

## E-COMMERCE, TRADE AND THE COVID-19 PANDEMIC

### INFORMATION NOTE<sup>1</sup>

#### KEY POINTS

- The enforcement of social distancing, lockdowns and other measures in response to the COVID-19 pandemic has led consumers to ramp up online shopping, social media use, internet telephony and teleconferencing, and streaming of videos and films.
- This has resulted in spikes in business-to-consumers (B2C) sales and an increase in business-to-business (B2B) e-commerce.<sup>2</sup> The increase in B2C sales is particularly evident in online sales of medical supplies, household essentials and food products.
- Demand has also increased for internet and mobile data services. The network capacity and spectrum to accommodate the shift to online activities has urgently had to be adapted by both operators and governments. Demand has fallen, however, for certain services with a large online component, such as tourism services.
- E-commerce for goods and services trade has been adversely impacted by the same factors that have caused disruption in supply and demand overall. Such disruptions have resulted in delivery delays or outright cancellation of orders. Several other e-commerce-related challenges have arisen or been further amplified during this pandemic. These include price gouging (i.e. increasing prices to unreasonably high levels), product safety concerns, deceptive practices, cybersecurity concerns, the need for increased bandwidth, and development-related concerns.
- The pandemic has highlighted the glaring need to bridge the digital divide, both within and across countries, given the central role the digital economy has played during the crisis. Many traditional obstacles have been accentuated and have continued to hamper greater participation in e-commerce activities by small producers, sellers and consumers in developing countries, particularly in least-developed countries (LDCs). This has underscored the need for efficient and affordable information and communications technology (ICT) services, such as telecommunication, computer and other IT services and emerging technologies.
- Governments have adopted new measures, and the private sector has also acted, to respond to and ensure that e-commerce can help to alleviate some of the challenges faced in combatting the virus. These have included increasing network capacity, offering expanded data services at little or no cost, lowering or scrapping transaction costs on digital payments and mobile money transfers, improving delivery services and other logistics, using digital tools to enforce measures and disseminate information, promoting telehealth services, and leveraging ICT for surveillance.
- The global nature of COVID-19 and its impact on e-commerce may encourage strengthened international cooperation and the further development of policies for online purchases and supply. The pandemic has made it clear that e-commerce can be an important tool/solution

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<sup>1</sup> This information note, prepared by the WTO Secretariat on its own responsibility, is without prejudice to the positions of members or to their rights or obligations under the WTO. The measures/examples/issues mentioned are illustrative only and not exhaustive.

<sup>2</sup> The WTO Work Programme defines "electronic commerce" as the production, distribution, marketing, sale or delivery of goods and services by electronic means.

for consumers. E-commerce can also support small businesses and, by making economies more competitive, be an economic driver for both domestic growth and international trade.

- The pandemic has highlighted the importance of digital technologies in general, but also several vulnerabilities across the world. The resulting experiences and lessons are relevant to various discussions in the WTO, including those on electronic commerce, which could benefit from looking at greater international cooperation to facilitate the cross-border movement of goods and services, narrow the digital divide, and level the playing field for micro, small and medium-sized enterprises (MSMEs).

## **1 OVERVIEW OF THE E-COMMERCE LANDSCAPE IN THE CONTEXT OF COVID-19**

B2B and B2C online sales of physical goods have recently experienced a surge of demand in certain products due to the COVID-19 pandemic. Initially, many businesses and consumers responded by stocking up. Medical supplies, including hand sanitizers, disinfectants and surgical facemasks, as well as household essentials such as toilet paper and non-perishable foodstuffs were stockpiled. Businesses were faced with teleworking, and homebound consumers had to communicate and entertain themselves remotely. Many governments have enforced social distancing measures, instituted lockdowns and/or temporarily closed "non-essential" businesses.

The result has been a spike in online purchases of some products, as well as an increased demand for a wide range of digital services, as many consumers resorted to online shopping – either internet-enabled or by telephone. Several brick-and-mortar businesses have therefore shifted resources to e-commerce. The increase in the number of consumers flocking to digital services has spurred both suppliers of these services and telecommunications operators to enhance their network capacity and to offer advantageously priced or free data and service packages.

