Non-paper
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Items 3, 4, 5 and 6 of the provisional agenda

Issues note on measuring e-commerce and the digital economy

Summary

This non-paper provides background information on the substantive agenda items that will be discussed at the fifth meeting of the Working Group on Measuring E-commerce and the Digital Economy. This document informs on current issues and progress made by international organizations and recommends possible actions that could be taken by the Working Group to advance work on these issues. Delegates to the Working Group are encouraged to share their experiences under any of the agenda items through written contributions (to be made available as received) and brief oral interventions. Delegates may also wish to make proposals for topics to be included in the agenda of the next meeting of the Working Group in December 2025.

Issues note on measuring e-commerce and the digital economy

I. Introduction

1. The Intergovernmental Group of Experts (IGE) on E-commerce and the Digital Economy, during its seventh session in May 2024, acknowledged the summary of the Chair of the fourth meeting of the Working Group (WG) on Measuring E-commerce and the Digital Economy, and agreed on the following topics for the fifth meeting[1]:

a) Progress in measuring work on e-commerce and the digital economy and knowledge resources by relevant international organizations (Item 3 of the Provisional Agenda).
b) Measuring the value of e-commerce (Item 4).
c) Non-survey–based measurement of e-commerce and the digital economy (Item 5).
d) Developing capacities on measuring e-commerce and the digital economy (Item 6).

2. This background document provides an overview of main issues and developments related to these agenda items, as a starting point for discussions. The WG Chair will prepare a summary of the discussions and any eventual recommendations and report to the eighth session of the IGE in May 2025.

3. This Working Group takes place at a pivotal time following the Summit of the Future and its outcomes in September 2024. The Global Digital Compact, which is annexed to the Pact for the Future, recognizes that policies to shape an inclusive and sustainable digital future will depend on a strengthened evidence base of digitalization data and statistics. It explicitly underlines the importance of strengthening the collection and use of data to inform decision-making.[2] It also calls on all stakeholders, where requested, to provide technical assistance to developing countries, in line with national digital transformation policies and priorities.[3] This Working Group is well placed to guide policy and statistical stakeholders on the issues they should explore and the capacity building needed to build the evidence base that will inform digital economy policy for an inclusive and sustainable future.

II. Progress in measuring e-commerce and the digital economy

4. **Agenda item 3** of this WG meeting refers to progress in measuring electronic commerce (e-commerce) and the digital economy by relevant international organizations (see Provisional Agenda). It is a standing agenda item intended to ensure that delegates are aware of ongoing activities in relevant international organizations, can explore opportunities for synergies and avoid unnecessary duplication of efforts.

5. Since the fourth meeting of the WG, UN Trade and Development (UNCTAD) has continued its work in developing the evidence base related to e-commerce and the digital economy. An UNCTAD technical note entitled “Business e-commerce sales and the role of online platforms” published in June 2024 built on previous efforts[4] by compiling the latest available statistics on the value of e-commerce sales by businesses covering 43 developed and developing economies.[5] That such statistics are not more widely available, especially among developing economies, as well as differences in the measurement of ecommerce value across economies, underpinned the 2022 decision of this WG to establish a Task Group on Measuring E-commerce Value (TG-eCOM). The TG’s work to develop internationally agreed guidelines and recommendations on measuring e-commerce value has continued in 2024 and will be discussed under agenda item 4 (see section III, below).

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[1] The Report of the IGE containing this action (TD/B/EDE/7/4) is available at https://unctad.org/system/files/official-document/tdb_ede7d4_en.pdf

[2] Global Digital Compact, para 21c.

[3] Global Digital Compact, para 21d.

[4] https://unctad.org/publication/measuring-value-e-commerce

[5] https://unctad.org/publication/business-e-commerce-sales-and-role-online-platforms

6. During 2024 UNCTAD continued with the processing of the data on ICT use by businesses and the ICT sector that was collected through an online questionnaire in the second half of 2023. Unfortunately, the response rate from developing countries remains low: 14 developing economies provided data on ICT usage indicators compared to available data from 36 and 12 countries reporting to Eurostat and OECD, respectively. With regard to the ICT sector, 11 developing economies reported data compared to 30 from Eurostat and 4 from OECD. The related digital economy tables in the UNCTAD statistical portal (UNCTADstat) were updated this year,[6] and the UNCTAD Secretariat hopes that the next online data collection, which is planned for the summer of 2025, will elicit a larger number of responses from developing countries. Experts in this Working Group are encouraged to inform the Secretariat if they have statistics on the core indicators on business use of ICT and on the ICT sector that could be included in the UNCTAD digital economy tables.

