Chair’s summary of the second meeting of the Working Group on Measuring E-commerce and the Digital Economy

Summary

In this document, prepared by the Chair of the Working Group on Measuring E-commerce and the Digital Economy, a summarized account is given of discussions held during the second meeting of the Working Group. The meeting was held at the Palais des Nations in Geneva from 3 to 4 May 2021, with physical and remote participation, with the Chair and the UNCTAD secretariat present in the meeting room and all other attendees participating remotely.

The Working Group discussed progress in the measurement of electronic commerce (e-commerce) and the digital economy by international organizations; capacity-building based on the revised UNCTAD Manual for the Production of Statistics on the Digital Economy 2020; and non-survey sources of data on e-commerce and the digital economy. Based on the discussions, the present Chair’s summary proposes possible topics for future meetings of the Working Group for the consideration of and decision by the Intergovernmental Group of Experts on E-commerce and the Digital Economy at its fifth session, to be held from 27 to 29 April 2022.
Chair’s summary

Opening

1. The second meeting of the Working Group on Measuring E-commerce and the Digital Economy was held from 3 to 4 May 2021.

2. At the opening meeting, the Working Group elected the Vice-Director and Head of the Economy Division of the Federal Statistical Office of Switzerland as its Chair.\(^1\) The Director of the National Statistical Office of the Dominican Republic was elected as the Vice-Chair-cum-Rapporteur.\(^2\)

3. The Chair noted that the agenda of the Working Group was pertinent to the upcoming United Nations World Data Forum, to be hosted by Switzerland and held from 3 to 6 October 2021. The Working Group adopted an agenda, as follows:
   1. Election of officers
   2. Adoption of the agenda and organization of work
   3. Progress in measuring e-commerce and digital economy work by relevant international organizations
   4. Next steps in the implementation of the revised UNCTAD Manual for the Production of Statistics on the Digital Economy 2020
   5. The use of non-survey sources of data to supplement the traditional measurement of e-commerce and the digital economy
   6. Topics for future consideration by the Working Group
   7. Adoption of the Chair’s summary.

4. The Working Group agreed that the results of the meeting would be reported to the Intergovernmental Group of Experts on E-commerce and the Digital Economy, in the form of a Chair’s summary to be finalized after the second meeting of the Working Group.

5. The Director of the Division on Technology and Logistics of UNCTAD, in her opening remarks, underlined that the coronavirus disease (COVID-19) pandemic had shown the importance of digital solutions in maintaining social and economic activities, but had also served to underscore the divides in digital readiness. To bridge these divides, countries needed improved statistics on the digital economy for evidence-based policies that could help reap development gains from digital transformation.

Item 3
Progress in measuring e-commerce and digital economy work by relevant international organizations

6. The Working Group on Measuring E-commerce and the Digital Economy reviewed the latest progress in the work of international organizations on measuring e-commerce and the digital economy. The UNCTAD secretariat provided details of new data on international trade from the information and communications technology (ICT) sector and digitally deliverable services; recent analysis by UNCTAD of the impact of the pandemic on e-commerce; and the UNCTAD business-to-consumer index 2020. The latest growth of e-commerce belied the large disparities remaining between countries, regions and companies in the digital economy, with high-income countries dominating in e-commerce.

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\(^1\) Mr. Livio Lugano.
\(^2\) Ms. Miosotis Rivas Peña.
7. One expert detailed the updated going digital toolkit of the Organisation for Economic Co-operation and Development, highlighting the indicators on e-commerce, digital trade and the digital economy and the advances in country coverage. The expert emphasized the recent mapping of digital economy indicators with the Sustainable Development Goals under the 2030 Agenda for Sustainable Development.

8. Another expert provided updates on the revisions made to the International Telecommunication Union Manual for Measuring ICT Access and Use by Households and Individuals in 2020 and the e-commerce indicators recently added therein. The expert encouraged countries to use this manual as reference material in the process of preparing, designing and implementing ICT household surveys.

