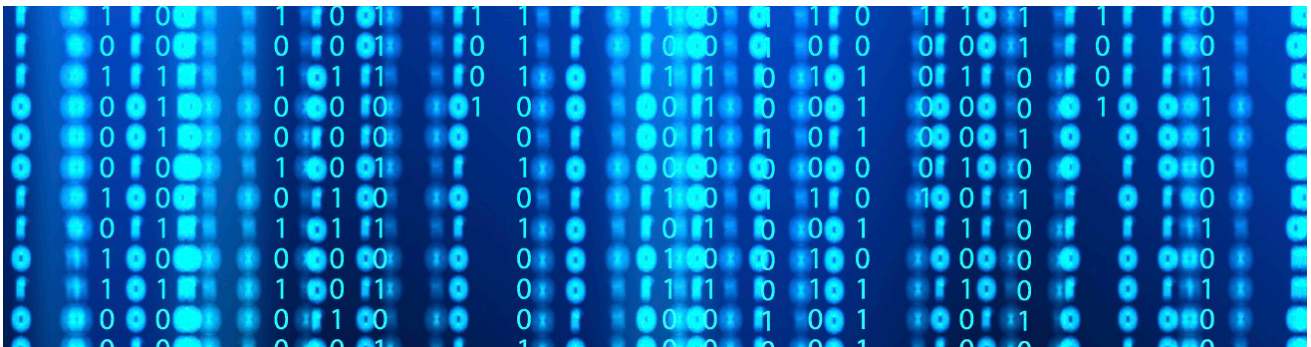




The **E15** Initiative

STRENGTHENING THE GLOBAL TRADE AND INVESTMENT
SYSTEM FOR SUSTAINABLE DEVELOPMENT



A New Digital Trade Agenda

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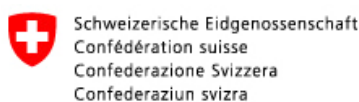
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EXECUTIVE SUMMARY

The globalization of the Internet and the ability to move data across borders underpins an increasing amount of international trade. What constitutes digital trade is potentially very broad. It can include the use of the Internet to search for products, purchase them, and in the case of digital goods, deliver them online. In an international economy where global supply chains are an important feature of international trade, the Internet is also allowing business to participate in supply chains, such as by providing discrete tasks or services. In addition, the Internet has become an important tool for businesses to communicate with consumers and suppliers, for accessing IT in the cloud, raising finance from crowdfunding websites, transferring data globally to manage production schedules, or collaborating in research and development (R&D) with globally located researchers. All this activity can increase the productivity of businesses, and their levels of innovation and competitiveness, leading to increased opportunities for international trade. The scope of the impact of the Internet on trade also extends to creating opportunities for people and businesses that have traditionally been marginalized from international levels of innovation and competitiveness, leading to more opportunities for them since the costs of international trade are reduced. Other more traditional barriers to trade in developing countries such as poor infrastructure, inefficient logistics, and distance to market are also being overcome as the Internet allows for products to be searched for and delivered online.

To maximize the opportunities that the Internet presents for international trade requires a life-cycle approach. This starts with issues around Internet access, including access to mobile phones, the cost of access, and the challenge for those whose language is not English or one of the other main languages used online. It also means that Internet access, in particular the ability to move data across borders, needs to remain free from unnecessary and restrictive rules. For digital trade to continue to grow, especially to ensure that consumers in the developed world are prepared to purchase digital products from businesses in the developing world, will require trust.

All these challenges to the opportunity that the Internet presents for growing international trade are amenable to being addressed by trade rules. Some of them only require a re-emphasis of existing commitments. For instance, World Trade Organization (WTO) General Agreement on Trade in Services (GATS) rules already include a number of disciplines that support digital trade. There are, however, new challenges that require new rules. Some of these arise from an increasing range of laws that are curtailing the ability to move data across borders such as data localization requirements. Other restrictions on the Internet and cross-border data flows might be for legitimate reasons such as protecting privacy. Addressing such restrictions on digital trade do not necessarily present fundamentally new challenges for trade law, which has a long history of balancing commitments to non-discrimination and the right of Members to pursue legitimate policy goals in ways that do not constitute unnecessary or unjustifiable discrimination or a disguised restriction on international trade. Given that digital trade will require clarifying existing WTO rules as well as developing new trade rules. In this regard, the WTO and ongoing bilateral and regional FTA negotiations provide important pathways for developing a digital trade agenda. In terms of the WTO, the Secretariat was given a mandate at the 2013 WTO Ministerial to study digital trade issues, and part of this work should focus on how to update or clarify existing commitments, including in the GATS, the TRIPS, and TBT agreements. In the more immediate term, the large FTA negotiations, in particular the Trans-Pacific Partnership, the Trade in Services Agreement and the EU-U.S. Transatlantic Trade and Investment Partnership negotiations present the best opportunities for agreeing on new rules. The Regional Comprehensive Economic Partnership (RCEP) is another large regional FTA. It is not clear what the ambition of this FTA on digital trade is, but the inclusion of large developing countries such as China, India, and Indonesia in it make this another potentially important pathway for agreeing to new rules on digital trade.

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LIST OF ABBREVIATIONS

CPC	Central Product Classification
EU	European Union
FTAs	free trade agreements
GATS	General Agreement on Trade in Services
GATT	General Agreement on Tariffs and Trade
GDP	gross domestic product
ICANN	Internet Corporation for Assigned Names and Numbers
IP	Internet Protocol
IPRs	intellectual property rights
ISPs	Internet service providers
IT	information technology
ITA	Information Technology Agreement
MFN	most-favored nation
MNEs	multinational enterprises
OECD	Organisation for Economic Co-operation and Development
PCs	personal computers
RCEP	Regional Comprehensive Economic Partnership
SMEs	small and medium enterprises
TBT	Technical Barriers to Trade
TiSA	Trade in Services Agreement
TRIPS	Trade Related Intellectual Property Rights
TPP	Trans Pacific Partnership
TTIP	Transatlantic Trade and Investment Partnership
UNCITRAL	United Nations Commission on International Trade Law
UPICC	Uniform Principles of International Commercial Contracts
US	United States
WIPO	World Intellectual Property Organization
WTO	World Trade Organization

INTRODUCTION AND SCOPING ISSUES

Economies are going digital. No longer is the impact of the Internet and data confined to the information technology (IT) sector. It is an economy-wide phenomenon as all industries increasingly use the Internet to reach consumers, purchase inputs, find market information, and download software and applications from the cloud.