7. The UNCTADstat tables on trade in ICT goods are compiled from the UN Commodity Trade Statistics Database (UN Comtrade), while the tables on trade of ICT services and digitally-deliverable services are compiled from World Trade Organization (WTO) statistics on trade in services.[7] The trade tables are updated yearly and reflect good availability across the board. In this context, UNCTADstat was also revamped to feature "Data insights" on the digital economy.[8]

8. The measurement of digital trade received increased attention in 2024. In addition, the second edition of the Handbook on Measuring Digital Trade,[9] which was also presented to this Working Group in 2023, was disseminated through several regional workshops organized by the co-authors International Monetary Fund (IMF), the Organisation for Economic Cooperation and Development (OECD), UNCTAD and the WTO, including contributions from national experts: Tanzania in April, Georgia in May, China in June (also with the UN Statistical Division), Mauritius in July, Indonesia in October (also with the UN Statistical Division), and the United Arab Emirates in November. The Handbook has been widely appreciated by countries and regional organizations as a valuable reference to better understand the statistical implications of digital trade, provide clarity within countries and comparability between countries, eventually improve the availability of statistics on digital trade from developing countries, and support policy making in this area. A major milestone for the collaborative work on digital trade was the endorsement by the UN Statistical Commission of the Handbook at its 55th session in early 2024.

9. The UNCTAD *Digital Economy Report 2024*[10] launched in July 2024 looked at the environmental impact of digitalization, and in that context examined the limits of available official statistics on electronic waste (e-waste) and other digitalization-related waste, regarding both domestic waste management and the transboundary flows of waste. This hampers the ability of policy makers to analyze the environmental implications of digitalization, reduce risks and leverage economic opportunities from electronic material. The report also provided updated information on the value of domestic and international e-commerce, based on data from 43 developed and developing countries.

10. Eurostat continues to implement its annual business survey, updating e-commerce and digital economy indicators in its database. In 2024, the model questionnaire for the Eurostat survey asked about access to and use of the Internet, e-commerce sales, ICT specialists and skills, ICT security, and artificial intelligence (AI). Over time, the Eurostat survey on ICT usage in enterprises has extended its scope from e-commerce and internet access to cover also emerging issues relevant to European policy directives, as in the case of AI for 2024. The OECD Working Party on Digital Economics, Measurement and Analysis (WPDEMA) meets regularly to discuss ongoing methodological issues that often results in guidance also useful for the wider community of developing countries. Areas of recent discussion are the measurement of the Internet of Things and of use of AI. In addition, in the near future, the OECD will be updating its e-commerce definition and ICT sector definition, as well as developing preliminary estimates of digital trade for a sample of large economies. In this context, OECD and UNCTAD are collaborating on the issue of measuring e-commerce (see section III, below). The OECD regular data collection feeds the ICT Access and Usage database, which in turn provides a key input to the OECD Digital Economy Outlook 2024, Volumes 1 and 2, that were published in May and November 2024, respectively.[11]

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[6] https://unctadstat.unctad.org/datacentre/

[7] Data on annual trade in commercial services is available through the WTO Stats Portal https://stats.wto.org/. Jointly produced with UNCTAD, it includes exports and imports of commercial services broken down by sector and partner country when available. The data is sourced from the IMF, Eurostat, OECD and national sources.