9. One expert detailed the Organisation for Economic Co-operation and Development, World Trade Organization and International Monetary Fund handbook on measuring digital trade, which had been released in 2020. The handbook had been elaborated by an expert group consisting of members from international organizations, national statistical agencies and central banks. It contained a conceptual framework to define digital trade and a mechanism for sharing existing efforts on measuring digital trade, including a reporting template that mapped various data sources. The handbook provided examples of how to measure transactions from digital intermediation platforms using big data and surveys. Finally, the expert noted World Trade Organization technical assistance on measuring digital trade and, in response to queries from participants, provided further details of such assistance.

10. Another expert discussed recent developments in the enterprise survey on ICT usage and e-commerce of the statistical office of the European Union. The ongoing 2021 survey asked about the use of artificial intelligence, the Internet of things and cloud computing, as well as the impact of the pandemic. Future surveys would extend coverage of ICT security, robotics, ICT and the environment and big data. The expert noted that the model questionnaire of the statistical office of the European Union was featured in the revised UNCTAD manual.

11. One expert highlighted the use of postal trade data by the Universal Postal Union to measure the e-commerce of physically delivered goods. The Universal Postal Union used postal statistics collected annually from over 200 countries and high-frequency data from electronic information exchanges between postal operators about mail items. The expert emphasized that there were still challenges in harmonizing data and extending coverage.

12. The ensuing discussion served to emphasize the benefits that improved measurement of the digital economy could bring in achieving policy goals. For example, one expert indicated that Indonesia, during its tenure of the presidency of the Group of 20 in 2022, would wish to measure digital skills and literacy to determine strategies for how to maximize their potential for countries. One expert highlighted the limited country coverage of many digital economy statistics and emphasized that the least developed countries were challenged by the lack of skills, capacity and measurement infrastructure.

**Item 4**

**Next steps in the implementation of the revised UNCTAD Manual for the Production of Statistics on the Digital Economy 2020**

13. The secretariat, in its presentation to the Working Group on Measuring E-commerce and the Digital Economy of the revised UNCTAD Manual for the Production of Statistics on the Digital Economy 2020, detailed plans to use the manual for capacity-building among entities charged with producing official statistics on e-commerce and the digital economy. E-commerce, trade in digitally delivered services and the use of innovative data sources, such as transactional data and experimental data, were some of the new topics included in
the manual. In addition, there were more developing country examples than in the last edition, attesting to the success of the previous manual and related training.3

14. The secretariat noted that UNCTAD was developing training courses based on the manual under the Train for Trade programme, with a version for face-to-face delivery and a version for distance learning. The manual and training material had originally been developed in English and the aim was to translate them into at least French and Spanish as soon as possible. The manual would be used not only in training courses, but also as a methodological reference for UNCTAD advisory services and for stakeholders in digital economy statistics. For example, it could help support coordination in national statistical systems; be used as a self-assessment tool for data completeness and accuracy; or be used as a checklist in managing statistical processes. The manual complemented other guideline and framework documents of the Partnership on Measuring ICT for Development. The secretariat advised the Working Group of the methodology used for developing online training material under the Train for Trade programme. Some of the main benefits of the programme included an open-source content management system that minimized costs; long-term experience in blended learning solutions in several languages; and the building of networks and communities of practice, notably due to the training of trainers. The training course on measuring e-commerce and the digital economy would be added to the available e-commerce and statistics-related courses on best practices of e-commerce; legal aspects of e-commerce; digital identity for trade and development; and trade in services.

15. In addition, the secretariat noted that UNCTAD intended to leverage partnerships as much as possible to disseminate and translate the manual and to implement related capacity-building. In 2021, UNCTAD planned to launch the Pacific Digital Economy Programme in collaboration with the United Nations Capital Development Fund and the United Nations Development Programme, which would be one of the first instances of the use of the manual for training activities. The objective of the Programme was to support the development of inclusive digital economies in the Pacific. In this context, the secretariat invited delegates at the Working Group to express interest in receiving technical assistance to build capacity in e-commerce and digital economy statistics.

