



**United Nations Conference
on Trade and Development**

Distr.: General
10 November 2023

Original: English

Trade and Development Board

Intergovernmental Group of Experts on E-Commerce and the Digital Economy

Working Group on Measuring E-commerce and the Digital Economy

Fourth meeting

Geneva, 30 November – 1 December 2023

Items 3, 4, and 5 of the provisional agenda

**Issues note on measuring e-commerce and the
digital economy**

*Background document for the discussions of the fourth meeting of the UNCTAD Working
Group on Measuring E-Commerce and the Digital Economy*

Executive summary

This non-paper provides background information on the substantive agenda items that will be discussed at the fourth meeting of the Working Group on Measuring E-commerce and the Digital Economy. This document informs on current issues, as well as 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 November 2024.

I. Introduction

1. The Intergovernmental Group of Experts (IGE) on E-commerce and the Digital Economy, during its sixth session in May 2023, acknowledged the summary of the Chair of the third meeting of the Working Group (WG) on Measuring E-commerce and the Digital Economy, and agreed on the following topics for the fourth meeting:
 - (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 of the Provisional Agenda).
 - (c) Non-survey-based measurement of e-commerce and the digital economy (Item 5 of the Provisional Agenda).¹
2. This background document provides an overview of the main issues and developments related to these agenda items, as a starting point for discussions. The WG Chair will report a summary of the discussions and any eventual recommendations to the seventh session of the IGE in May 2024. An additional agenda item (6) has also been included to allow for a discussion on capacity building in the area of e-commerce and digital economy measurement.

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

3. 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.
4. Since the third meeting of the WG, UNCTAD has continued its work in developing methodology and technical guidance to measure e-commerce and the digital economy. Following the WG discussion of the non-paper on measuring the value of e-commerce in 2022, UNCTAD published a revised report in April 2023² that will be discussed under agenda item 4 (see section III, below). The report conducts a “stock-take” of the estimates – available from official statistical sources – of the value of e-commerce sales by businesses including cross-border e-commerce. It analyses the definitions and data sources used, as well as other relevant aspects, to serve as a starting point for the development of statistical guidelines. In this context and on request from the WG, UNCTAD coordinated the drafting of terms of reference for a Task Group on measuring the value of e-commerce (TG-eCOM) made up of interested experts. The TG-eCOM should “guide, oversee, and contribute to the development of the necessary measurement standards and guidelines.”
5. In October 2023, UNCTAD published a technical note explaining how the 2022 update of the Harmonized Commodity Description and Coding System (HS 2022) affected the measurement of international trade in ICT goods.³ The resulting recommendations excluded some goods that are expected to reduce the figure for ICT components, which is the largest component of ICT goods trade, but recommended some new inclusions that can be expected to partially offset this negative impact. Changes will appear in the digital economy tables relating to imports and exports of ICT goods in the UNCTAD statistical portal, which are updated every year under the “Digital Economy

¹ The Report of the IGE containing this action (TD/B/EDE/6/4) is available at https://unctad.org/system/files/official-document/tdb_ed6d4_en.pdf

² https://unctad.org/system/files/official-document/dtlecde2023d3_en.pdf

³ https://unctad.org/system/files/official-document/tn_unctad_ict4d20_en.pdf

Tables”.⁴ The statistical portal also contains the tables on the use of ICT by enterprises and on the ICT sector, for which the data collection takes place every two years. The 2023 data collection was carried out through an online questionnaire for the first time, and results will be published in 2024. It is important that experts contact the UNCTAD Secretariat if the latest available data have not yet been submitted for your country.⁵

