which are not intended to be included for respondents when the survey is implemented. These are presented in blue and surrounded by angle brackets e.g.: < note to compilers >.

Questions targeted at DIP operators are shaded in blue. These should only be presented to respondents that have indicated they fall into this category by answering "yes" to question 1.1a(i).

Optional questions are shaded in grey. This includes questions 1.1x and 2.2x, related to other remote online transactions.

The questionnaire should identify the business unit covered and provide reporting instructions suited to national collection and compilation arrangements, following Sections 7.3 and 8.5.4 of the Guidelines and Recommendations on Measuring the value of e-commerce and related online transactions. Enterprise-level figures should exclude internal sales, with consistent reporting scope, reference period and treatment across total turnover, e-commerce sales and their breakdowns.

Further information on implementation is provided in Chapter 8 of the Guidelines and Recommendations on Measuring the value of e-commerce and related online transactions.

Part 1. Engagement in e-commerce [and other remote online sales activities

Question 1.1	**During <reporting period>, did your enterprise receive orders for goods or services via the following channels?** *Answer according to the channel used by the customer to place the order.* *Payment may or may not be made digitally, and digital payment may be part of the order confirmation process; however, this does not affect which channel should be selected.* *Digital payment does not mean that ordering should be reported under one of these channels if the order was otherwise placed using a channel that is not listed, such as on-premises or by phone.*	
1.1a	**E-commerce marketplaces and other platforms that operate websites or apps used by multiple businesses or producers to receive orders for goods or services** *Includes orders received through platforms mainly used for selling goods (e.g. Alibaba, Amazon, eBay, Shopee), for ordering accommodation, transport, delivery or other physically delivered services (e.g. Airbnb, Booking.com, TaskRabbit, Uber/UberEATS), and for ordering digitally delivered services or digital products (e.g. Coursera, Fiverr, Upwork, app stores such as Apple's App Store and Google Play).* *Includes orders received through shopping or ordering features integrated into social media platforms or messaging apps, such as WhatsApp Cart or TikTok Shop.* *Does not include orders placed or agreed only through message conversations or email where no integrated shopping or ordering feature is used.* *Does not include orders placed using on-premises ordering methods, such as self-service kiosks or QR codes scanned at the seller's premises to access, for example, a product listing, menu, ordering form or payment page.* < Recommended to adjust with examples most relevant to the compiling economy >	☐ Yes ☐ No
1.1a(i)	**Does your enterprise operate an e-commerce marketplace or other platform with websites or apps used by multiple businesses or producers to receive orders for goods or services?** *Include cases where your enterprise earns fees, commissions or other revenue as an agent or intermediary for sales by other businesses or producers. If your enterprise also sells its own goods or services through the same platform as principal alongside third-party sellers, you should still answer "Yes".* < If 1.1a(i) = Yes, present questions 1.1a(ii), 2.2a, 2.2a(i), 2.2a(ii) and Part 5, regardless of the response to 1.1a >	☐ Yes ☐ No
1.1a(ii) [optional]	**IF 1.1a(i) = "yes"** Please provide details of the e-commerce marketplace(s) or other platform(s), operated by your enterprise, with websites or apps used by multiple businesses or producers to receive orders for goods or services. We will use these details to help validate and ensure correct recording of your responses. < This extension is not essential but proposed to aid data validation and consistency checking > < In a computerised form, allow the respondent to add as many rows as they need >	1. Name: _____ Web address: _____ 2. Name: _____ Web address: _____ 3. etc.
1.1b	**Other websites or apps not covered in 1.1a** *Includes orders received through websites or apps used only for your enterprise's own sales, such as an online store or web shop where customers add items to a basket/cart, or an online order form, booking form or reservation system.* *Also includes password-protected customer or partner portals, such as extranets, where customers can place orders, bookings or reservations for your enterprise's goods or services.* *Includes websites or apps created, hosted or technically provided by a third party, where the website or app is presented as your enterprise's own sales channel and is not an e-commerce marketplace or other platform covered in 1.1a.* *Does not include orders received or agreed through manually typed messages, recorded voice messages or recorded video messages sent via messaging apps, social media platforms, email or other communication tools.*	☐ Yes ☐ No

