

SYMPOSIUM ON DIGITAL TRADE AND INTERNATIONAL LAW

WHAT ARE DIGITAL TRADE AND DIGITAL TRADE LAW?

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Digitization has greatly expanded the scope of trade, and with it the scope of trade law. But the regulatory framework, although growing in bilateral and regional fora, is highly dynamic and remains fragmented, increasing the challenges facing digital trade law.

It is common nowadays to engage in digital trade without knowing it. Some activities, like buying books on Amazon or downloading video games, appear intuitively covered by digital trade, as they clearly involve an online commercial transaction. Others, such as meeting over Zoom or watching a video on YouTube, may not be recognized as digital trade, as there are seemingly no contracts signed or monetary exchanges, but they too are rightly categorized as digital trade. Critical to these different types of digital trade is the collection and transfer of data inherent to the provision of these goods and services, which may flow across multiple state borders. Therefore, whereas the trade of past millennia was carried out via camels along the Silk Road, ships sailing around the Cape of Good Hope, and, beginning with the last century, cranes unloading containers at enormous ports, digitization has redefined trade in our age.¹ But even as digital trade has become the invisible fabric of the modern economy and our everyday lives and the benefits of the digital transformation for trade are praised in report after report,² do we truly understand what “digital trade” is and more importantly how to regulate it? This essay addresses these questions and unveils the fluidity of the topic of digital trade—both from a technological and a policy-legal perspective.

What Is Digital Trade?

For almost two decades, starting with the 1998 Work Programme on Electronic Commerce of the World Trade Organization (WTO),³ the term that was conventionally used for trade enabled by the internet was “electronic commerce” or “e-commerce,” which was then “understood to mean the production, distribution, marketing, sale or delivery of goods and services by electronic means.” The WTO itself continues to use the increasingly anachronistic term “e-commerce” in the current negotiations under the 2019 Joint Statement Initiative (JSI),⁴ which is an effort to craft new digital economy rules among a subset of WTO members. In both trade policy scholarship and in regional and bilateral agreements, the terminology has moved decisively toward the term of

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¹ UK Board of Trade, [Digital Trade](#) 14 (Nov. 25, 2021); [ADAPTING TO THE DIGITAL TRADE ERA: CHALLENGES AND OPPORTUNITIES](#) 19 (Maarten Smeets ed., 2021).

² See, e.g., *id.*; James Manyika et al., [Digital Globalization: The New Era of Global Flows](#), MCKINSEY GLOB. INST. (2016).

³ WTO, [Work Programme on Electronic Commerce](#), WTO Doc. WT/L/274 (Sept. 30, 1998).

⁴ WTO, [Joint Statement on Electronic Commerce](#), WTO Doc. WT/L/1056 (Jan. 25, 2019).

“digital trade.”⁵ This rhetorical shift also marks a dramatic change in the scope and content of international trade disciplines, as discussed in the essay’s second part.

Digital trade has become both an essential foundation for the growth of the “digital economy,” and a beneficiary of it. This further involves progressively advancing digitization of economies and societies as a whole. Advanced digitization brings with it a number of notable new trends in trade. These include the emergence of global value chains that allow manufacturers to manage and optimize complex industrial processes with manufacturing and services components spread across different geographical locations.⁶ Digitization has also rendered services tradeable, as the need for the physical proximity of the provider that is conventionally associated with services disappears.⁷ This transformation, known as “servicification,” also includes the proliferation of information technology products, such as smartphones or video game consoles, which by their nature require software updates, remote processing, remote storage, and access to digital content, which transcend the purchase of the initial products and in essence renders such products platforms for selling services.⁸

More recent conceptualizations of digital trade and the corresponding regulatory action seen in domestic and international contexts are distinguished by the attention paid to data. Data underpins all transactions in contemporary digital trade,⁹ as data itself can be traded as an asset and as a means through which global value chains are organized and services are delivered.¹⁰ In this context, it should also be highlighted that “[t]he geography of data flows is very different from the geography of trade flows,”¹¹ and what was conventionally understood as the provision of a good or service can now be linked to multiple data flows often invisible to us.