16. The Working Group heard from delegates about experiences with UNCTAD capacity-building in Costa Rica and Kenya. Costa Rica had received technical assistance from UNCTAD on measuring trade in digitally delivered services in 2017. The Central Bank had been able to take the project forward and integrate data collection into its annual statistical offerings and was therefore one of the countries with the most advanced data collection in this sector, covering 2017–2020. For example, Costa Rica could determine the share of services delivered digitally across borders by experts travelling abroad and could also track the growing share of digitally delivered services in the national economy, to identify in greater detail the services involved, as well as the types of enterprises, the number of jobs generated and the contribution of enterprises located in special economic zones. The data fed into the national policymaking process, helping to assess the return on investment and the impact of policies aimed at fostering the development of e-commerce and creating special economic zones. In the context of the COVID-19 pandemic, digitally delivered services conferred much needed resilience to the national economy, at a time when revenues from tourism were significantly affected. The delegate noted that an important lesson from the national perspective was the need to establish a national strategic alliance, including economic and technology-related policymakers, to be able to take advantage of the newly generated data; and that benefits were further derived from widely disseminating data to the business sector and to the public.

17. UNCTAD had assisted the National Bureau of Statistics of Kenya, in collaboration with the Communications Authority of Kenya, to implement its first ICT enterprise and public sector surveys in 2016. This had involved training national data producers in questionnaire design, sampling, data analysis and report writing, which had helped build a

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3 The target audience for the manual was officers from national statistical offices in charge of producing ICT statistics and producers of business statistics, trade statistics, industrial statistics and services statistics, as well as data producers from other agencies in national statistical systems and users of the data.
sound methodological foundation for the production of ICT statistics in Kenya. Other positive outcomes of the exercise included international recognition of the validity and comparability of the data produced and the ability to build further work more easily on the solid foundation that had been laid, while maintaining the flexibility of being able to add national indicators. The delegate noted that further technical support was still needed in the following areas: measurement of e-readiness and e-commerce, both overall and cross-border; measurement of the business side of e-commerce; and training in how to best incorporate non-survey sources of data.

18. The ensuing discussion focused on needs and demands for capacity-building in measuring the digital economy, including the following interventions:

(a) One delegate expressed appreciation to the Economic and Social Commission for Western Asia and UNCTAD for already having been able to benefit from the methodology and guidance in the revised manual, as well as for advice provided on the ICT business survey of the Palestinian national statistical office. The delegate indicated that further support would be needed during the implementation of the survey and in data production;

(b) Another delegate expressed an interest in the measurement of e-commerce and e-services and requested UNCTAD support in taking forward national efforts in the Dominican Republic. The delegate also welcomed the possibility of participating in train-the-trainer initiatives, as well as the sharing of experiences with other countries, such as in regional workshops;

(c) One expert expressed appreciation for the revised manual and methodological guidelines and highlighted the need for further training given the growing importance of the digital economy in national strategies;

(d) One delegate highlighted that the Russian Federation had previously benefited from UNCTAD technical assistance in preparing an ICT business survey and that the Russian Federation had been able to compile and publish data on the impact of digitalization on gross domestic product. Russian Federation data were available free of charge on the website of the national statistical office. The delegate noted that a translation into Russian of the revised manual would be particularly desirable;

(e) Another delegate emphasized the need to improve digital trade data in all of the least developed countries, where capacity was particularly constrained and budgetary resources were limited. Even countries with low levels of digital readiness needed baseline data to craft policies that would help boost e-commerce and the ICT sector, as well as to monitor progress in reducing digital divides. The delegate requested technical assistance in Burundi in implementing the manual, including by establishing a national coordination mechanism to ensure that the benefits of training were maintained and built upon sustainably. In addition, the delegate highlighted that connectivity limitations in the least developed countries should be considered in the provision of online training;

(f) The secretariat encouraged delegations to take advantage of the capacity-building opportunities offered by UNCTAD and invited those interested to submit written requests to the secretariat, highlighting in as much detail as possible priorities and specific needs.