6. At its last meeting, the WG also considered several draft chapters of the IMF-OECD-UNCTAD-WTO *Handbook on Measuring Digital Trade*.⁶ The Handbook was released in July 2023 and represents a significant step forward in providing compilation guidance based on survey and non-survey sources - proposing a new reporting template and clarifying digital trade concepts. The Handbook also provides the basis for statistical capacity-building on this issue by the four partner organizations. Similarly, the OECD just published a companion handbook on the use of digital Supply-Use Tables (see section IV below). The OECD’s Working Party on Measurement and Analysis of the Digital Economy (WPMADe) meets regularly to discuss ongoing methodological issues that often results in guidance also useful for the wider community of developing countries. One such case is the OECD definition of e-commerce which is a key reference in the UNCTAD *Manual for the Production of Statistics on the Digital Economy*⁷ and the ongoing work on measuring the value of e-commerce . Other areas of continuing discussion are how to best measure the digital intensity of industries or the growth of the ICT sector in real time.
7. In the context of business statistics, Europe has been advancing its measurement framework for digitalization with the understanding that it underpins a general policy directive to make Europe “fit for the digital age”. Currently, Eurostat implements its surveys and updates digital economy indicators annually while continuously revising those indicators to reflect trends (such as the use of data analytics and big data by enterprises). The indicators of the European Digital Economy and Society Index (DESI) are also now available as an online dashboard that strengthens the usefulness of such statistics for policy makers and citizens.⁸ However, Eurostat is also exploring alternative ways to fill data gaps on the value of e-commerce and digital trade, on the demand for ICT specialists and e-skills, and on digitally delivered services. The use of alternative sources such as web scraping or leveraging platform data could potentially help to fill those data gaps while reducing response burden. At the same time, the use of digital supply-use tables (SUTs) and satellite accounts are being experimented with by certain European countries to measure the magnitude of the digital economy.
8. The International Telecommunications Union (ITU) held various meetings in 2023 of its Expert Group on Telecommunication/ICT Indicators (EGTI) and the Expert Group on ICT Household Indicators (EGH), including on the methodological review of its ICT Development Index (IDI).⁹ The EGTI and EGH jointly discussed the measurement of over-the-top (OTT) media services¹⁰ that are increasingly important in the digital economy. From the demand side perspective, the groups recognized the need to still improve data collection when (and if) measuring “individuals using the Internet, by type of activity” through household surveys, especially to shed further light regarding frequency of use that could have an impact on ICT infrastructure (for example, the intensity of VoIP or streaming services can have an impact on broadband availability and quality). From the supply side perspective, legal and technical hurdles (including encryption) make it difficult to identify OTT

⁴ <https://unctadstat.unctad.org/EN/>

⁵ Please write to emeasurement@unctad.org

⁶ <https://doi.org/10.1787/ac99e6d3-en>

⁷ The item is being discussed during the 34th session of the WPMADe on 20 November 2023.

⁸ See <https://digital-decade-desi.digital-strategy.ec.europa.eu/datasets/desi/charts>

⁹ Subject to approval by ITU Member States. See https://www.itu.int/en/ITU-D/Statistics/Documents/IDI/IDI_2023_Version3_1_Oct2023.pdf

¹⁰ OTT = A service provided and delivered over the public Internet without control of the network layer, and access to which is independent of a specific Internet access service.

traffic and thus to collect data from service providers. At the same time, while cross-border OTT services fall under ICT services in international trade statistics, disaggregation is not always available to the level of detail required to identify such services. The ITU experts concluded that improving the demand side data collection was simpler and could be tackled first, including through capacity building, and that the feasibility of supply side data collection could be tackled at a later, undetermined, stage.¹¹

9. The ITU is also, along with UNCTAD and UN Department of Economic and Social Affairs (UN DESA), 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.¹² During 2023, the Partnership focused on raising awareness of the need for increased availability, nuance, and quality of ICT statistics for monitoring international development goals and targets. During the World Summit of the Information Society (WSIS) Forum 2023, the Partnership organized a session that discussed the role of ICT indicators in monitoring progress in the 2030 Agenda for Sustainable Development, the implementation of WSIS action lines, and the assessment of the Global Digital Compact.¹³ In this context, in 2023 the Partnership also provided an input to the UN High-Level Political Forum on Sustainable Development (HLPF)¹⁴ and a written contribution to the online consultation on the Global Digital Compact.¹⁵ The discussions at various fora highlighted not only the continued lack of core ICT indicators from many developing countries, but also the need to innovate based on those core indicators and traditional statistical data collection to better inform future digital policies. The Partnership will report on the progress in ICT statistics to the 55th session of the UN Statistical Commission in early 2024.¹⁶
10. The UN Statistical Commission is following a conscientious path in finding ways to address digitalization in official statistics through the Task Team on Globalization and Digitalization (TTGD) under its UN Committee of Experts on Business and Trade Statistics (UNCEBTS).¹⁷ The TTGD in 2023 agreed on Terms of Reference and a work plan that will focus on 3 actions. First, it will seek to provide practical advice and methodological guidance to measure e-commerce and its impact, building on the work being conducted by UNCTAD and the OECD. Second, it will aim to improve understanding of the structure of large multinational enterprise groups and its impact in globalization and digitalization statistics, to develop recommendations on the feasibility of a global network of Large Cases Units. In this case, the work will be coordinated with the Task Team on Statistical Business Registers. Third, it will outline the current landscape in measuring the adoption of and investment in automation technology and their contribution to firm performance. In the longer term, this assessment could lead to developing new business statistics indicators to better measure artificial intelligence and automation.
11. Measuring the inclusiveness and the enabling environment for digital transformation is one of the aims of the Inclusive Digital Economy Scorecard (IDES) of the UN Capital Development Fund