Moreover, datafication and the borderless nature of data also extend the scope of trade-related issues—so that, for instance, data protection has now turned into a key trade regulation topic, as its domestic regulation directly impinges on cross-border data flows.¹² States have also reacted in a variety of ways to shield their data sovereignty.¹³ In the trade context, this has translated into erecting modern forms of trade barriers, such as data localization measures, that seek to keep the data within the territory of the sovereign state.¹⁴

Against this backdrop of dynamic digital trade practices and an evolving technological context, it is difficult to come up with a uniform definition of digital trade. Thus far, and in line with the definition of “electronic commerce,” most of the existing definitions share a focus on the digital transmission of goods and services. Yet, there are variations and some of them are controversial. For instance, the U.S. International Trade Commission explicitly

⁵ See, e.g., [United States-Mexico-Canada Agreement](#) (USMCA) and the [European Union-New Zealand Free Trade Agreement](#) (EU-NZ FTA), which have dedicated chapters titled “Digital Trade.” The latest negotiating text circulated under the JSI in December 2022 uses both terms as alternatives “e-commerce/digital trade.”

⁶ Mira Burri, [The Impact of Digitization on Global Trade Law](#), 24 GER. L.J. 171 (2023).

⁷ *Id.*; WTO, [World Trade Report 2019: The Future of Services Trade](#) (2019).

⁸ Burri, *supra* note 6; WTO, *supra* note 7; Swedish National Board of Trade, [Everybody Is in Services: The Impact of Servicification in Manufacturing on Trade and Trade Policy](#) (2012).

⁹ WTO, [World Trade Report 2018: The Future of World Trade: How Digital Technologies Are Transforming Global Commerce](#) (2018).

¹⁰ See, e.g., Javier López-González, Francesca Casalini & Taku Nemoto, [Mapping Approaches to Cross-Border Data Flows](#), in [ADDRESSING IMPEDIMENTS TO DIGITAL TRADE](#) (Ingo Borchert & L. Alan Winters eds., 2022).

¹¹ Francesca Casalini & Javier López González, [Trade and Cross-Border Data Flows](#) (OECD Trade Policy Paper No. 220, 2019).

¹² See, e.g., Mira Burri, [Interfacing Privacy and Trade](#), 53 CASE WESTERN J. INT’L L. 35 (2021); Anupam Chander & Paul M. Schwartz, [Privacy and/or Trade](#), 90 U. CHI. L. REV. 49 (2023).

¹³ See, e.g., Anupam Chander & Haochen Sun, [Sovereignty 2.0](#), 55 VAND. J. TRANSNAT’L L. 283 (2022).

¹⁴ See, e.g., Anupam Chander & Uyên P. Lê, [Data Nationalism](#), 64 EMORY L.J. 677 (2015); United States Trade Representative (USTR), [2022 National Trade Estimate Report on Foreign Trade Barriers](#) (2022); Simon J. Evenett & Johannes Fritz, [Emergent Digital Fragmentation: The Perils of Unilateralism](#), Joint Report of the Digital Policy Alert and Global Trade Alert (2022).

excludes the value of sales of physical goods ordered online, as well as physical goods that have a digital counterpart (such as books, movies, music, etc.) from its definition of “digital trade.”¹⁵ In stark contrast, China in its communication under the JSI negotiations, subscribes to a definition focused on the use of the digital medium to enhance trade in goods, arguing that the e-commerce negotiations should concentrate on the discussion of cross-border trade in *goods* enabled by the internet, together with relevant payment and logistical services.¹⁶

Yet, the overall tendency is toward broader, all-encompassing definitions. In this sense, a joint report by the Organisation for Economic Co-operation and Development (OECD), the WTO, and the International Monetary Fund (IMF) defines digital trade to include “all trade that is digitally ordered and/or digitally delivered.”¹⁷ The distinction between the narrower and broader definitions is, of course, crucial for measuring the extent of digital trade and the effects of regulatory intervention—an important basis for evidence-based policymaking that is still insufficiently developed.¹⁸ The broader definition also augments the impact of the rule framework that will be adopted. Given, for instance, that business-to-business purchase ordering has increasingly moved online, this impact can be sizeable.

In legal terms, most modern trade agreements, as well as the yet undecided debates in the WTO, avoid subscribing to any set definition of digital trade. Rather, they simply specify the scope of application of the adopted rules. The European Union (EU) free trade treaty model applies to “measures of a Party affecting trade enabled by electronic means,”¹⁹ while the U.S. model applies to “measures adopted or maintained by a Party that affect trade by electronic means.”²⁰ This suggests, on the one hand, that there is significant convergence of treaty language across actors, and, on the other, that treaties can avoid definitional debates. This is perhaps for the better for topics such as, particularly, digital trade, that are inherently fluid.

What Is Digital Trade Law?