The growth in the digital economy is creating new opportunities to grow international trade. The Internet is providing access to new markets and business inputs that can increase productivity and the capacity of businesses to compete. Importantly, the Internet is providing new opportunities for those often marginalised from the international economy—business in developing countries and small and medium enterprises (SMEs) everywhere—to become traders.

The potential breadth of the Internet's impact on economic growth and trade raises the question of what is included in the phrase “digital trade.”

A starting point is to consider how trade has become digitized, enabling the online delivery of digital products where consumers have Internet access. Services, including content for apps, software, and movies, can now be sold and delivered online. In addition, goods that are delivered using traditional means are increasingly searched for and often purchased online.

The Internet is also having an important impact on how businesses operate, and in this way is creating a more broad-based digital economy. For instance, businesses can use the Internet to participate in global supply chains, manage customers, and track production. Businesses are also increasingly using digital inputs—whether it is accessing IT in the cloud, or using Skype to communicate with customers and supplies—which increase firm productivity and competitiveness in domestic and overseas markets. All this is creating conditions that are enabling a growth in international trade.

THE KEY CHALLENGES AND OPPORTUNITIES OF DIGITAL TRADE

QUANTIFYING THE DIGITAL TRADE POTENTIAL

Growing Internet use is good for growth and trade. A World Bank study found that a 10 percent increase in broadband penetration resulted in a 1.38 percent increase in growth in developing countries and a 1.21 percent increase in growth in developed countries (Qiang and Rossotto 2009). In terms of the impact of the Internet on trade, one study concludes that a 10 percent increase in Internet access leads to a 0.2 percent increase in exports (Freund and Weinhold 2004: 171). Other studies using more recent data find even stronger impacts of the Internet use on trade (Meijers 2014: 162). Moreover, as discussed in more detail below, the scope for digital trade will grow as Internet access expands globally and businesses use it to reach consumers in overseas markets because it helps them cut down the costs of international trade

In addition to providing access to overseas markets, the Internet leads to increased trade through its impact on firm productivity, which, in turn, increases the competitiveness of these businesses domestically and globally (Bernard et al. 2007: 5). A recent US International Trade Commission (ITC) report estimates that the Internet has improved the productivity of digitally intense industries by 7.8–10.9 percent (USITC 2014: 65). Another study found that broadband access increases firm productivity by 7–10 percent (Grimes et al. 2012: 187–201).

The Internet can also benefit employment. Research shows that for every job destroyed by the Internet, it creates 2.6 jobs (McKinsey Global Institute 2011). The Internet can be used to improve the labor market by streamlining job search capabilities, more effectively matching employers and employees. In developing countries, employment growth from the Internet has been positive and is being driven by the proliferation of mobile phones (ITU 2013).

HOW THE INTERNET CAN GROW INTERNATIONAL TRADE

Access to global customers

The impact of the Internet on international trade is being driven by its increasingly global nature. Internet access is

expected to reach 5 billion people by 2020, up from 2.7 billion today, with most of the growth happening in the developing world (ITU 2013). However, Internet access in the developing world averages only 32 percent, ranging from 16 percent in India to 46 percent in China (ITU 2014). In fact, 4 billion people do not have Internet access, with more than 90 percent of these people living in developing countries (ITU 2014). For instance, in China more than 730 million people do not have Internet access and in India that number is more than 1 billion.

As the developing world gets online, access is increasingly on mobile devices. These mobile devices are becoming "smart" and can connect to the Internet. In the developing world, 54 percent of mobile devices will be smart by 2018, double the amount today (ITU 2014: 3). This is, however, still significantly less than in developed countries, where by 2018, 93 percent of mobile devices in the United States (US) and 83 percent of Western Europe's mobile devices (61 percent in Central and Eastern Europe) will be "smart" (Cisco Index 2014: 9).

The expansion of the Internet globally means that businesses can reach overseas customers and sell products online. Goods can be searched for and purchased online but delivered offline. Other digital products that are searched for and purchased online can also increasingly be delivered online. Combining this with a growing middle class in Asia, in particular, which is expected to double by 2020, highlights the potential growth of online international commerce. Globally, people who have made at least one online purchase increased from 38 percent in 2011 to just more than 40 percent in 2013. By 2017, more than 45 percent of the world is expected to be engaging in online commerce (Statista Dossier 2014: 41).

Access to inputs: B2B Internet commerce

The Internet is also providing opportunities for businesses to access and purchase inputs. For instance, a business can use the Internet to download software, reach international consultants and other professional services providers.

Cloud computing is a key development here, providing access to data storage, processing power, and software applications as services. Cloud computing reduces IT infrastructure and services costs and improves the productivity of businesses (Liebenau et al. 2012).

Accessing business inputs online can itself be a form of trade when services are supplied from businesses situated globally. In addition, access by businesses to cutting-edge inputs can indirectly grow trade when it leads to increased productivity and thereby makes businesses more competitive domestically and in overseas markets. According to an Organisation for Economic Co-operation and Development (OECD) study, a 1 percent increase in the import of business services is associated with a 0.3 percent higher export share (Gonzalez et al. 2012: 186).

The Internet can also reduce trade costs, which can grow international trade. For instance, access to online services such as Skype allows for communications with overseas customers and suppliers at little or no cost. The USITC estimates that the Internet reduces trade costs by 26 percent on an average (2014: 65).

The Internet is also creating more efficient and cost-effective ways to deliver goods and services to customers. This includes transportation management systems that connect supply chains with logistics networks, and ones that track and trace the movement of goods from suppliers to customers in real time.

Global value chains

Another way the Internet is affecting international trade is through its impact on global value chains. The reduction in transaction costs that it has brought about has allowed business to split production globally. For instance, the Internet allows businesses to contribute so-called trade in tasks as part of a global supply chain (Grossman and Rossi-Hansberg 2008: 1978).

THE OPPORTUNITIES FOR SMALL AND MEDIUM SIZED ENTERPRISES

The global nature of the Internet and the ability to move data across borders is also creating new opportunities for SMEs to engage in international trade (USITC 2013: 2–3). This is important because SMEs are the main drivers of employment and job creation across the world. A World Bank study conducted across 99 countries found that SMEs are the biggest contributors to employment, on average being responsible for more than 66 percent of permanent full-time employment and 86 percent of new jobs created (Ayyangar et al. 2011).