	Does not include orders placed using on-premises ordering methods, such as self-service kiosks or QR codes scanned at the seller's premises to access, for example, a product listing, menu, ordering form or payment page.	
1.1c	**EDI-type system-to-system messages** *Includes orders received using Electronic Data Interchange (EDI) messages. These orders are:* • *sent and received in an agreed or standard format that can be read and processed by business systems;* • *generated by the customer's business, procurement or ERP system and transmitted to your enterprise's business management or ERP system, either directly or through a shared system or EDI service provider;* *Includes automatic system-generated demand-driven orders.* *Examples of EDI standards and formats include EDIFACT and XML-based EDI formats such as UBL and RosettaNet.* *<Recommended to add national or industry-specific examples>* *Does not include orders made by customers through a website, app, online marketplace or other platform where EDI messages are used in the background for order handling or processing. These orders should be included under 1.1a or 1.1b according to the type of ordering interface used by the customer.*	☐ Yes ☐ No
1.1x **[optional]**	**Orders received or agreed through online message conversations** *Includes orders received or agreed through manually typed messages, recorded voice messages or recorded video messages sent via messaging apps, social media platforms, email or other communication tools.* *Does not include orders placed using shopping, ordering or booking features built into a website, app, online marketplace or platform. These orders should be included under 1.1a or 1.1b according to the type of website or app used by the customer.* *Does not include orders placed by live voice or video calls, fax, or on-premises ordering methods such as self-service kiosks or QR codes scanned at the seller's premises to access, for example, a product listing, menu, ordering form or payment page.*	☐ Yes ☐ No
< IF no to all, END or route to questions on reasons for not selling online > < IF yes only to 1.1x, consider asking questions on reasons for not engaging in e-commerce sales > < Examples are available in the OECD and Eurostat model surveys >		

Part 2. Value of e-commerce [and other remote online sales]

Question 2.1	**During <reporting period>, what was your enterprise's total revenue from sales of goods and services?** *Report revenue from sales of goods and services as recorded in your enterprise's accounts for the reporting period, before deducting costs and expenses.* *Revenue should be reported after accounting for any returns, allowances, rebates or discounts, including discounts for early or on-time payment, where these reduce revenue in your accounts.* *Exclude VAT/GST and other taxes collected on behalf of government, where these are not recorded as revenue.* *Where your enterprise acts as an agent or intermediary for sales by other businesses or producers, include only the fees, commissions or other amounts recognised as your enterprise's revenue, not the full value of the underlying goods or services sold by those businesses or producers.*	National currency _____	
2.2	**During <reporting period>, what was the value of sales revenue resulting from orders for goods and services received through the following channels?**	National currency	OR percentage of total revenue from sales of goods and services reported in 2.1
2.2a	**Revenue from orders received through e-commerce marketplaces and other platforms that operate websites or apps used by multiple businesses or producers to receive orders for goods or services** < The clarifications under 1.1a are relevant here and should be replicated when implementing the questionnaire >	_____	_____ %
<u>Operators of e-commerce marketplaces or other platforms with websites or apps used by multiple businesses or producers to receive orders for goods or services</u>: Report under 2.2a only revenue from orders received through marketplaces or platforms operated by **other entities**. Revenue from marketplaces or platforms operated by your enterprise should be reported in 2.2a(i) and 2.2a(ii), where applicable.		< Only present these questions to relevant operators as indicated by answering "Yes" to question 1.1a(i) >	
2.2a(i)	**Revenue recognised from fees, commissions or similar charges for transactions through the marketplace or platform operated by your enterprise, where your enterprise acts as an agent or intermediary for sales by other businesses or producers.** *Does not include the full value of the goods or services sold by those other businesses or producers.* *Does not include revenue from charges for ancillary services, such as warehousing, logistics, delivery or payment processing, even where these are invoiced together with platform fees or commissions. If these services were ordered through one of the channels listed in 2.2, report the revenue under the relevant channel.*	_____	_____ %
2.2a(ii)	**Revenue from sales of your enterprise's own goods or services through the marketplace or platform operated by your enterprise, where your enterprise acts as principal and the full sale is accordingly recognised as your enterprise's own revenue (rather than only a fee or commission).**	_____	_____ %