[8] https://unctadstat.unctad.org/insights/theme/36

[9] https://unctad.org/publication/handbook-measuring-digital-trade

[10] https://unctad.org/publication/digital-economy-report-2024

[11] See https://www.oecd.org/en/publications.html

11. In November 2024, the International Labour Organization launched a Working Group to develop statistical standards concerning digital platform work and employment.[12] Recognizing that digital labour platforms have grown exponentially as a new form of work over the past decade, the ILO will discuss setting standards for digital platform work and employment at the 2025 and 2026 International Labour Conference. The Working Group will aim to propose guidelines for a definition and boundaries for digital platform work and employment, linkages to economic units and other statistical frameworks, an activity-based classification, and tools and recommendations for data collection, among other things. The Working Group will also consider possible digital employment work and employment indicators. Eventually, this work will contribute to the recently launched ILO Observatory on Artificial Intelligence and Work in the Digital Economy.[13]

12. The International Telecommunication Union (ITU) held its Expert Group on ICT Household Indicators (EGH) in September 2024 and discussed the review of the ITU's ICT Development Index (IDI) jointly with its Expert Group on Telecommunication/ICT Indicators (EGTI).[14] The EGH also discussed the measurement of ICT skills in household surveys and updated its list of skills indicators, recommending that countries report overall ICT skill levels for individuals and recognizing that ICT skills will continue to evolve and will need to be revisited eventually. Looking forward, the EGH will work on a number of items that are complementary to the measurement of the digital economy, namely, to establish a subgroup on measuring the use of AI through household surveys, continue working jointly with the EGT on the IDI, continue discussions on measuring e-waste, and open new discussions on measuring ICT skills. The EGTI meeting discussed the development of new indicators that could help measure the environmental footprint of key players in the ICT sector, such as greenhouse gas emissions that would be reported by national telecommunication regulators, based on a recent study by ITU and the World Bank.[15]

13. The ITU is also, along with UNCTAD and the UN Department of Economic and Social Affairs (UNDESA), part of the Steering Committee of the Partnership on Measuring ICT for Development. The Partnership is composed of 14 international organizations that coordinate to improve the availability and quality of ICT data and indicators, particularly in developing countries.[16] In March 2024, the Partnership provided a report on progress in ICT statistics to the 55th session of the UN Statistical Commission[17] that concluded that the rapid evolution of ICT and the increased complexity of their impacts on development are outpacing the capacity of national statistical systems and limit the availability of ICT statistics in developing countries. The international and donor communities were encouraged to increase their support for capacity-building of producers of official ICT statistics, and for funding the implementation of surveys and the exploration of non-survey-based sources of data.

14. The Partnership marked its 20th anniversary in 2024 through a series of events that took stock of progress made in statistical methodology development and ICT data availability over the past two decades. It also considered new areas of ICT measurement. At the World Summit of the Information Society (WSIS)+20 High-Level Event 2024[18], at a methodological workshop and debate hosted by the Regional Center for Studies on the Development of the Information Society (Cetic.br) in Brazil[19], and at the World Telecommunication/ICT Indicators Symposium (WTIS)[20], participants noted the importance of ICT indicators to monitor progress in the 2030 Agenda for Sustainable Development, the need to develop statistics in new areas (digital health, digital platform employment or the environmental impact of digitalization), and to explore new data sources in national statistical systems. The Partnership's original objective of improving the quality and availability of ICT indicators remains relevant, but must

[12] The establishment of the Working Group reflects the decision at the 21st International Conference of Labour Statisticians (ICLS) to develop statistical standards to better guide data collection and improve the coverage, quality, and harmonization of statistics in this area.

[13] https://www.ilo.org/artificial-intelligence-and-work-digital-economy

[14] See https://www.itu.int/itu-d/meetings/egh2024/

[15] These could complete the picture of available statistics on the environmental impact of the digital economy, as noted in the UNCTAD Digital Economy Report 2024.

[16] https://www.itu.int/en/ITU-D/Statistics/Pages/intlcoop/partnership/default.aspx

[17] https://unstats.un.org/UNSDWebsite/statcom/session_55/documents/2024-29-ICT-E.pdf

[18] https://www.itu.int/net4/wsis/forum/2024/Agenda/Session/158

[19] https://workshop.metodologia.cetic.br/

[20] https://www.itu.int/itu-d/meetings/wtis24/programme/interactive-programme/#close

also adapt to new services, new technologies, and the fact that digitalization is now ubiquitous in social and economic domains. Linking ICT statistics producers and policymakers is also an ongoing effort.[21]