¹¹ See <https://www.itu.int/itu-d/meetings/statistics/wp-content/uploads/sites/8/2023/09/EGTIEGH-OTT-Indicators-Joint-Subgroup-Report-2023.pdf>

¹² See <https://www.itu.int/en/ITU-D/Statistics/Pages/intlcoop/partnership/default.aspx>

¹³ See <https://www.itu.int/net4/wsis/forum/2023/Agenda/Session/216>

¹⁴ See

<https://hlpf.un.org/sites/default/files/vnrs/2023/HLPF%202023%20Inputs%20Partnership%20Measuring%20ICT%20%20for%20Development.pdf>

¹⁵ See <https://www.un.org/techenvoy/global-digital-compact/submissions>

¹⁶ See <https://unstats.un.org/UNSDWebsite/statcom/>

¹⁷ See <https://unstats.un.org/unsd/business-stat/UNCEBTS.cshtml>. Currently the TTGD includes the national statistical offices of Australia, Austria, Brazil, Canada (Chair), Denmark, France, Indonesia, Mexico, Switzerland, United Kingdom, United States, as well as Eurostat, UNCTAD, the UN Economic Commission for Europe, and the UN Statistical Division.

(UNCDF), which released the 4th edition of its IDES for 25 countries in October 2023.¹⁸ It provides a baseline of indicators related to infrastructure, skills, innovation and policy and regulation, while recognizing the need to revisit the indicators and the methodology regularly since developing countries still need to increase the availability and robustness of statistics of several aspects of the digital economy.

III. Measuring the value of e-commerce

12. In 2022, the WG had discussed an early version of the report *Measuring the Value of E-commerce* published in April 2023.¹⁹ This meeting of the WG will consider the latter version of the document and hear about progress in the establishment of the Task Group on measuring e-commerce value (TG-eCOM) to develop statistical guidelines and recommendations in this area. Selected organizations and member states will present their latest results and developments. Experts are encouraged to share their own experiences during the interactive debate, and their views on the publication *Measuring the Value of E-commerce* submitted to this WG.
13. The document describes the various measures of the value of e-commerce, including cross-border e-commerce, that were available at the time and shows considerable variation in terms of definitions, approaches to e-commerce value, survey questions, data sources, and scope underpinning the statistics. In most economies, there are no official estimates on the value of e-commerce and, where they exist, they are mostly statistics on e-commerce sales, which implies that cross-border e-commerce statistics mainly refer to exports and rarely to imports.
14. The research showed not only the need to increase the availability of e-commerce value statistics, but also to improve their robustness and international comparability. To those ends, the TG-eCOM will develop statistical guidance. In turn, UNCTAD should incorporate these guidelines into its statistical capacity building and articulate for developing country policymakers the link between improved e-commerce value statistics and a better understanding of the contribution of e-commerce to GDP, employment, trade and development.
15. The WG discussions on this item will inform the work of the TG-eCOM to develop statistical guidelines to measure the value of e-commerce. The work of the TG-eCOM is just beginning, and it remains open to further involvement from statisticians that would like to share their experiences and contribute to the guidelines. In particular, guidance will be needed on ensuring the comparability of statistics through clear definitions and metadata: what is included/excluded in e-commerce in practice, what constitutes “money earned”, whether to ask for a range of value or a specific value, etc. Guidance will also be needed regarding the limits of what can be captured through traditional economic statistics, such as the value of domestic e-commerce conducted by the informal sector or over social media.

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

16. Agenda item 5 will discuss non-survey based measurement of e-commerce and the digital economy, with a focus on the use of digital supply-use tables (digital SUTs). Experts will introduce the framework for digital SUTs and set out key steps that member states can take to start implementing

¹⁸ See <https://ides.uncdf.org/>

¹⁹ See https://unctad.org/system/files/official-document/dtlecde2023d3_en.pdf

its principles, with a special focus on developing countries, even in the case where supply-use tables are not available as a starting point.²⁰