	Includes revenue from ancillary or other services sold by your enterprise through the marketplace or platform that it operates, including services ordered by sellers through a seller-side interface of that marketplace or platform.		
2.2b	**Revenue from orders received through other websites or apps not covered in 2.2a** < The clarifications under 1.1b are relevant here and should be replicated when implementing the questionnaire > Do not include revenue already reported in 2.2a.	_____	_____ %
2.2c	**Revenue from orders received through EDI-type system-to-system messages** < The clarifications under 1.1c are relevant here and should be replicated when implementing the questionnaire > Do not include revenue already reported in 2.2a or 2.2b.	_____	_____ %
2.2x **[optional]**	**Revenue from orders received or agreed through online message conversations** < The clarifications under 1.1x are relevant here and should be replicated when implementing the questionnaire > Do not include revenue already reported in 2.2a, 2.2b, or 2.2c.	_____	_____ %
	Summary of revenue from website, app and EDI-type orders		
2.2ab	Sales revenue from orders received through websites and apps (2.2a + 2.2b, plus 2.2a(i) and 2.2a(ii) where relevant)	_____	_____ %
2.2c	Sales revenue from orders received through EDI-type messages (reproduced from above)	_____	_____ %
2.2abc	**Total sales revenue from orders received through websites, apps, and EDI-type messages** < = e-commerce > (2.2ab + 2.2c)	_____	_____ **%**
		< In a computerised form, recommended to automatically calculate based on values entered in Part 2 >	

Part 3. Composition of e-commerce sales

Question 3.1	With respect to **sales revenue from orders received through websites and apps shown in 2.2ab [<recommended to replicate the value here>]**: What is the percentage breakdown of this value by type of customer? *If exact percentages are not available, estimates are acceptable.*	
3.1a	Sales to private consumers (i.e. individuals or households), *Commonly referred to as business-to consumer or "B2C" sales*	_____ %
3.1b	Sales to businesses, public sector bodies, or other organisations *Commonly referred to as business-to-business or "B2B" sales. Sales to government bodies, non-profits, and other non-business organisations should be included.*	_____ %
	Total	100%
3.2	With respect to **total sales revenue from orders received through websites, apps, and EDI-type messages shown in 2.2abc [<recommended to replicate the value here>]**: What is the percentage breakdown of this value by customer location? *If exact percentages are not available, estimates are acceptable.*	
3.2a	Customers located in the same country as your enterprise	____ %
3.2b	Customers located outside the country where your enterprise is located (i.e. abroad)	____ %
	TOTAL	100%

< To support the measurement of digital trade, compilers may follow up question 3.2b by asking respondents to identify the main countries where customers abroad are located, for example the top three countries, and the percentage share for each >

3.2b(i)

[optional]

IF 3.2b > 0:

With respect to **sales revenue from orders received from customers abroad, through websites, apps, and EDI-type messages, as referenced in 3.2b [<recommended to replicate the percentage here>]:**

Please indicate the countries accounting for the largest shares your sales to customers abroad via orders received through websites, apps, and EDI-type messages.

If exact percentages are not available, estimates are acceptable.

Country where customers abroad are located	**Percentage share**
1. _____ < In a computerised form, a searchable drop-down list is recommended to aid coding of responses >	_____ %
2. _____	_____ %
3. _____	_____ %
Other countries	_____ % < In a computerised form, auto-calculate >

	Total	**100%**
	< Optional extension: in a computerised form, allow respondents to add more countries if they wish >	

3.3	With respect to **total sales revenue from orders received through websites, apps, and EDI-type messages shown in question 2.2abc [<recommended to replicate the value here>]**: What is the percentage breakdown of this value by type of goods or services sold? *If exact percentages are not available, estimates are acceptable.*	
3.3a	Goods or services delivered digitally over the Internet or other computer networks*	____ %
3.3b	Other services (services not digitally delivered)	____ %
3.3c	Physical goods	____ %
	TOTAL	100%
<To address policy, business and analytical needs, compilers may follow up question 3.3 by asking respondents to identify the main goods or services sold under each category and their percentage shares. The Central Product Classification (CPC) can provide a standard list of goods and services for this purpose, which can be offered to respondents in a searchable form.>		

*Note to compilers: Although goods cannot be digitally delivered under the framework for measuring digital trade (IMF, OECD, UNCTAD, and WTO, 2023), this wording is recommended to reduce the risk that respondents under-report sales of digitally delivered products because they perceive them as goods rather than services.