Given the way in which commercial activities are intertwined and supply chains operate, the relative shift to online B2B and B2C sales by means of retail and wholesale distribution services is dependent on manufacturing activity and on the availability of services. However, these were also disrupted by the measures instituted by governments to contain the spread of the virus. First, manufacturing in many economies came to a halt as a result of the lockdowns, thereby resulting in a decrease in production and labour shortages in many countries. Second, online purchasing of goods has been subject to the same supply chain bottlenecks as physical purchases. International transport and logistics services have been affected by the introduction of new health regulations, as these have severely disrupted most international means of transport – land, sea and air cargo.

## **2 MEASURES AND ACTIONS TAKEN TO FACILITATE E-COMMERCE OF GOODS IN RESPONSE TO COVID-19**

In order to implement effectively the social distancing measures aimed at containing the further spread of COVID-19, several governments around the world have encouraged online purchasing as an alternative to physical shopping, and consumers have adapted their shopping patterns and behaviours to minimize risks of getting infected. In some developed countries, distribution service platforms have managed to address problems without government intervention. In developing countries, some governments have been more proactive than others, and in particular in countries where face-to-face transactions had, until now, remained the norm.

For example, in some African countries, to facilitate online purchases of essential food items, local governments have compiled and circulated, via social media and other means, the telephone contacts of coordinators of different food products in various markets to enable consumers to call and order groceries. Consumers then pay with mobile money (i.e. by means of their mobile phones) and have their purchases delivered by bicycle and motorcycle taxis known as *tuku-tukus*<sup>3</sup> operated, for example, by Uber, SafeBoda, or other similar options. This expansion of delivery services has had positive knock-on effects for increased employment, even if these may be temporary.

In addition, several telecommunications providers have made available data services for minimal or no costs. Central banks have temporarily permitted companies and banks to lower or scrap

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<sup>3</sup> Tuku-tukus/boda-bodas are commonly found in East Africa, providing transportation options for passengers and job opportunities for drivers.

transaction costs and fees on digital payments and mobile money transfers in order to encourage the use of mobile money in preference to cash.<sup>4,5</sup> Other authorities, including in the United Arab Emirates and the Russian Federation, have encouraged the use of mobile payments but are yet to formally unveil specific regulations.

These are some of the innovative measures/actions which have been employed to encourage regions in which, hitherto, populations did not fully trust online purchases, with a view to ensuring a continued flow of food supplies and essential household goods. Despite persistent challenges, in light of the pandemic, online purchases and e-commerce have become *de facto* fall-back solutions. Going forward, the questions arise of whether the experiences from the COVID-19 pandemic will propel more consumers to change their shopping behaviours and patterns and increasingly resort to online purchases, and whether governments in these regions will prioritize and invest more in e-commerce and online-facilitating infrastructure and policies.

### **3 DISRUPTIONS FACING LOGISTICS AND DELIVERY SERVICES, ONLINE B2B WHOLESALE AND SUPPLY CHAINS**

The COVID-19 pandemic has tested wholesale and logistics services and other features of supply chains like no other event in recent history. Due to the lockdowns instituted to contain the further spread of the virus, e-commerce in goods has faced supply chain disruptions. Many firms have continued to experience supply challenges as a result of the suspension of manufacturing activity, decreased production and labour shortages. Those with warehousing facilities in impacted areas have faced difficult decisions about how or whether to keep manufacturing their products. The pandemic has therefore brought to the fore the vulnerabilities of supply chains and tested the ability of businesses to adjust swiftly.