SMEs that export are more productive and pay higher wages (USITC 2010b: 2–5). The Boston Consulting Group found that SMEs that use the Internet at high levels have revenue growth of up to 22 percent higher than those that do not or only use the Internet at low levels (Dean 2012: 14). A McKinsey survey of 4,800 SMEs in 12 countries found that SMEs utilizing the Internet for business functions grew at twice the rate of those that did not (McKinsey Global Institute 2011: 17). These findings are not only true for SMEs in the IT sector but also across several different sectors, including retail and manufacturing.

The Internet provides various ways that SMEs can overcome traditional barriers to international trade.

- Crowdfunding provides access to finance, which is often a key constraint on SME growth (World Bank 2013: 16).

- A website gives SMEs an instant international presence. SMEs can use the Internet to reach markets globally and thereby avoid having to establish a physical presence overseas. A website also gives SMEs legitimacy in the eyes of potential customers and suppliers, and helps a company gain trust from their customers (Mathews and Healy 2007: 78).
- Online access to business inputs are needed to become internationally competitive and to engage in international trade. It includes using the Internet to advertise globally, access best-practice services, and communicate with overseas customers and suppliers.
- Cloud computing enables SMEs to access IT services with little upfront investment and to quickly scale up their IT use in response to changes in demand. In this way, cloud computing reduces businesses costs for SMEs, which can make them more competitive domestically and in overseas markets (Gasser and Palfrey 2012: 147).
- Access to critical knowledge and information is another benefit. The cost of gathering information on foreign markets is a major barrier inhibiting SMEs from engaging in international trade (OECD 2009; USITC 2010a: 3–19). The Internet gives SMEs access to information that previously was limited to multinational corporations (Mathews and Healy 2007: 82).
- Participation in global supply chains enables SMEs to specialize in specific tasks and use the Internet to deliver that service to a particular part of a global value chain. For instance, NightHawk Radiology Services located in the US relies on broadband technology to employ radiologists in India and Australia to provide immediate diagnostic interpretation of CT images taken in US hospitals (USITC 2013: 2–3).

OPPORTUNITIES FOR DEVELOPING COUNTRIES

Internet access provides a range of economic growth opportunities for developing countries, including through the opportunities it provides to engage in international trade. Moreover, as noted, in developing countries, Internet access is increasingly on mobile devices, which is opening a range of new economic opportunities for business and entrepreneurs. In addition to contacting customers and accessing the Internet, entrepreneurs in developing countries are using mobile devices to make financial transactions, establish client databases, and coordinate just-in-time supply chain deliveries (Andjelkovic and Imaizumi 2012: 75).

As is the case for business generally, the Internet can help developing country firms overcome the costs of engaging in international trade. For example, a lack of information about overseas markets and what needs to be done to successfully sell to these markets is a barrier for developing

country businesses that have limited budgets and capabilities to gather market information and analysis. The Internet can serve as a tool for conducting market research, strategic analytics, and putting developing country businesses in touch with customers globally (UNCTAD 2010: 6).

Getting access to customers globally using Internet platforms is another way businesses in developing countries can use the Internet to engage in international trade. For example, China's Taobao.com provides a mobile platform that coordinates all e-commerce needs along a value chain (UNCTAD 2010: 74).

Developing country businesses can use the Internet to sell goods and services online, directly to the consumer or as part of a global value chain (UNCTAD 2010: 72). This can be particularly significant for business in developing countries where the Internet provides ways to overcome barriers such as inefficient customs procedures and poor transportation infrastructure that have made international trade too costly (Adlung and Soprana 2012: 4–5).

Similar to SMEs, developing country businesses use the Internet to access business inputs, such as legal, financial, and accounting services, thereby improving their ability to compete globally. For example, MPesa is a financial service provider in Kenya that gives consumers access to financial services using mobile devices (McKinsey and Co. 2010: 13).

The Internet can also improve access to finance for developing country business, thereby overcoming constraints on growth due to limited domestic capital markets, particularly for start-ups. For example, crowdfunding platforms already exist in emerging markets such as Brazil and Colombia and developing countries in sub-Saharan Africa (World Bank 2013: 32). According to the World Bank, developing country businesses could use crowdfunding to mobilize up to US\$96 billion by 2025 (2013: 43). Expanding crowdfunding platforms in the developing world will require an enabling regulatory environment that includes access to the Internet.

In terms of the employment impacts, using mobile phones to access the Internet has already generated employment in developing countries (ITU 2013). There are significant growth opportunities for businesses providing services delivered over mobiles (Andjelkovic and Imaizumi 2012: 75). For instance, in India it is estimated that such opportunities could create 7 million new jobs (Cellular Operators Association of India 2011). This includes the development of apps for smart phones that provide access to financial services, health care information, and data about the latest agricultural prices. Such business opportunities are particularly realizable for developing country businesses as providing services online requires only an Internet connection and they can be provided to consumers globally (Andjelkovic and Imaizumi 2012: 77).

Moreover, employment opportunities from Internet-enabled trade do not necessarily require high skills. There

are job growth opportunities in so-called microwork—small digital tasks such as transcribing hand-written text—which is relatively low-skill work that cannot be easily automated (Andjelkovic and Imaizumi 2012: 81). Microwork already accounts for more than 100,000 jobs and more than US\$3 billion per year in economic value with significant room for growth (Lehdonvirta and Ernkvist 2011). In addition, the associated job creation from the Internet tends to be inclusive in that it leads to greater employment gains among businesses with larger proportions of low-skilled workers (Dutz et al. 2011: 4).

THE BARRIERS AND CHALLENGES TO DIGITAL TRADE

There are a range of barriers to realizing the Internet as a platform and driver of international trade. These include Internet access, a secure payments system, efficient and cost-effective delivery services, as well as barriers to trade in goods and services, costly customs procedures, different consumer protection laws, and access to cost-effective and timely dispute settlement mechanisms.

In addition, the engagement in international trade by small businesses is expected to lead to more trade comprising larger quantities of smaller value goods (Olarreaga and Austin 2013). This will have important implications for existing trade rules and infrastructure that has been geared to facilitating trade by multinational enterprises (MNEs). For instance, it could mean that delays at the border, while costly for all businesses, can be large enough as a share of a small transaction to become a barrier to trade.