15. Regarding e-waste statistics, the United Nations Institute for Training and Research (UNITAR) conducted a consultation on the third edition of the *E-waste Statistics* guidelines that included inputs from countries, international organization, and business.[22] The new edition will reflect changes since 2018 in the classifications of electric and electronic equipment under the Basel Convention and their correlation to the Harmonized System (HS) classification used in trade statistics, new approaches to measure transboundary e-waste flows, and updated technical parameters of electronic and electronic equipment. UNITAR reports that the number of countries compiling and legislating e-waste statistics at the national level continues to increase, at a pace that now allows for benchmarking with other countries, compilation by international organizations, and calculation of global averages. Data on e-waste collection and recycling is produced in 86 countries by national statistical offices, environmental protection agencies, ministries of environment, producer compliance schemes, or academia. Measuring e-waste through household surveys is also a future item of work for the ITU Expert Group on Household indicators. As a result of collaboration on e-waste statistics by ITU and UNITAR, the fourth edition of the Global E-waste Monitor was issued in March 2024, showing the latest global e-waste data, statistics, and progress in policy and regulation.[23] UNCTAD's Digital Economy Report 2024 also benefited from collaboration with UNITAR on the issue of digitalization-related waste.

16. Under the UN Statistical Commission (UNSC), the Committee of Experts on Business and Trade Statistics (CEBTS)[24] has started work to integrate business and trade statistics with digitalization. In addition, its Task Team on Globalization and Digitalization decided in 2024 to become the Task Team on Digitalization (TTD) and is due to update its terms of reference to reflect its shift in focus. While in 2023 the TTD had agreed to work on measuring e-commerce and its impact, building on the work being conducted by UNCTAD and the OECD, in 2024 it decided to focus on measuring the adoption and investment in automation technology. Instead, the TTD will contribute to the measurement of e-commerce through the TG-eCOM to avoid duplication of efforts. Following this change, a sub-group of the TTD launched in February 2024 has so far drafted a background note with an overview of international and private sector AI and related national data collection. The TTD plans to further its work to provide measurement guidance related to selected technologies that make up Industry 4.0, such as AI and robotics.

17. As noted above, the work of international organizations and national statistical systems to measure e-commerce and the digital economy has gained a renewed sense of urgency in the context of the Summit of the Future in 2024 and its outcomes, including the Global Digital Compact.[25] The Summit of the Future recognizes the importance of data for development and, under Objective 4, countries commit to increase financing for data and statistics from all sources and to build capacity in data and related skills, by 2030. In this context, developing countries and their development partners should consider increasing financial support for overall strengthening of national statistical systems to implement business surveys with ICT modules, or stand-alone ICT business surveys, and to build the capacity of countries to tap into non-survey-based sources of data to measure e-commerce and the digital economy.

III. Measuring the value of e-commerce

18. **Agenda item 4** focuses on the work of the Task Group on Measuring E-commerce Value (TG-eCOM) to develop internationally agreed guidelines and recommendations on measuring e-commerce value. A summary of progress since the TG was formed in November 2023 is contained in a separate background paper entitled "Update on activities of the Task Group on Measuring e-commerce value (TG-eCOM)" made available for this meeting.[26] The work of the TG-eCOM gathered speed in 2024 following the August launch of a members-only online platform that

[21] https://cetic.br/en/noticia/especialistas-internacionais-destacam-os-20-anos-da-parceria-para-medicao-das-tic-para-o-desenvolvimento/

[22] The third edition of *E-waste Statistics* guidelines is expected to be issued in 2025.

[23] https://globalewaste.org/

[24] https://unstats.un.org/unsd/business-stat/UNCEBTS.cshtml

[25] https://www.un.org/en/summit-of-the-future

[26] https://unctad.org/system/files/non-official-document/tg-ecom-update-wgecde_2024.pdf

hosts meeting materials and records, as well as an online forum for discussions and tools to enable collaborative work.