The international transport and logistics services on which all e-commerce and more traditional trade transactions rely have also been severely affected by the introduction of new health regulations that have disrupted land, sea and air cargo transportation. The cancellation of more than a million passenger flights,<sup>6</sup> which were typically used to transport postal shipments and other small consignments, has significantly reduced transport capacity and increased shipping prices for cross-border B2C and B2B transactions. According to the International Air Transport Association (IATA) and the Universal Postal Union (UPU), problems were aggravated by administrative and regulatory bottlenecks, as well as crew quarantine conditions, which prevented cargo flights from keeping pace with demand.<sup>7</sup> Commercial B2B e-commerce relying on large-scale imports via maritime transport has also been affected. Customers have therefore been faced with delays or cancellations of their orders, even on the day of delivery.

### **4 HIGH DEMAND FOR SERVICES DELIVERED ELECTRONICALLY: MEDIA, E-PAYMENTS, EDUCATION, HEALTH**

One of the most significant segments of online purchasing by value,<sup>8</sup> tourism and travel has plummeted as a result of the COVID-19 pandemic for obvious reasons.<sup>9</sup> In March, for example, 30 per cent of US consumers reported delaying vacations and 25 per cent delaying flights.<sup>10</sup> In this environment, e-commerce by tourism-related purchasing platforms has likewise fallen. For example,

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<sup>4</sup> See <https://www.mobileworldlive.com/featured-content/money-home-banner/consumers-urged-to-turn-away-from-cash-in-virus-fight/>, <https://www.mobileworldlive.com/featured-content/money-home-banner/african-nations-back-mobile-money-in-virus-battle/> and <https://www.mobileworldlive.com/featured-content/money-home-banner/kenya-pushes-mobile-money-in-pandemic-fight>

<sup>5</sup> See <https://twitter.com/stanbicug/status/1240972920379277312?s=08> and <https://pctechmag.com/2020/03/mtn-no-charge-on-sending-mobile-money>

<sup>6</sup> Estimate by IATA cited by the UPU. Source: [http://news.upu.int/no\\_cache/nd/upu-and-iata-cooperate-to-keep-cargo-moving](http://news.upu.int/no_cache/nd/upu-and-iata-cooperate-to-keep-cargo-moving)

<sup>7</sup> UPU and IATA collaborate to keep cargo moving. Source: [http://news.upu.int/no\\_cache/nd/upu-and-iata-cooperate-to-keep-cargo-moving](http://news.upu.int/no_cache/nd/upu-and-iata-cooperate-to-keep-cargo-moving)

<sup>8</sup> By some accounts, the value of online sales of tourism and travel services exceeds the value of even the categories of merchandise most commonly purchased online. See, for example, Kemp, S. (2019), *Digital 2019: Global Digital Overview*, Hootsuite and We Are Social, 31 January 2019, available at <https://datareportal.com/reports/digital-2019-global-digital-overview>

<sup>9</sup> See <https://www.emarketer.com/content/podcast-covid-19-has-ground-tourism-to-a-halt-now-what>

<sup>10</sup> See <https://www.emarketer.com/content/some-consumers-are-pausing-purchases-during-covid-19?ecid=NL1014>

the holiday accommodation rental platform AirBNB has experienced a dramatic reduction in customer traffic.<sup>11</sup>

However, spurred by social distancing and stay-at-home requirements, e-commerce in services that can be delivered electronically has flourished, with demand rising sharply. While it may be a short-term phenomenon that might not last beyond the current crisis, as with online shopping, longer-term shifts in customer habits could potentially make businesses and consumers more accustomed to consuming online services in both work and personal settings.

One example is media services. Facebook reports that its online messaging, voice and video call services are up by more than 50 per cent, with Italy showing a 70 per cent surge overall, and a 1,000 per cent increase in group calls. Spain's Telefonica has seen an increase in IP (i.e. internet protocol) and mobile data traffic of 40 per cent and 50 per cent, respectively. Thailand reported an 828 per cent rise in data traffic from Zoom Video Communications and a 215 per cent spike on Skype video conferencing.