Part 4. Fees paid for sales through e-commerce marketplaces and other digital intermediation platforms

For enterprises that answered "Yes" to question 1.1a because they received orders through e-commerce marketplaces or other platforms that operate websites or apps used by multiple businesses or producers to receive orders for goods or services

< Present this question only to respondents answering "Yes" to question 1.1a >

Question 4.1	**During <reporting period>, what fees did your enterprise pay for using e-commerce marketplaces or other platforms to receive orders for goods or services?** *Refers to marketplaces and other platforms that operate websites or apps used by multiple businesses or producers to receive orders for goods or services.* *Does not include fees or charges for ancillary services, such as warehousing, logistics, delivery or payment processing, even where these are invoiced together with platform fees or commissions.* *If exact values or percentages are not available, estimates are acceptable.*	National currency _____ OR Average platform fee rate (percentage of sales value through these marketplaces or platforms) _____ %

Alternative formulation: Platform-by-platform reporting

< As platform fees are likely to vary across marketplaces and platforms, respondents may find it difficult to calculate a single average fee rate across all platforms. Because most sellers are likely to use only a small number of such platforms, platform-by-platform reporting may be easier, especially where business records are separated by platform.>

[Question 4.1 (alt)]

For enterprises that answered "Yes" to question 1.1a because they received orders through e-commerce marketplaces or other platforms that operate websites or apps used by multiple businesses or producers to receive orders for goods or services

Please list the e-commerce marketplaces or other platforms through which your enterprise received orders during <reporting period>.
Refers to marketplaces and other platforms that operate websites or apps used by multiple businesses or producers to receive orders for goods or services.

For each marketplace or platform, provide its share in the revenue reported in question 2.2a [<recommended to replicate the value here>] and either the fees paid in national currency or the average platform fee rate that your enterprise pays for using that marketplace or platform to receive orders.

These fees are often referred to as platform, matching or intermediation fees, commissions or similar charges.

Does not include fees or charges for ancillary services, such as warehousing, logistics, delivery or payment processing, even where these are invoiced together with platform fees or commissions.

If exact values or percentages are not available, estimates are acceptable.

Marketplace or platform	**Share of your enterprise's revenue from orders through e-commerce marketplaces or other platforms reported in 2.2a**	**Fees paid** National currency	**OR average platform fee rate** Percentage of sales value through the marketplace or platform
1. _____	_____ %	_____	_____ %
2. _____	_____ %	_____	_____ %
3. _____	_____ %	_____	_____ %
< In a computerised form, allow the respondent to add as many rows as needed.>			

Part 5. Gross value of third-party sales through e-commerce marketplaces or other platforms operated by your enterprise [optional]

[Question 5.1]

For enterprises that answered "Yes" to question 1.1a(i) because they operate an e-commerce marketplace or other platform with websites or apps used by multiple businesses or producers to receive orders for goods or services:

< Present this question only to respondents answering "Yes" to question 1.1a(i) >

During <reporting period>, what was the total gross value of goods and services sold by third-party sellers through the e-commerce marketplace(s) or other platform(s) operated by your enterprise?

Report the gross value of sales made by third-party sellers before deducting platform fees, commissions or similar charges. This value may be referred to as gross merchandise value, gross transaction value or another similar measure in your enterprise's records.

Do not include third-party sales where the order was placed or agreed only through message conversations, email or other communication tools, rather than through an integrated shopping or ordering feature of the marketplace or platform.

Do not include sales of your enterprise's own goods or services through the marketplace or platform; these should be reported under question 2.2a(ii), where applicable.

If available, please also provide an approximate split of the total gross value between goods and services.

Total gross value of goods and services sold by third-party sellers through the marketplace(s) or other platform(s) operated by your enterprise	National currency _____
Percentage share of the total gross value from sales of goods *Often referred to as gross merchandise value where goods are sold through the marketplace or platform.*	_____ %
Percentage share of the total gross value from sales of services *Often referred to as gross transaction value where services are sold through the marketplace or platform.*	_____ %
Total	**100%**

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