19. The TG-eCOM has adopted a continuous process for development of the guidelines and recommendations. Each quarterly meeting facilitates substantive discussion on a given topic bundle from the agreed work plan. Based on points raised during this substantive discussion, the UN Trade and Development Secretariat produces an initial draft of the associated guidelines and recommendations in time for discussion at the following quarterly meeting (alongside discussion of the next topic bundle). As of September 2024, initial drafts cover the introduction, user needs for e-commerce value statistics, industry and institutional sector coverage, and on the valuation of e-commerce transactions and are available for all members to directly edit and comment on via the online platform, drafting the UNCTAD is exploring the development of a website to share information on the TG-eCOM with external stakeholders.

20. In November 2024, a joint OECD-UNCTAD workshop was held back-to-back with the OECD WPDEMA to further discuss the strengths and limitations of the OECD e-commerce definition and supporting guidelines. Experts from WPDEMA and TG-eCOM, as well as invited representatives of e-commerce platforms provided inputs, and the workshop concluded that while the definition is robust and adaptable, it would benefit from clearer guidelines to its application. The OECD will revisit the e-commerce definition and related guidelines in the 2025-2026 biennium.

21. The TG-eCOM welcomes comments on its report and invites donors to consider supporting its work. Countries that have chosen not to participate in the TG-eCOM and would like to contribute their experience in trying to measure e-commerce value or on the policy considerations and needs for measuring e-commerce value, are welcome to contact the UNCTAD secretariat (emeasurement@unctad.org).

IV. Non-survey-based measurement of e-commerce and the digital economy

22. **Agenda item 5** will discuss non-survey-based measurement of e-commerce and the digital economy, which can complement the information produced by traditional business surveys. During this session, experts from tax authorities, central banks, and foreign exchange offices, may present work to evaluate particular aspects of the digital economy, complementing official statistics on ICT access and use, and online sales and purchases, by businesses and individuals.

23. At its second meeting in 2021, the Working Group discussed initiatives leveraging big data to produce or complement official statistics. For example, big data associated with commercial transactions and consumer behaviors can provide valuable insights on e-commerce and the digital economy, to guide policies in these areas. The Working Group noted that national statistical systems need to build capacity in harnessing big data, including by piloting big data collection and analysis exercises, and by instituting cooperation agreements with private data providers. Most importantly, it noted that developing countries will need support in building this capacity and in translating data into robust indicators that are of public value. In this context, national statistical offices may function as trusted data intermediaries, as has been discussed at OECD WPDEMA, and as custodians of big data governance, as in the case of the UN Big Data Regional Hubs in Brazil, China, Rwanda, and the United Arab Emirates.[27] and/or on measuring aspects of e-commerce and the digital economy through tools other than surveys.

24. Experts are encouraged to share experiences in establishing mechanisms to leverage electronic payments data, Customs data, administrative data, private sector data, big data, and other sources to supplement the traditional measurement of e-commerce and the digital economy, highlighting advantages and challenges in this context.

25. In the context of limited data available from business or ICT surveys, during its fourth meeting in 2023, this Working Group was presented with a working paper on the use of digital supply-use tables (DSUTs) that considered the challenges for developing countries that face limitations in the statistics available to compile such DSUTs. In March 2024, the paper was published as an UNCTAD technical note entitled “Applying digital supply-use tables in

[27] https://unstats.un.org/bigdata/regional-hubs.cshtml#uae

developing economies" and is a background document for this meeting.[28] The approach entails a re-allocation of data from within existing SUTs, or adding detail to existing national accounts data, and a gradual approach to start compiling only those components for which there is available data. The work of TG-eCOM will potentially support the compilation of Digital SUTs, since digital ordering is one of the key concepts within the frameworks for Digital SUTs and for digital trade. Eventually, the broader availability of robust and internationally comparable statistics on e-commerce value will also support the availability of statistics that can be used in the context of Digital SUTs. Experts are invited to share their experiences on initial approaches to compiling DSUTs, challenges encountered, solutions and lessons learned, as well as to propose recommendations in making effective use of DSUTs.

V. Developing capacities for measuring the digital economy

26. **Agenda item 6** aims to allow for a targeted discussion on capacity building to measure e-commerce and digital economy. This item will showcase efforts from individual countries and international organizations to develop capacities to measure e-commerce and the digital economy. It will also allow for a discussion of capacity building constraints faced by countries and their technical assistance needs and wants. Experts are encouraged to contribute actively to the discussion.