INTERNET ACCESS

For the Internet to be a platform for international trade requires access to it. As outlined, Internet access is growing globally but significant gaps remain, particularly in the developing world. Moreover, there is significant variation in Internet access within the developing world. For instance, in Africa, only 7 percent of households have Internet access at home compared with almost 33 percent of households in Asia (ITU 2013).

In addition, as mobile devices are now the main way of getting online in the developing world, access to mobile phones and mobile networks is inseparable from the challenge of Internet access.

Increasingly, access to broadband is also necessary if businesses want to use the Internet to engage in international trade (USITC 2013: 1–9). For instance, broadband access is often needed if businesses want to become part of global supply chains (UNCTAD 2010: 48). Businesses also require broadband to take full advantage of Internet services such as cloud computing.

However, broadband access in developing countries remains low. One of the reasons is that broadband costs more in developing countries, particularly where a monopoly/duopoly exists in the telecommunications market (UNCTAD 2010: 18). For example, the introduction in Tanzania of competition in the telecommunications market led to significantly reduced Internet costs and higher mobile penetration rates (ITU 2007).

This requires telecom regulations that address issues such as the access of new entrants to telecommunication facilities that would be too costly to build and economically inefficient to duplicate, such as the last mile. Interconnection rules that prevent overcharging for access to these facilities and for how frequencies are allocated are also needed (Geradin and Kerf 2004).

Another challenge in some developing countries is access to reliable power supply. For instance, one in five people in the world still do not have access to electricity (Practical Action 2013). Another barrier to Internet use arises from the majority of online content being in English (UNCTAD 2010: 49).

CROSS-BORDER DATA FLOWS

The ability to transfer data freely across borders is necessary for the operation of the global Internet as a platform for international trade. Additionally, some forms of cross-border data flows are themselves international trade, such as providing a digital product over the Internet. Other cross-border data flows such as sharing information online might not itself be international trade but are an important enabler of economic activity that can lead to international trade.

Government intervention in the free flow of data can reduce the potential of the Internet for international trade. Some of these restrictions are for legitimate reasons such as protecting the privacy of data, Internet Protocol (IP) protection, ensuring cybersecurity or regulating access to harmful content such as child pornography. In other cases, restrictions on cross-border data flows are being imposed to provide domestic companies with a competitive advantage by redirecting Internet searches or blocking access to foreign sites.

DATA LOCALIZATION

Understood broadly, data localization is any law that limits the ability for data to move globally and to remain local (Chander and Le 2014). This would include privacy laws such as the European Union (EU) 1995 Privacy Directive that conditions the ability to transfer personal data outside the EU, Australia's law preventing digital health records from being sent overseas, and Indonesia's requirement for local data centers. All these restrictions raise the costs of moving data globally, which affect the economics of the global Internet and the opportunities for Internet-enabled trade.

MARKET ACCESS RESTRICTIONS ON TRADE IN GOODS AND SERVICES

Internet-enabled trade also faces traditional trade barriers such as tariffs and non-tariff barriers. Services trade barriers are often higher and given the potential for the Internet to boost services trade, such barriers are particularly significant (Borchert et al. 2012: 21).

INTELLECTUAL PROPERTY RIGHT PROTECTION

There are a number of IP issues raised by Internet-enabled trade. One challenge is to find a balance that gives IP rights holders the ability to enforce their rights and prevent the sale of counterfeits while not burdening Internet service providers (ISPs) and other Internet platforms to the extent that it makes international trade on the Internet too risky and costly.

Another issue is IP infringement in the consuming market. Businesses selling online need confidence that their intellectual property rights (IPRs) will be protected. Selling counterfeit goods online also undermines consumer trust in the use of the Internet as a platform for international trade. These concerns about IPR protection exist for international trade broadly, but the nature of digital products—their non-physical nature that makes replication almost costless, combined with the ability to use the Internet to deliver digital goods rapidly and globally—makes IP piracy particularly prevalent and costly. Protection of IP is also particularly challenging for SMEs who might lack the capacity and resources to identify an infringement and to enforce a copyright breach in a foreign court (USITC 2010a: 3–15).

Another issue is the use of the Internet to steal business trade secrets and IP. This issue can reduce trust in using the Internet and is often part of a broader issue with IP protection.

DOMESTIC RULES FOR INTERNET ENABLED TRADE

For digital trade to occur, countries will require domestic laws that allow contracts to be concluded online. This could include laws that recognize digital signatures and that clarify which countries' laws apply in the event of a dispute.

ACCESS TO COST-EFFECTIVE DISPUTE SETTLEMENT MECHANISMS

The impact of the Internet on international trade, in particular the expected increase in trade in low-value goods, raises new challenges for disputes settlement. For one, disputes over low-value goods will often make use of domestic courts uneconomical. This is also true of the World Trade Organization's (WTO) dispute settlement mechanism. The absence of cost-effective and timely mechanisms for resolving disputes arising from an online international transaction increases the risk of engaging in Internet-enabled trade. Ebay has responded to this by creating its own dispute settlement process for transactions over its platform. Using this system, eBay resolves more than 60 million online disputes annually, most of them over low-value goods (Rule and Nagarajan 2010: 5), highlighting the demand for such a system.

This issue is particularly acute for SMEs that are more likely to be transacting smaller value goods and services. In addition, SMEs and developing country businesses have less financial capacity to engage lawyers and to absorb the costs if a transaction goes wrong.

INTERNATIONAL PAYMENTS SYSTEMS

To complete an online transaction requires international payment options. One way is to pay using a credit card. Another is to use intermediary payment systems such as PayPal or VeriSign that facilitate payments amongst non-merchants who cannot accept conventional credit card payments (Mann 2003).

Credit cards and e-wallet services such as PayPal and VeriSign offer the most convenient, cost-effective ways of paying for online transactions. Unlike bank transfers or cash, consumers can usually stop payment in the case of fraud or non-receipt of goods or services. For vendors, the ability to receive payment almost immediately can expedite the delivery process and helps manage cash flows.

There are, however, limits on the ability of consumers to use international payments mechanisms (Mangiaracina 2009:

12). For instance, access to a bank account and credit card are minimal requirements, but in many developing countries such access is limited (Mann et al. 2000: 63). According to the World Bank, up to 2.5 billion people do not have access to banks or credit cards (2014).

There are various other challenges to developing international payments systems.