Both companies and governments are moving to address capacity constraints and facilitate consumer access. Some publishers have, for example, made COVID-19-related content freely available online.<sup>12</sup> In addition, social distancing measures have dramatically boosted the demand for audiovisual content; and, as consumers cannot attend cultural events physically, content is being brought online. For example, a number of opera and concert houses have chosen to offer free online streaming of their repertoire.<sup>13</sup>

The considerable increase in demand for these digital services, as illustrated above, has led to an equivalent increase in data volumes which, in some cases, has strained the telecommunications infrastructure. In order to ensure continuity of service, Netflix and YouTube have reduced video quality to alleviate network congestion. In India, this move by Netflix has reduced its network traffic by 25 per cent.<sup>14</sup>

In the financial sector, some mobile phone companies have moved independently to reduce their fees on mobile payments, and these moves have been complemented by governments in an effect to discourage the use of cash. Many central banks have lifted some of the restrictions and requirements applied to e-payment systems, particularly in Africa, where mobile payments are common. Ghana, for example, agreed to alter policies for mobile money transactions for a period of three months; smaller withdrawals will not carry a charge, and transaction limits and balance levels have been increased. Rwanda has removed fees on all mobile money transactions, with increased daily and monthly limits depending on the type of user. Following discussions with Uganda's central bank, mobile providers of payment services announced temporary measures that included removing fees for lower-value transactions, and certain providers will make mobile wallet-to-bank transactions cost-free. Kenya introduced similar temporary measures, such as increasing daily transaction limits and suspending fees for transferring funds between mobile services and banks. Egypt has raised contactless payment limits and reduced costs of mobile cash transfers.

Once the crisis necessitated the closure of businesses and schools, demand for online collaboration tools and learning platforms grew dramatically. Platforms such as Amazon have chipped in, offering the public sector free access to its remote education, remote working and research tools, and Cisco has made its Webex video conferencing tool free of charge.<sup>15</sup> Looking forward, the current crisis is likely to have a significant and lasting impact on the demand for e-working facilities and online education traded across borders.

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<sup>11</sup> See <https://www.telegraph.co.uk/technology/2020/04/13/coronavirus-has-brought-airbnb-knees-will-ever-recover>

<sup>12</sup> See <https://wellcome.ac.uk/press-release/publishers-make-coronavirus-covid-19-content-freely-available-and-reusable>

<sup>13</sup> See <https://blooloop.com/news/met-opera-live-stream-performances-coronavirus>; Covent Garden: <https://www.classicfm.com/music-news/coronavirus/royal-opera-house-launches-online-ballet-opera> and <https://www.staatsoper.de/en/staatsopertv.html>

<sup>14</sup> See <https://www.networkworld.com/article/3533438/coronavirus-challenges-capacity-but-core-networks-are-holding-up.html> and <https://www.cnn.com/2020/03/27/coronavirus-can-the-internet-handle-unprecedented-surge-in-traffic.html>

<sup>15</sup> See <https://www.digitaleurope.org/resources/how-digitaleurope-members-are-supporting-efforts-to-tackle-covid-19>

The COVID-19 crisis has stimulated a surge in the use of telemedicine services, as the spread of the virus has spurred calls for more extensive use of telemedicine. In China, for example, the growth of online medical platforms has substantially accelerated. Between December 2019 and January 2020, some platforms showed three-digit growth, with one even showing growth of 900 per cent. Some providers are expanding their activities to enable patients to benefit from services sourced abroad, and some jurisdictions are reviewing laws and regulations to facilitate telemedicine services, mainly on a provisional basis.

## **5 COVID-19 RELATED CHALLENGES**

### **Consumer protection**

Online consumer protection is one of the challenges that the COVID-19 pandemic has highlighted. There have been reports of fraudulent and deceptive practices, with some online sellers offering fake or unsafe hand sanitizers, surgical face masks or disinfectants for sale, and of price-gouging practices by certain manufacturers and retailers seeking to cash in and profit from the surge in demand.