Item 5
The use of non-survey sources of data to supplement the traditional measurement of e-commerce and the digital economy

19. The Working Group on Measuring E-commerce and the Digital Economy discussed the use of non-survey sources of data to measure e-commerce and the digital economy and to supplement traditional data sources, highlighting advantages and challenges. The secretariat opened the session by noting that, despite the significant amounts of data being generated automatically worldwide through electronic transactions, intermediation and media platforms and search engines, much of the data was duplicated and difficult to exploit for statistical purposes. Data also transcended borders and dominant digital
platforms, mainly in the United States of America, were harnessing data from users in developing countries. The exploration of ways to disentangle data flows and try to mine them for meaningful statistics was just beginning.

20. The secretariat noted that isolated data were of limited use, and national statisticians and international organizations therefore needed to find smart ways to compile data in a coordinated fashion, in particular data related to international trade that crossed borders. The digital economy prompted statistical and policy communities to consider new governance models for data, particularly for discrete sets of data that had been agreed as useful to all, for example to help monitor progress towards the achievement of the Sustainable Development Goals. Data governance needed to distinguish between data as a commodity and data as a public good and to ensure the quality, relevance and robustness of such data, as well as preserve trust between data providers, producers and users. In addition, the secretariat noted that traditional statistical production, fed by survey-based data and, to a certain extent, administrative data, needed to be expanded to include new data sources and data compilation techniques.

21. In this regard, one expert detailed the work of the Committee of Experts on Big Data and Data Science for Official Statistics, which had established a global platform for international collaboration in the development of official statistics using new data sources and innovative methods, including in the context of the Sustainable Development Goals monitoring framework. The Committee of Experts had set up task teams on specific issues and was developing training and establishing physical regional hubs. The task teams were open to the broader statistical community and the United Nations Statistics Division welcomed interest from developing countries in particular. Areas covered by the task teams included mobile telephone data, scanner data and web scraping for price statistics, access to global private sector data, privacy preserving techniques and training and building skills. The expert noted that the task team on mobile telephone data, for example, had produced a handbook on how to use such data for official statistics and a wiki. The work aimed to measure progress towards achieving Goals 9 and 17. Finally, the expert stated that the Committee of Experts wished to expand the scope of the exercise to the acquisition of data from other economic sectors at the global level and deepen the granularity of the data compiled.

22. Another expert highlighted the Economic Commission for Latin America and the Caribbean big data project on measuring the digital economy, which used data from the largest online marketplace in the region. The expert noted that the digital economy in particular needed innovative measurement, beyond connectivity indicators, in order to have meaningful information on online activities, enterprise digitalization and financial technology, as well as in other areas. The COVID-19 pandemic made the need for such information more pressing, including as a measure of economic resilience and recovery. The project was aimed at building the capacity of national statistical offices through pilot web scraping exercises. Despite the complexity of its implementation, this technique had significant potential to yield timely and detailed information. The project had yielded valuable insights that would have been unachievable otherwise on the growth of e-commerce due to the impact of the pandemic. As more data became available for analysis, it might be possible to measure digital freelance activity, disaggregated by gender, or link web data with existing business registers. The project showed that the unprecedented diversity of data that was increasingly available could be useful in understanding new economic paradigms. Finally, the expert noted that big data and traditional statistics had different purposes and were complementary; and that, to address data innovation, statistical systems and institutions needed to adjust and acquire new capabilities.

23. One delegate shared an experiment conducted in Brazil, which had been involved in the Economic Commission for Latin America and the Caribbean big data project, on measuring e-commerce through the analysis of domain name data, which had required the cooperation of the national domain name organization and surveyed whether companies with a website engaged in e-commerce. The delegate emphasized the methodological difficulties of engaging with new sources of data. The complexity of disentangling big data for statistical purposes was not impossible to address yet posed a challenge. Finally, the
delegate noted that Brazil was taking concrete steps to improve each statistical exercise by, for example, reducing respondent burdens, linking databases and traditional surveys and integrating social media in e-commerce.

24. During the ensuing discussion, the Working Group agreed that traditional statistical production needed to be rethought in order that it might be expanded through new data sources. In some cases, this might entail structural reforms of national statistical systems. Challenges in developing countries might include those related to costs, whether of access to data or related to physical infrastructure such as servers; data sovereignty and privacy issues; and the availability of skills. In addition, the use of big data should not ignore the fundamental pillars of a sound statistical system.