27. In this context, experts may recall that the Global Digital Compact of the Summit of the Future noted that that safe and secure data systems and capacity are critical for evidence-based policymaking and the delivery of public services, and committed to "increase financing for data and statistics from all sources and enhance efforts to build capacity in data and related skills, as well as responsible data use, particularly in developing countries. We will scale up predictable financing for sustainable development data".[29]

27. In 2022, UNCTAD implemented its Trade-in-Services Information System (TiSSTAT) with the support of the West African Monetary and Economic Union (UEMOA) and carried out related capacity building. The positive experience has led to extending the work to other regions in 2024, with a workshop in collaboration with the UN Economic Commission for Latin America and the Caribbean. The TiSSTAT aims to facilitate the collection and processing of statistics on international trade in services by national statistical offices and other agencies, improving international comparability and reducing response burden.[30] This work also improves the measurement of e-commerce and the digital economy by improving the comprehensiveness of statistics in ICT services, ICT-enabled and digitally-deliverable services. This is particularly important considering the growing importance of services in developing economies.

29. Despite progress in capacity building in measuring trade in services and digital trade, other areas of technical assistance have suffered from constrained resources. No training courses, online or in-person, based on the UNCTAD *Manual for the Production of Statistics on the Digital Economy*, could take place in 2024. The last online course in 2023 will have follow-up technical assistance for a couple developing countries in the Pacific in 2025. In addition, the Manual dating from 2020 is due to be reviewed and updated along with the core indicators contained within. This Working Group may wish to include the revision of the core indicators in the agenda of its next meeting in 2025, and request that member states support methodological development and capacity building in this context.

VI. Conclusions and way forward

30. As per the substantive agenda items, the Working Group may consider conveying the conclusions and recommendations below to the eighth meeting of the IGE on E-commerce and the Digital Economy:

On progress in measuring e-commerce and the digital economy

[28] https://unctad.org/publication/applying-digital-supply-use-tables-developing-economies

[29] https://www.un.org/global-digital-compact/sites/default/files/2024-09/Global%20Digital%20Compact%20-%20English_0.pdf

[30] https://unctad.org/programme/trade-services-statistics-information-system-tisstat

a) Recommend that UNCTAD continue efforts to gradually improve the measurement of e-commerce and the digital economy by engaging with other international organizations and national statistical offices in future meetings of the WG.

On measuring the value of e-commerce

b) Ask UNCTAD to continue coordinating the work of the TG-eCOM to develop statistical guidelines that can be used by developing countries to measure the value of e-commerce, to elicit more country experiences of good practices, challenges, and lessons learned, and to report back on progress at the sixth meeting of the WG.

On non-survey–based measurement of e-commerce and the digital economy

c) Encourage countries to continue exploring the use of non-survey-based sources of data for official statistics on e-commerce and the digital economy, as a complement to statistics resulting from business surveys.

On building capacities for measuring e-commerce and the digital economy

d) Recognize that the availability of survey-based statistics from developing countries needs to be strengthened, and that official statistics should reflect the changing digital economy landscape and commitments of the Summit of the Future and the Global Digital Compact.

e) Call on the donor community to increase support for methodological development, including the updating of the core indicators and the participation of developing countries in related technical meetings, as well as for capacity building, training, and technical assistance, on e-commerce and digital economy statistics that are needed to support policy making.

31. Based on the above, the Working Group may wish to recommend that the IGE endorse the following topics for discussion at the next WG meeting:

- Progress in measuring e-commerce and the digital economy work by relevant international organizations (standing agenda item)
- Measuring the value of e-commerce
- Updating the core indicators on ICT use by business and on the ICT sector
- Developing capacities for measuring the digital economy

32. UNCTAD recognizes that digitalization will shape the future of trade and development[31], and in the aftermath of the Summit of the Future, policy makers from developing countries face a pressing need for relevant and reliable official statistics and data on e-commerce and the digital economy, as well as for support from development partners to build the capacity of their national statistical systems to produce such statistics and data.

[31] https://unctad.org/news/making-e-commerce-and-digital-economy-work-all