- Vendors need to link credit cards with e-commerce sites, particularly when the payment is coming from another country.
- Existing government mandated ceilings on the maximum amount that can be spent online.
- The ability to verify who is making the transaction to avoid being complicit in illegal activities such as fraud, money laundering, and terrorist financing

TRADE LOGISTICS

Logistics matter for all goods trade. The World Bank has observed that the competitiveness of many countries is affected by high trade costs arising from poor transport and logistics (2013: 34). This includes infrastructure such as ports, roads and airports, ICT infrastructure, and logistics service such as express postal services (World Bank 2012: 27–28). A World Economic Forum report estimates that improving customs administration and transport services could increase global gross domestic product (GDP) by up to US\$2.6 trillion (2013).

Access to efficient logistics networks is also needed if businesses are going to effectively participate in global supply chains. According to a World Bank report, flows of goods among developing countries participating in regional supply chains are particularly sensitive to logistics costs (Saslavsky and Shepherd 2012: 18).

Internet-enabled trade in low-value goods makes logistics issues particularly important and raises some new issues. For instance, trade in high quantities of small-value goods makes efficient customs processes and seamless linking between international and domestic delivery services particularly important, as these costs can quickly make trade in such goods uneconomical.

A further challenge here is for trade logistics systems to be capable of handling returns—a distinguishing feature of the domestic e-commerce experience that will need to be replicated internationally if consumers are to fully engage in Internet-enabled international trade.

HOW THE WTO AND FREE TRADE AGREEMENTS REGULATE DIGITAL TRADE

OVERVIEW

The WTO is the key multilateral organization governing international trade. Its rules are central to supporting international trade, including when it is transacted online. In December 2013, WTO Members agreed to a new trade facilitation outcome that will streamline customs procedures, increase transparency and reduce costs, all of which will benefit online trade in goods, including making it easier for businesses to integrate into value chains, which Internet access can support. Members also agreed on a Work Program on Electronic Commerce that instructs the WTO to continue working on this issue, including the relationship between e-commerce and development (WTO 2013).

Besides this WTO outcome on trade facilitation, its rules have not been updated since its establishment in 1995 and the rapid development of the Internet.

Negotiating new multilateral trade rules remains hostage to the slow-moving WTO Doha Round of trade negotiations. Instead, new rules for digital trade are being developed in bilateral and regional free trade agreements (FTAs). For instance, all FTAs to which either the US or the EU are party include e-commerce chapters (Herman 2010). Progress is also being made in current FTA negotiations, the most prominent of which are the Trade in Services Agreement (TiSA), Trans Pacific Partnership (TPP) and the US-EU Transatlantic Trade and Investment Partnership (TTIP) negotiations.

THE WTO INFORMATION TECHNOLOGY AGREEMENT

Trade policy can drive down the costs of Internet access in the developing world. For instance, trade barriers to imports of ICT influences the costs of Internet access, whether for wireless devices or via personal computers (PCs) over fixed lines.

The WTO Information Technology Agreement (ITA)—a plurilateral agreement involving 80 Members representing 97 percent of world trade in ICT products—has reduced tariffs to zero on a range of ICT goods. It was concluded in 1996 and is in the process of being updated. Success here would reduce the costs of developing Internet access. For example, an updated ITA would include coded key cards used to access Internet content such as software, machines for making optical fiber for cables that provide Internet access, and machines used to make semiconductors that can drive down the costs of computers and mobile devices used to access the Internet (USITC 2012).

THE GENERAL AGREEMENT ON TRADE IN SERVICES

Under the General Agreement on Trade in Services (GATS), WTO Members have scheduled commitments to liberalize their services markets. The key role of services in online trade makes the GATS particularly important. Moreover, many FTA services commitments are also based on the GATS. The GATS defines services as the supply of a service—1) from the territory of one Member to the territory of any other Member; 2) in the territory of one Member to the service consumer of any other Member; 3) by a service supplier of one Member, through commercial presence in the territory of any other Member; and 4) by a service supplier of one Member, through the presence of natural persons of a Member in the territory of any other Member.

The GATS includes two sets of rules. The first set, of which the most-favored nation (MFN) commitment is the most important, applies to all services trade unless subject to reservations. The second set of rules includes the national treatment commitment and a set of market access commitments that prohibit WTO Members from adopting various quantitative limits on service suppliers, such as limits on the number and total value of services. However, these commitments only apply to those services sectors where WTO Members have specifically scheduled a commitment to liberalize their services market in the GATS. Business professional and financial services are the GATS sectors with the highest number of commitments, followed by telecommunications. This is significant as all these services can be provided over the Internet.

THE GENERAL AGREEMENT ON TRADE IN SERVICES ANNEX ON TELECOMMUNICATIONS

The GATS Telecoms Annex is a set of commitments WTO Members have made regarding access to telecom networks. It was motivated by the understanding that access to the telecoms networks is often needed to supply a service. As a

result, the absence of such access could reduce the value of a Member's commitments to liberalize their services sectors.

The WTO Telecoms Annex requires WTO Members to provide service suppliers from another Member with access to and use of their public telecommunications networks and services on reasonable and non-discriminatory terms (Article 5).

THE WTO TELECOMS REFERENCE PAPER

The WTO Telecoms Reference Paper includes pro-competitive regulatory principles for the telecommunications sector, which are designed to ensure that monopoly operators do not use their market power—such as control of access to telecoms infrastructure—to undermine competitive opportunities for new market entrants (Brookers and Larouche 2008: 331). The Reference Paper requires WTO Members to prevent “major suppliers” from engaging in anti-competitive practices. It also includes commitments to allow for interconnection with a major supplier on non-discriminatory terms, in a timely fashion, and on cost-oriented rates.

The Reference Paper also addresses access to spectrum. The rapid uptake of mobile phones as a means of getting online also means that how countries manage and allocate spectrum is increasingly important. Countries need to allocate appropriate spectrum in ways that encourage competition and reserve spectrum for new operators (UNCTAD 2010: 26). The Reference Paper includes a commitment that “the allocation and use of scarce resources, including frequencies ... will be carried out in an objective, timely, transparent and non-discriminatory manner.” These issues are being addressed in other trade agreements. For example, in the United States-Korea Free Trade Agreement (KORUS FTA) the parties agree to allocate and assign spectrum “in a manner that encourages economically efficient use of the spectrum and competition among suppliers of telecommunications services” (Article 14.17.4). Similar aims are expressed in the EU-US Trade Principles for Information and Communication Technology Services.