### **Compliance with health and safety regulations**

The increased number of small packages ordered directly to consumers has raised challenges with regard to compliance with health and safety regulations in importing countries, as well as with regard to protecting the health of the workers involved in handling and inspecting the goods. In part, the reason for the latter challenges is that regulatory agencies and other authorities responsible for assessing product conformity with such regulations are not necessarily equipped to inspect large volumes of small packages entering, for example, through postal or courier services.

In addition, the speed of these activities has significantly altered the logistics chain, and more so as a consequence of the COVID-19 pandemic. This creates new challenges and difficulties for border authorities, which must intervene not only to inspect but also to collect and share, at an international level, pertinent information and data allowing them to determine the risks involved in each transaction, including with respect to the sanitary and phytosanitary (SPS) and technical barriers to trade (TBT) regulatory aspects of goods. These challenges illustrate the importance of ensuring that members base their health and safety regulations on relevant international standards<sup>16</sup> wherever possible, in line with the WTO's TBT and SPS Agreements, and of regulatory cooperation to ensure that safety- and quality-approved products are fast-tracked.

### **The development dimension**

The pandemic has highlighted the crucial importance of the digital economy and the urgent need to bridge the digital divide both within and across countries. The pandemic has accentuated existing questions about the extent to which small producers, sellers and consumers in developing countries, particularly in LDCs, can benefit from the opportunities that e-commerce provides. Many traditional obstacles have become even more obstructive in the context of the COVID-19 pandemic. These include access to online payment solutions, reliable internet and electricity connections, the prohibitive costs of trading across borders, visibility in online searches, advertising and sales platforms, and the difficulties in gaining consumer trust.

The pandemic has also exposed the need to address the challenges faced in accessing health and educational services. Some communities continue to have limited access to ICTs, either because they are rural or because their incomes are low, or both. In some countries, tariffs can be as high as 35 per cent for computers and 40 per cent for telecommunications devices.<sup>17</sup> Many ICT-related policy responses by governments during the pandemic have related to expanding access. These are important issues to be considered when devising strategies and policy frameworks aimed at facilitating e-commerce to ensure that it is truly inclusive and serves as an opportunity for development.

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<sup>16</sup> For example, the WTO Trade Facilitation Agreement (TFA), which contains provisions referring expressly to TBT and SPS measures, also contains encouragement for TFA measures to align wherever possible with relevant international standards.

<sup>17</sup> See WTO (2017), *20 Years of the Information Technology Agreement: Boosting trade, innovation and digital connectivity*, Geneva: WTO, page 24, available at: [https://www.wto.org/english/res\\_e/booksp\\_e/ita20years\\_2017\\_full\\_e.pdf](https://www.wto.org/english/res_e/booksp_e/ita20years_2017_full_e.pdf)

## 6 WTO WORK IN THE CONTEXT OF THE COVID-19 PANDEMIC

### On-going e-commerce discussions

Work on e-commerce at the WTO continues under a multilateral Work Programme on e-commerce. Also, since the Eleventh Ministerial Conference in 2017, a group of members has been discussing potential rules on e-commerce under a Joint Statement Initiative.

The COVID-19 pandemic has seen an increased use of e-commerce in certain areas as well as e-commerce-enabling services and technologies, generally highlighting the importance of electronic commerce. It has also underlined the continued challenges faced by developing countries and LDCs and the critical importance of bridging the digital divide.

The e-commerce discussions at the WTO – both in terms of the Work Programme and the Joint Statement Initiative negotiations – could benefit from considering the new experiences and lessons emerging from the COVID-19 pandemic, and the challenges and benefits that have emerged could be a further incentive for global cooperation in this area. Such an approach to e-commerce has the potential to contribute to greater coherence in policy-making, provide greater certainty of market access, foster consumers' confidence, and enhance the overall development of e-commerce, while at the same time addressing the challenges and difficulties that the COVID-19 pandemic has highlighted in terms of e-commerce.

### The WTO Trade Facilitation Agreement

Some of the challenges that the COVID-19 pandemic has brought to the fore as requiring urgent solutions could be addressed through the continued implementation of the Trade Facilitation Agreement (TFA), which came into force in 2017.