25. One expert provided an example of how to access privately held data, namely, the bilateral agreement on the exchange of data between the statistical office of the European Union and four large international companies in the tourism sector, regarding data from online platforms related to short-term accommodations. Since such companies operated worldwide, it was more effective for the statistical office to take the lead rather than for national statistical offices to approach the platforms individually.

26. The discussions served to show that continuous professional capacity-building was essential in order for national statisticians to be able to leverage new data sources. Developing countries might need to receive more support from international organizations and colleagues in the broader statistical community. Institutional cooperation and partnerships were critical at the national, regional and international levels, as evidenced by the information on big data projects shared with the Working Group.

27. Finally, participants noted that the COVID-19 crisis had put pressure on national statistical offices to produce more high-quality, timely, reliable and disaggregated data on e-commerce and the digital economy. Data innovation not only provided new insights that might have been overlooked in traditional approaches, but it also appeared inevitable. The use of big data would play a central role in transforming statistics production by offering relevant input and by requiring a rethink of data governance. In this regard, developing countries needed support in building the capacity of national statistical systems to exploit alternative data sources, through methodology or software, and to establish trust between data providers and producers, as well as to translate data into robust indicators that were of public value.

**Item 6**

**Topics for future consideration by the Working Group**

28. As per its terms of reference, the Working Group on Measuring E-commerce and the Digital Economy discussed possible topics that could be examined at future meetings and that would be proposed to the Intergovernmental Group of Experts on E-Commerce and the Digital Economy for consideration at its fifth session. The Intergovernmental Group of Experts would decide on the provisional agenda items to be discussed at the third meeting of the Working Group.

29. Participants underlined the importance of more experience- and information-sharing on the measurement of e-commerce and the digital economy at future meetings and suggested that agenda item 3 on “Progress in measuring e-commerce and digital economy work by relevant international organizations” become a standing agenda item of the Working Group. Future meetings should also maintain the practice of sharing country experiences in using novel techniques to measure the digital economy, as well as in adopting protocols for data compilation, processing and dissemination. For example, one delegate offered to share the experience of the Dominican Republic in measuring the digital activities of small and medium-sized enterprises by extrapolating samples from household surveys. Participants noted that experiences in measuring the impact of the digital economy on specific economic sectors, such as real estate and insurance, would also be welcome. In addition, details of the experiences of intergovernmental organizations and national statistical offices in establishing mechanisms to enable data transfers from technology providers such as mobile telephone operators and digital intermediation platforms would be
apprreciated, such as with regard to data transfer agreements, memorandums of understanding and non-disclosure agreements. Finally, participants stated that more examples of web scraping as a supplementary method for data collection would be welcome.

30. Some delegates noted the need to improve the measurement of the gender dimension in e-commerce and the digital economy, to better understand how women participated in the digital economy; and the need for support policies, for example, to promote women’s entrepreneurship in e-commerce. Such statistics were also important in the context of monitoring progress towards the achievement of the Sustainable Development Goal on gender equality.

31. Based on the Working Group discussions, the secretariat suggested that there should be further debate on a definition of the digital economy for statistical purposes, for both clarity in national data production and to improve international comparability.

32. In addition to the substantive proposals, one delegate emphasized the necessity and importance of having knowledge resources such as manuals and toolkits available in more official languages; member States could thereby better understand the content of materials and improve the results of capacity-building activities. The secretariat stated that it would make its best efforts to translate documents into the official languages of the United Nations, subject to the availability of resources, and encouraged other international organizations to translate their manuals or guidelines as well whenever possible. At the same time, the secretariat requested the understanding of delegates regarding the fact that it would not be possible to translate presentations from panellists at the Working Group meeting.

33. Another delegate suggested that the secretariat find ways to ensure continuity in the representation of experts that attended meetings of the Working Group in collaboration with the permanent missions in Geneva. The secretariat suggested that delegates could also spread the word through national statistical systems, to coordinate and support representation at the Working Group.