THE WTO UNDERSTANDING ON COMMITMENTS IN FINANCIAL SERVICES

The WTO Understanding on Commitments in Financial Services includes commitments on cross-border data flows. Specifically, Members have agreed that they will not “prevent transfers of information or the processing of financial information, including transfers of data by electronic means.” This commitment is balanced against the right of a Member to protect personal data and personal privacy so long as such a right is not used to circumvent the provisions of this agreement.

THE TRADE RELATED INTELLECTUAL PROPERTY RIGHTS AGREEMENT AND OTHER FTAS

The WTO Agreement on Trade Related Intellectual Property Rights (TRIPS) provides minimum IP standards that all WTO Members have agreed to apply and enforce domestically. For example, the TRIPS agreement provides copyright protection based on the life of the author and of not less than 50 years (Article 12). In the case of trademarks, the TRIPS agreement requires WTO Members to have a system for registering trademarks for terms of seven years, renewable indefinitely (Article 18). These IP rights have been extended in FTAs. For instance, KORUS creates copyright for the life of the author, plus 70 years.

While the TRIPS was an important development in terms of extending minimum IP protections globally, a number of countries view these commitments as being limited by a lack of implementation. Such IP enforcement issues are being addressed in FTAs. For example, under the KORUS, the parties have agreed to set "pre-established" damages that are high enough to deter counterfeiting and piracy and compensate IP holders for loss. The US and Korea have also agreed to provide criminal penalties for willful copyright infringement and trademark counterfeiting. The TPP is also expected to boost IP standards and commitments on enforcement.

Another development has been incorporation of the World Intellectual Property Organization (WIPO) Internet treaties—the WIPO Copyright Treaty and the WIPO Performances and Phonograms Treaty—into FTAs. For example, the liability of Internet intermediaries such as ISPs and Internet platforms for international trade addressed in the WIPO Internet treaties has been reflected in some FTAs.

For the US, the balance between ISP liability and IP protection is reflected in the 1998 Digital Millennium Copyright Act, which enforces IP rights and limits the liability of Internet providers by creating a safe harbor for ISPs that are unaware of hosting IP infringing content and requires its removal on receipt of a takedown notice. This balance is reflected in US FTAs, where the liability of an ISP that does not own, initiate, or control distribution of pirated material is limited if it expeditiously removes infringing material it is made aware of by the copyright holder (KORUS Article 18.3).

OTHER FREE TRADE AGREEMENTS

Cross-border data flows

The US in its FTAs has incorporated and built on the WTO rules on data transfers for financial services. For example,

in the KORUS, the US and Korea have agreed to allow financial institutions to transfer information across borders for data processing where such processing is required in the ordinary course of business. Unlike the WTO commitment, the KORUS does not balance this right to transfer data with the right of a Member to protect personal data (Annex 13-B, Section B).

The KORUS also expanded the data flow commitment beyond the financial sector. Under it, the parties agree to "endeavor to refrain from imposing or maintaining unnecessary barriers to electronic information flows across borders" (Article 15.8). However, the hortatory nature of this commitment limits its effectiveness. This commitment is also subject to GATS Article XIV exceptions, which includes measures necessary for the protection of privacy of individuals (Article 23.1.2).

E-commerce chapters

Many FTAs now include e-commerce chapters. These include agreements to not prevent the parties to an electronic transaction from determining their own authentication methods (Article 15.4.1[a]). Additionally, some FTAs require authentication of e-commerce transactions to meet certain performance standards where these standards are required to achieve a legitimate government objective (KORUS Article 15.4.2).

NEW TRADE RULES FOR A DIGITAL WORLD?

COMMITMENTS ON CROSS-BORDER DATA FLOWS

Commitments to allow the free flow of data across borders are needed as the ability to move data globally underpins the capacity of the Internet to deliver a global market. As noted, there are already commitments on data flows for the financial sector in the WTO. The US has taken the lead in promoting a broader set of commitments on cross-border data flows in the KORUS. Even more robust provisions will be included in the TPP.

Any commitment on cross-border data flows will need to provide space for legitimate government restrictions, such as for laws addressing the how personal data is collected to prevent access to morally offensive content and for national security purposes.

The most obvious framework for thinking about how to strike this balance is in GATS Article XIV, which allows WTO Members to take measures that are otherwise inconsistent with their GATS commitments for the range of legitimate policy objectives listed in subparagraphs (a)–(e) such as protection of human animal and plant life or health and the protection of privacy.

RULES ON DATA LOCALIZATION

There are no trade rules that address government regulation requiring local data centers. Such rules are being pursued in the TPP, which is likely to include a commitment by the parties to not require localization of data as a condition for investment.

A particularly important issue here is how to manage the interface between digital trade and privacy. One approach would subject privacy regimes to multilateral negotiation, possibly at the WTO. A less ambitious outcome might be agreement among WTO Members to reach an agreement on such regulatory issues separate to trade negotiations, understanding that consensus on these issues can give countries confidence to liberalize their trading regimes.

ARE DIGITAL PRODUCTS GOODS OR SERVICES?

There is no consensus on whether a product provided online is a good or a service. For instance, is a sound recording downloaded from the Internet on to a disk a good or a service or both?¹

There are a number of implications that flow from defining digital products as goods or services. One is that it will determine whether the General Agreement on Tariffs and Trade (GATT) or the GATS applies. As outlined above, most GATS rules only apply to sectors where Members have made commitments and there is uncertainty about the application of these commitments to new businesses and modes of trade such as search engines and mobile software downloads.

The WTO Appellate Body has addressed the issue of which WTO Agreement applies to online trade, but only in part. In the *China – Audiovisuals* case, the Appellate Body found that a measure that conditioned import and distribution of films to review and approval of their content affected trade in goods. The Appellate Body reasoned that “the mere fact that the import transaction involving hard-copy cinematographic films may not be the ‘essential feature’ of the exploitation of the relevant film does not preclude the application of China’s trading rights commitments to the Film Regulation.”²

In this case, the Appellate Body found that the mode of delivery on hard-copy cinematographic film raised GATT issues. This implies that delivering the film online would have

excluded application of the GATT (Conconi and Pauwelyn 2011: 101). In contrast, the Appellate Body has found that GATS commitments are neutral as to their delivery, observing that once a Member has scheduled a commitment it undertakes to “liberalize the production, distribution, marketing, sale and delivery of the service(s) falling within that sector or subsector and mode(s) of supply, unless it has specified otherwise by inserting conditions, limitations, or qualifications in the Schedule. This implies that, in the absence of specific limitations, conditions, or qualifications, the meaning of ‘sound recording distribution services’ is not limited to the physical delivery of sound recordings. Rather, this entry would encompass distribution in electronic form.”³

This suggests that the GATT, unlike the GATS, is not technologically neutral as to the means of delivery. As the GATT now contains more rigorous rules than the GATS, this could create an incentive for countries to shift trade online. To the extent this occurs, it re-emphasizes the significance of the GATS and the need to develop new and more comprehensive trade rules to address the challenges and opportunities of the Internet for international trade.