The TFA has several provisions that promote the adoption of improved export, import and transit procedures. For example, the TFA includes provisions that:

- allow for the advance lodging of documents in electronic format in order to allow for the pre-arrival processing of such documents
- allow for the electronic payment for duties, taxes, fees and charges collected by customs incurred upon importation and exportation
- provide for a *de minimis* shipment value or dutiable amount for which customs duties and taxes will not be collected; in certain members, this also extends to the VAT and other internal taxes.

Another important tool in the TFA is the implementation of a single window, which allows traders to submit the relevant documents and/or data requirements and be notified of a decision to release the goods from border control through a single entry point. The TFA encourages members to use information technology to support the single window, which in many members include automated control mechanisms for the above-mentioned requirements. Some of the more advanced systems allow for the use of electronic certificates (for rules of origin and sanitary and phytosanitary requirements) and even employ artificial intelligence and "big data" to develop algorithms that assist different authorities in undertaking risk management of specific consignments.

### WTO SPS and TBT work

WTO members' notifications to the TBT Committee show that members are taking a growing number of e-commerce-related TBT measures in recent years, covering regulations and standards for networks, cybersecurity, the Internet of Things, additive manufacturing (e.g. 3D printing) and autonomous vehicles (e.g. drones). In the TBT Committee, e-commerce-related measures are frequently discussed as specific trade concerns, especially measures related to cybersecurity. Exchanges between members in the TBT Committee have highlighted the importance of an appropriate framework for post-market controls and market surveillance to complement conformity assessment procedures in relation to challenges posed by e-commerce and to the fulfilment of technical regulations and standards, for example to deal with accidents and product recalls related to goods bought online.

In all three areas covered by the SPS Agreement – food safety, animal health and plant health – members continue to explore the use of electronic (rather than paper-based) certificates, with the plant health world being the most advanced. Several members have provided information on the increased use of e-certificates in the COVID-19 pandemic.

## **7 CONCLUSION**

The implications of the COVID-19 pandemic may last for a long time, and e-commerce in goods and services will need to continue to adapt to the new environment. A similar spike in the use of teleworking services and in B2B and B2C e-commerce was also documented during the SARS (Severe Acute Respiratory Syndrome) epidemic in 2002-03, when e-commerce firms such as Alibaba and Taobao rose from relative obscurity. Similarly, COVID-19 could trigger further digitalization of society and the development of policies and rules to regulate online trade.

While the current situation is rapidly evolving, and suggestions may become outdated at the same pace as the development of the pandemic, the question is what lessons can be drawn in the context of e-commerce.

The COVID-19 pandemic has made it clear that e-commerce can be an important tool/solution for consumers in times of crisis, and that it is also an economic driver, including for small businesses. However, the pandemic has highlighted not only the importance of digital technologies in general, but also several vulnerabilities across the world. These experiences and lessons raise some useful questions:

- a. Should new and practical e-commerce solutions to enable the fast and secure cross-border movement of goods and services be considered, to help economic recovery and job creation after the COVID-19 pandemic?
- b. Network capacity and higher bandwidth services have proved to be crucial, not only during the pandemic itself, but also for e-commerce and economic inclusion in general. Even more importantly, they have demonstrated their role in the delivery of essential services and the equipment of less connected communities when faced with a global crisis. Given these insights, what can WTO members do to improve communications networks and services?
- c. What can the WTO do to assist e-commerce in developing countries and LDCs, to reduce the digital divide and promote economies that are more resilient to possible future crises or shocks?
- d. Are there additional actions relating to e-commerce at the WTO that can be taken to assist MSMEs?

## List of abbreviations

B2B	business-to-business
B2C	business-to-consumer
IATA	International Air Transport Association
ICT	information and communications technology
LDC	least-developed country
MSME	micro, small and medium-sized enterprise
SPS	sanitary and phytosanitary
TBT	technical barriers to trade
TFA	WTO Trade Facilitation Agreement
UPU	Universal Postal Union
VAT	value-added tax