Item 7
Adoption of the Chair’s summary

34. The Working Group on Measuring E-commerce and the Digital Economy agreed that a Chair’s summary reflecting the key issues discussed during the meeting would be produced after the end of the meeting. The Working Group authorized the Chair and the Vice-Chair-cum-Rapporteur to finalize the summary, which would be submitted to the fifth session of the Intergovernmental Group of Experts on E-commerce and Digital Economy.

Conclusion

35. The Working Group on Measuring E-commerce and the Digital Economy concluded that to measure the evolving digital economy, countries needed continuous capacity-building; data science was increasingly relevant to meaningful statistical production; and developing countries needed support from development partners, as well as from regional and international organizations, to tap into new data sources, including through the facilitation of access to and provision of guidance on private sector data.

36. Based on the discussions at its second meeting, the Working Group noted that the Intergovernmental Group of Experts on E-commerce and the Digital Economy might wish to consider the following:

(a) Encouraging development partners to provide funding for the delivery of training, the translation of knowledge resources and the provision of other capacity-building and technical assistance based on the revised UNCTAD Manual for the Production of Statistics on the Digital Economy 2020;
(b) Requesting that the Working Group address the following four topics at its next meeting:

(i) Progress in measuring e-commerce and digital economy work by relevant international organizations, including in terms of providing knowledge resources in multiple languages;

(ii) Defining the digital economy for statistical purposes;

(iii) Mechanisms to implement web scraping techniques and facilitate data transfers between providers and producers to produce official statistics on e-commerce and the digital economy;

(iv) Measuring the gender dimension in e-commerce and the digital economy.
Annex I

Attendance list of the second meeting of the Working Group on Measuring E-commerce and the Digital Economy

1. Participants from the following member States of UNCTAD were in attendance:

   Afghanistan  Indonesia  Russian Federation
   Albania      Jamaica      Senegal
   Azerbaijan   Kenya        South Africa
   Bangladesh   Lebanon      Spain
   Belgium      Lesotho      Sri Lanka
   Bolivia      Lithuania    State of Palestine
   Brazil       Mauritius    Switzerland
   Burundi      Mexico       Tunisia
   Cambodia     Mongolia     Turkey
   Canada       Morocco      United Arab Emirates
   Congo        Nepal        United Kingdom of Great Britain
   Costa Rica   Netherlands  and Northern Ireland
   Czechia      Nicaragua    Uruguay
   Djibouti     Niger        Venezuela (Bolivarian Republic of)
   Dominican Republic  Oman      Viet Nam
   Egypt        Peru         Zambia
   Gambia       Portugal     Zimbabwe
   India        Republic of Moldova

2. Participants from the following intergovernmental organizations and United Nations and related entities were in attendance:

   Department of Economic and Social Affairs
   Economic and Social Commission for Western Asia
   Economic Commission for Latin America and the Caribbean
   European Commission of the European Union
   International Telecommunication Union
   Latin American Integration Association
   Organisation for Economic Co-operation and Development
   Statistical Centre for the Cooperation Council for the Arab States of the Gulf
   United Nations Development Coordination Office
   United Nations Industrial Development Organization
   Universal Postal Union
   World Trade Organization

3. Participants from the following non-governmental organizations, civil society and private sector entities and academic entities were in attendance:

   BASIS[Bangladesh Association of Software and Information Services] E-commerce Alliance
   Devstat, Statistical Consulting Services, Spain
   Global Express Association
   Groupe d’Initiative Commune Cadire Cameroon
   ICT Data
   International Network for Standardization of Higher Education Degrees
   Nova School of Business and Economics, Portugal
   Organisation Camerounaise de Promotion de la Coopération Économique Internationale
   University of the Witwatersrand, South Africa
   Vertical Web Media
   Village Suisse ONG
   WHD Excellence Consulting
   World Wide Web Foundation
Annex II

List of resources shared and referenced at the second meeting of the Working Group


United Nations Global Platform, Data for the world, available at https://unstats.un.org/bigdata/un-global-platform.csh.html. Further information on online courses of the Committee of Experts on Big Data and Data Science for Official Statistics under development (on mobile telephone data; and on scanners and web scraping) can be found under the “Training, competencies and capacity development” page under “Task teams”. National statistical offices interested in joining the task teams may contact BigData@un.org.