Another implication is for the collection of customs duties. For example, software delivered on a disk is subject to border duties while the same software delivered online avoids this.

In recent US FTAs, the question of whether digital products are goods or service has also not been resolved. For instance, the e-commerce chapter in KORUS applies to digital products, defined as products that are “digitally encoded and produced for commercial sale or distribution, regardless of whether they are fixed on a carrier medium or transmitted electronically” (Article 15.9). Despite seeming to apply to goods and services, a footnote to the definition makes clear that the definition of digital products does not reflect the party’s view on whether trade in digital products through electronic transmission should be categorized as a trade in services or trade in goods.

1 | Background Note by the WTO Secretariat for the Council for Trade in Services (S/C/W/300), June 2009, p. 2; see also Appellate Body Report, *European Communities – Regime for the Importation, Sale and Distribution of Bananas*, WT/DS27/AB/R, 25 Sep. 1997, para. 221; Appellate Body Report, *Canada – Certain Measures Concerning Periodicals*, 30 July 1997, WT/DS31/AB/R, DSR 1997:1, 481, p. 17.

2 | *China – Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products*, 2 Dec. 2009, WT/DS363/AB/R, para. 196.

3 | *China – Measures Affecting Trading Rights and Distribution Services for Certain Publications and Audiovisual Entertainment Products*, 2 Dec. 2009, WT/DS363/AB/R, para. 377.

UPDATE THE GENERAL AGREEMENT ON TRADE IN SERVICES

As discussed, the potential for the Internet to drive services trade makes services commitments such as in the GATS and in FTAs particularly important.

Some of the most significant services barriers are on professional services such as accounting, law, and consulting, which can be key inputs for businesses (Borchert et al. 2012: 34–36). These include requirements for a local presence to provide the service and membership or licensing by local professional bodies.

Existing WTO GATS commitments, while not made with the Internet in mind, can support Internet-enabled international trade. As a result, how these GATS commitments apply to Internet-enabled trade is something this group could address.

Update the classification of services in WTO Members' schedules

As discussed, the convergence of services over telecoms networks has caused uncertainty as to whether existing GATS commitments cover new Internet-enabled services that do not clearly fit within how these services commitments were made.

GATS commitments for telecommunications are divided into basic telecommunications and value-added telecommunications services. Basic services are things such as telex, telegraph, and fax services. Value-added services include emails, online data base retrieval, and online information and data processing. WTO Members have made GATS commitments based on this distinction using the UN Central Product Classification (CPC) system, the Services Sectoral Classification System, or a combination of both.⁴ The US uses neither. The CPC was finalized in 1991 when the Internet largely did not exist.⁵ Convergence has made the basic/value added distinction artificial and led to a lack of clarity on whether a scheduled services commitment applies to these activities (Tuthill and Roy 2012: 164). For instance, do GATS commitments to liberalize telecommunications services include access to movies streamed over fixed lines? (Luff 2012: 67).

A WTO Secretariat Background Note suggested that in determining whether a GATS commitment applies to distinguish between “use and supply, wherein telecommunications may be used as a ‘means of delivery’ for many other services.”⁶ This would mean, for instance, that computer services “use” telecommunication networks to deliver their service, but this use does not alter the relevant commitment from one on computer services to one on telecommunication services.⁷

Clarify whether providing a service online is a mode 1 or mode 2 form of delivery

It is unclear whether a service delivered online is a delivery under GATS mode 1—consumption at home—or GATS mode 2—consumption abroad. For instance, does the consumption by a US citizen of travel services provided online by an Indian company occur in India or the US? Clarifying the relevance of GATS mode 2 commitments for the delivery of services over the Internet is relevant because GATS commitments tend to be more liberal for mode 2 services (Mattoo and Wunsch 2004: 15). Another fallout of classifying the provision of a service online as Mode 2 is what it might imply about which domestic legal system would apply to the transaction (Drake and Nicolaidis 2000: 413). For instance, classifying online services as mode 2 could imply that the legal system of the service supplier is applicable to the transaction. Such an outcome, however, could increase consumer risk of engaging in online international trade.

THE GENERAL AGREEMENT ON TRADE IN SERVICES REFERENCE PAPER

As outlined, the GATS Reference paper provides important guiding principles on telecommunications regulations but there are limits to it.

- It only provides a non-exhaustive list of what constitutes anti-competitive practices. A WTO Panel in the *Mexico – Telecoms* case found that anti-competitive practices could include practices such as price fixing and market-sharing agreements.⁸ While WTO panels could continue to elaborate on what constitutes an anti-competitive practice, further WTO rules on what this might mean will reduce uncertainty.
- It only applies to basic telecommunications services.

Recent FTAs have built on the WTO Reference Paper and include additional principles. These include commitments on local loop unbundling, collocation, and dialing parity. In each case, these commitments were a response to a limitation of the Reference Paper in getting incumbent operators to

4 | The Uruguay Round of Multilateral Trade Negotiations, Group of Negotiations on Services, “Services sectoral classification list: Note by the Secretariat,” MTN.GNS/W/120.

5 | The CPC was updated in 2008 but GATS commitments remain based on CPC version 1 from 1991.

6 | WTO Council for Trade in Services, Background Note by the Secretariat, “Telecommunication Services,” S/C/W/299, 10 June 2009, para. 11.

7 | See WTO Council for Trade in Services, Communication by the United States, S/C/W/339, 20 September 2011, para. 11.

8 | WTO Panel Report, *US – Mexico Telmex*, para. 7.232.

open access to their infrastructure on terms that made competition viable. For instance, local loop unbundling seeks to require operators to lease part of their network to allow other telecommunications providers to compete over the same line and thereby avoid having to negotiate interconnection agreements.