The challenge of regulating cross-border “electronic commerce” was initially largely left to be worked out through the application of the WTO’s General Agreement on Trade in Services (GATS). But even in 1998, the WTO’s Work Programme on Electronic Commerce acknowledged that all areas of trade are deeply affected by the internet and changes may be needed in the existing rules for trade in goods and trade in services, as well as those for the protection of intellectual property.²¹ Despite this recognition, it lacked a negotiating mandate. Whereas some clarifications occurred through WTO jurisprudence,²² the WTO agreements did not undergo any changes in the last two decades in response to the rise of digital trade and the broader challenges of the digital transformation. This left unresolved many important questions as to the application of WTO law. For example, should previously non-existent digital offerings be classified as goods or services (requiring the application of the General

¹⁵ See United States International Trade Commission, [Global Digital Trade 1: Market Opportunities and Key Foreign Trade Restrictions](#) 33 (2017).

¹⁶ WTO, [Joint Statement on Electronic Commerce, Communication from China](#), WTO Doc. INF/ECOM/19, Sec. 3, para. 2.5. (Apr. 24, 2019) (China Communication 1).

¹⁷ OECD, WTO & IMF, [Handbook on Measuring Digital Trade, Ver. 1](#) (2020).

¹⁸ See, e.g., [Evenett & Fritz](#), *supra* note 14.

¹⁹ See, e.g., [EU-NZ FTA](#), *supra* note 5, Art. 12.1.

²⁰ See, e.g., [USMCA](#), *supra* note 5, Art. 19.2(2).

²¹ [WTO](#), *supra* note 3.

²² See, e.g., Appellate Body Report, [US – Gambling](#), WT/DS285/AB/R (adopted Apr. 7, 2005); Appellate Body Report, [China – Publications and Audiovisual Products](#), WT/DS363/AB/R (adopted Dec. 21, 2009); Panel Report, [China – Electronic Payment Services](#), WT/DS413/R (adopted Aug. 31, 2012).

Agreement on Tariffs and Trade (GATT) or the GATS, respectively)?²³ If categorized as services, which subsector of services (e.g., computer and related, value-added telecommunications, entertainment, or audiovisual services) would they fall into?

As a reaction to both the stalemate in the multilateral forum of the WTO and the extended scope of regulatory issues falling under contemporary digital trade, states shifted the venue and used preferential trade agreements, either bilateral or regional, to regulate digital trade. The newly minted regime is highly dynamic and not only compensates for the lack of developments within the WTO but also effectively creates a comprehensive, albeit fragmented, governance framework for the data-driven economy.²⁴ This new framework is less preoccupied with the traditional trade objectives of reduction of tariff barriers and improved market access and more focused on the novel regulatory issues underlying digital trade practices. These translate into two broader areas of rulemaking: the first, linked to the facilitation of digital trade, includes rules on electronic contracts, electronic signatures, electronic invoicing and payments, paperless trading, and enabling participation of micro-, small-, and medium-sized enterprises. The second is linked to the importance of data in our personal and professional lives, a topic to which we now turn.

The latter cluster of rules is critical for the development of the data-driven economy but has also been the most controversial, as it implicates a slew of issues, such as privacy and cybersecurity, which are yet to be fully elaborated in trade agreements and which impact domestic regulatory frameworks in important ways. Consider some of these regulatory issues that affect even the execution of this symposium: The videoconferencing service Zoom, which was the medium for the essay authors' collaboration, has been probed on national security grounds in the United States because of its connections to China; the authors used Gmail for our emails back and forth to each other, but data protection authorities across Europe have declared that some of Google's European services, including Google Analytics and even Google Fonts, violate EU data protection law because they might transfer data to the United States.²⁵

The sensitivity of the regulatory questions raised and the diversity of approaches toward them across jurisdictions have led to different preferential trade agreement frameworks on data. A number of preferential trade agreements follow the model of the 2018 Comprehensive and Progressive Agreement for Trans-Pacific Partnership in adopting a liberal stance, which ensures the free cross-border flow of data, bans data localization measures, but only stipulates non-binding commitments on personal data protection rules.²⁶ The EU, as the champion of privacy protection, has chosen a different approach and created a conditional data flow regime, meaning that data flows are permitted without the imposition of localization measures, if the parties to the EU's trade agreements subscribe to the high standards of personal data protection endorsed under the EU General Data Protection Regulation (GDPR). Citing national security concerns, China also applies such a similar, albeit more stringent, conditional flow regime that provides leeway for protectionist digital trade measures. These varying approaches to data governance can create barriers to trade in and of themselves. Efforts to create interoperable frameworks

²³ See, e.g., Anupam Chander, *The Internet of Things: Both Goods and Services*, 18 WORLD TRADE REV. 9 (2019); Burri, *supra* note 6.