17. During the third meeting of the WG in 2022, the use of digital SUTs was discussed in the context of defining the digital economy for statistical purposes. The WG considered the OECD approach that proposes compiling digital SUTs with the aim to improve the visibility of digitalization in economic statistics. In this sense, a framework for the compilation of digital SUTs, through the reallocation of SUT tables, complements and builds upon the measurement of e-commerce and the ICT sector.²¹ Based on this framework, OECD just published a handbook on compiling digital SUTs.²² The Handbook sets out the three dimensions for measuring the digital economy: the nature of the transaction (the “how”), the goods and services produced (the “what”), and the new digital industries (the “who”). It also presents high priority indicators, detailed definitions of the products and industries included in the framework, and templates that can be referenced by developing countries.
18. The non-paper entitled “Using digital Supply-Use Tables in developing economies” submitted for this Working Group also considers the challenges for developing countries that might face limitations in the statistics available as a basis for digital SUTs. The approach entails a re-allocation of data from within existing SUTs, or adding detail to existing national accounts data, and NSOs can start by compiling the components for which they have available information. By making efficient use of limited statistical resources particularly in developing countries, the digital SUTs can inform policy decision makers in the areas of business investment, competition, international trade, labour, skills development, and taxation.
19. Privately held data is increasingly sought to complement official statistics in this area. Ongoing developments in various regional and international fora were discussed during the third meeting of the WG in 2022, and while there has been some progress there is still much work to be done in the medium and long term to develop agreed guidelines or strategies for the use of privately held data for official statistics in all economic areas, including the digital economy.
20. In Europe, which as a region is currently at the forefront of codifying this access to privately held data for public purposes, a political agreement was reached in June 2023 on the European Data Act that had been proposed by the European Commission in February 2022.²³ Also in June, the 71st plenary session of the Conference of European Statisticians (CES) noted that statistical offices could act as a hub for the acquisition by the public sector of privately held data, that data used for public policy should be free of charge, and that it is important to establish trust in collaborating with private sector data providers. The CES decided to continue working on this issue and a Task Team would collect best practices of public-private collaboration that could be used to provide guidance in the future.²⁴ In this context, companies that process digital data as a core activity are major potential data providers by their very nature. For example, data from payment card companies and electronic payment processing firms can support the measurement of digital trade, and since 2019 the Development Data Partnership has been exploring punctual collaboration between international organizations and about forty technology companies including LinkedIn, Meta and Google to facilitate “the efficient and responsible use of third-party data in international development.”²⁵

²⁰ Please see non-paper entitled “Using Digital Supply-Use Tables in developing economies”.

²¹ The framework was developed under the auspices of the OECD’s Informal Advisory Group (IAG) on Measuring GDP in a Digitalised Economy.

²² See <https://www.oecd.org/digital/oecd-handbook-on-compiling-digital-supply-and-use-tables-11a0db02-en.htm>

²³ After formal approval by the European Parliament and the European Council, the Data Act will become applicable 20 months after the entry into force. See https://ec.europa.eu/commission/presscorner/detail/en/ip_23_3491

²⁴ <https://unece.org/sites/default/files/2023-09/2023.06%20CES%20report%20Advance%20copy.pdf>

²⁵ <https://datapartnership.org/>

V. Building capacities for measuring e-commerce and the digital economy

21. The issue of capacity building was raised several times during the discussions of the third meeting of the Working Group in 2022. When discussing the paucity of gender-disaggregated data and statistics related to the digital economy, the UNCTAD secretariat emphasized the importance of capacity building and training in producing such data, and also in using innovative methodologies (such as web scraping) and data sources (big data). International organizations should provide more capacity-building support to developing countries and promote the sharing of good practices among countries. Therefore, an additional agenda item (6) has been included to allow for a targeted discussion on capacity building to measure e-commerce and digital economy. This item will showcase members' efforts to develop capacities to measure e-commerce and the digital economy. It will also allow for a discussion of technical assistance and capacity-building support offered by various international organizations in e-commerce and digital economy measurement. During the interactive debate, experts are encouraged to talk about their capacity-building constraints, needs and wants.

VI. Conclusions and way forward

22. As per the substantive agenda items, the Working Group may consider conveying the conclusions and recommendations below to the IGE.

On progress in measuring e-commerce and the digital economy

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

On measuring the value of e-commerce

- b) Ask UNCTAD to continue coordinating the work of the Task Group on measuring e-commerce (TG-eCOM) with a view to share national experiences, as well as develop measurement standards and statistical guidelines that can be used by developing countries to measure the value of e-commerce, and to report back on progress at the fifth meeting of the WG.

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

- c) Encourage national statistical offices of developing countries to consider applying the digital SUTs framework and sharing the results with the Working Group.
- d) Continue featuring experiences and approaches to using non-survey-based sources of data for official statistics in the discussions of the Working Group, with the aim to disseminate relevant knowledge resources to statisticians in developing countries to help them improve the measurement of e-commerce and the digital economy.

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

- e) Call on the donor community to increase support for methodological development, capacity building, training, and technical assistance, on e-commerce and digital economy statistics that are needed to support policy-making.