²⁴ Out of the 384 PTAs entered into between 2000 and 2022, 167 contain provisions relevant for digital trade and 109 have dedicated electronic commerce chapters. This analysis is based on the TAPED dataset. See Mira Burri & Rodrigo Polanco, *Digital Trade Provisions in Preferential Trade Agreements: Introducing a New Dataset*, 23 J. INT'L ECON. L. 187 (2020). For all data and updates, see <https://unilu.ch/taped>.

²⁵ Thomas Claburn, *Website Fined by German Court for Leaking Visitor's IP Address Via Google Fonts*, REGISTER (Jan. 31, 2022).

²⁶ Similar rules are also found in: the [2016 Chile–Uruguay FTA](#); the [2016 updated Singapore–Australia FTA \(SAFTA\)](#); the [2017 Argentina–Chile FTA](#); the [2018 Singapore–Sri Lanka FTA](#); the [2018 Australia–Peru FTA](#); the [USMCA](#), *supra* note 5; the [2019 Brazil–Chile FTA](#); the [2019 Australia–Indonesia FTA](#); the [2019 Japan–U.S. Digital Trade Agreement](#); the [2020 Digital Economy Partnership Agreement Between Chile, New Zealand, Singapore \(DEPA\)](#); the [2021 Korea–Singapore Digital Economy Agreement](#); and the [2022 UK–Singapore Digital Economy Agreement](#).

continue, including through a potential plurilateral treaty on electronic commerce, as the one currently negotiated under the WTO's Joint Statement Initiative.²⁷

On the positive side and despite the fragmentation of the digital trade law landscape, one can witness a strand of legal innovation through the new generation of Digital Economy Agreements,²⁸ which may or may not be linked to a trade agreement between the parties. These agreements offer a vehicle for enhanced cooperation in the regulation of the data-dependent economy. The issues addressed in these new treaties often go beyond the province of conventional trade law. For instance, the Digital Economy Partnership Agreement between Chile, New Zealand, and Singapore promotes cooperation in the area of fintech,²⁹ and discusses the adoption of ethical and governance frameworks that support the trusted, safe, and responsible use of artificial intelligence technologies.³⁰ The agreement also emphasizes the importance of a rich and accessible public domain,³¹ digital inclusion,³² digital identities,³³ and open government data.³⁴ Once again, this highlights the new dimensions that digital trade law has taken. It also underscores the need for international cooperation in order to facilitate seamless, yet regulated, data-driven trade.

Concluding Remarks

Digitization has expanded the scope of both trade and trade law, thereby transforming the nature of the regulatory issues at stake. The landscape of digital trade rulemaking is likely to remain dynamic. Technological innovations will surely demand appropriate regulatory responses (for instance with regard to artificial intelligence). But it is not only technological change, but geopolitical pressures that will drive the regulatory landscape, as countries continue to position themselves individually vis-à-vis strategic stakeholders, such as China, the EU, and the United States, and in new geopolitical blocks, such as the Indo-Pacific Economic Framework for Prosperity. The coming years will test the willingness for international cooperation in the domain of digital trade regulation and clarify to what extent legal frameworks developed in bilateral and regional forums can be transposed to the WTO, while also taking into consideration the interests of developing and least-developed countries.³⁵

²⁷ See, e.g., Mira Burri, *A WTO Agreement on Electronic Commerce: An Enquiry into Its Substance and Viability*, 52 GEORGETOWN J. INT'L L. ___ (forthcoming 2023).

²⁸ So far five such agreements have been agreed upon: the [2019 Japan–U.S. Digital Trade Agreement](#), *supra* note 26; the [SAFTA](#), *supra* note 26; the [DEPA](#), *supra* note 26; the [2021 Korea–Singapore Digital Economy Agreement](#), *supra* note 26; and the [2022 UK–Singapore Digital Economy Agreement](#), *supra* note 26.

²⁹ [DEPA](#), *supra* note 26, Art. 8.2.

³⁰ *Id.* Art. 9.2.

³¹ *Id.*

³² *Id.* Art. 11.2.

³³ *Id.* Art. 7.1.

³⁴ *Id.* Art. 9.5.

³⁵ See María Vásquez Callo-Müller & Kholofelo Kugler, *Digital Trade, Development and Inequality*, 117 AJIL UNBOUND 116 (2023).