The WTO could also address new digital issues such as the convergence of telecommunications services and the Internet and network neutrality (OECD 2013). The convergence between telecommunications, broadcasting, and audiovisual services and their delivery is making trade rules and commitments that distinguish between these services increasingly difficult to apply (Luff 2012: 65). For example, is video or music delivered over the Internet subject to the EU exception in its GATS schedule for “content provisions which requires telecom services for its transport”? Governments could update their GATS commitments to reflect such convergence. FTAs are another area where convergence could be reflected in the services commitments. For example, the KORUS reflects convergence by extending commitments in the telecoms space, such as the right of access and national treatment to include ecommerce providers.

NEW INTELLECTUAL PROPERTY RULES

As outlined above, a number of Internet-specific IP issues such as the liability if ISPs has been addressed in the WIPO Internet treaties. These WIPO treaties were concluded in 1996 and have not been reflected in the TRIPS. Instead, countries such as the US and EU have included these TRIPS plus provisions on digital IP issues in their FTAs.

There remains disagreement over parts of the WIPO Internet treaties, in particular on whether the rules permit legitimate exceptions for copyright (Latif 2012: 377). In parallel, other mechanisms for addressing IP issues arising from the digital environment have appeared. The most prominent is adoption by the Internet Corporation for Assigned Names and Numbers (ICANN) in 1999 of the Uniform Domain Names Dispute Resolution Policy to address abusive registration of domain names.

This raises the question of the extent that the WIPO Internet treaties should be reflected in the WTO. This could include consideration of whether these treaties and indeed the concept of IP in a digital context need to be updated in any new WTO rules. For instance, an expanded discussion on what digital products are could include trade-related IP rights. As one commentator has observed, “The possibility of trade in pure content clears away some of the physical clutter and sheds light on the true nature of the transaction” (Taubman 2012: 314). Here, the trade in digital products can be understood as a limited license to use the content—a song or a program—and these rights are themselves IP rights.

THE WTO TECHNICAL BARRIERS TO TRADE AGREEMENT AND INTERNATIONAL STANDARDS

Trade policy can also support an open Internet and reduce costs of Internet access by developing global standards that encourage interoperability of devices and content across networks. Here, the technical aspect of these standards should be developed in an appropriate standard-setting forum such as the ICANN.

Various efforts have been made to promote interoperability by developing Internet principles. For instance, the OECD has developed a recommendation on Internet Policy Making that includes “consensus driven technical standards that support global product markets and communications” (2011: 6). Additionally, there are a range of bilateral statements of Internet Principles, such as the US-Japan, US-Korea, and EU-US FTAs, that reflect support for develop an open and interoperable Internet that can support and drive ecommerce. This includes principles such as non-discriminatory allocation of spectrum and the free flow of information across borders.

The WTO could develop a reference-style paper on Internet principles. Such an outcome would also make the WTO Technical Barriers to Trade (TBT) Agreement relevant, which requires Members to use international standards as a basis for their domestic regulations. The current set of standards developed at the OECD would not constitute an international standard as per the TBT Agreement as its development was not open to all WTO Members “at every stage of standards development.”⁹

IMPROVE FINANCIAL PAYMENT OPTIONS

There a various issues the group can consider to support online payments. For one, services commitments could address limits on restrictions of financial flows across borders.

The free flow of data across borders is another matter related to payments. For example, banks and credit card companies need access to data to verify and authorise payments. Improved information flows also help financial institutions develop better risk profiles that can lead to a more efficient allocation of capital. Moreover, as opportunities for mobile banking develop, access to transaction histories will help financial institutions develop risk profiles that more accurately reflect the risk of lending to a particular business (McKinsey and Co 2010: 15). This is important for developing

⁹ WTO Appellate Body Decision, *US – Measures Concerning the Importation, Marketing and Sale of Tuna and Tuna Products*, WT/DS381/AB/R, 16 May 2012, para. 374.

country businesses in particular where the absence of robust risk profiles leads to higher collateral requirements or an absence of lending to certain segments of the population (World Bank 2014: 60).

Greater competition in the services sector should also lead to innovation that can expand access to financial services for the poor. For example, the MPesa project was developed in conjunction with Vodaphone, highlighting how access to foreign services providers can help develop new products.

Another area where trade policy could contribute is by encouraging international cooperation to address online fraud. For example, countries could agree to make their requirements on banks and payment facilities for reporting suspected illegal activities, such as money laundering and terrorist financing, transparent and easily accessible.

IMPROVE TRADE LOGISTICS

As noted, improving trade logistics to reduce the costs of trade is a cross-cutting issue that affects not only digital trade but also all forms of trade in goods.

There is a trade facilitation issue that is particularly relevant for digital trade—the de minimis level below which customs duties are not applied. This is particularly relevant due to the increasing trade in low-value goods brought about by the Internet. A low de minimis level can make such trade uneconomical.

WTO Members have agreed to a moratorium on imposing customs duties on electronic transmissions, though this does not apply to the physical delivery of goods.¹⁰ This means that countries apply different de minimis levels, ranging from US\$1,000 to less than US\$1. Getting to an agreement on an appropriate de minimis level would increase certainty and reduce the costs of Internet-enabled trade in low-value goods.

DEVELOPING COMMON LEGAL RULES FOR ONLINE INTERNATIONAL TRADE

For the Internet to function as a platform for international trade, global rules on contract formation and dispute resolution will be required (Chander 2013: 159).

Work on providing this legal infrastructure is already being pursued by international bodies, governments, and businesses. Commercial contract law has become increasingly harmonized globally as countries have based their contract laws on the Uniform Principles of International Commercial Contracts (UPICC). However, the UPICC significance for e-commerce has been limited as it does not apply to consumer contracts.

The United Nations Commission on International Trade Law (UNCITRAL) has developed a 1996 Model Law on Electronic Commerce that applies to the electronic element of commercial sales of goods and services, and this has been supplemented by the 2001 UNCITRAL Model Law on Electronic Signatures. These Model Laws address the legal process such as rules governing formation of contracts online, but does not address issues of access for such goods and services to the consumer market.¹¹ The UNCITRAL Model Laws are also not legally binding but have become the basis for legislation in various states, including US laws on use and acceptance of electronic signatures.¹²

As outlined, FTAs include rules that address contract formation issues over the Internet. While such FTA commitments can help prevent countries from introducing laws that would unnecessarily prevent electronic signatures being adequate to complete a contract, steps could be taken to encourage more regulatory cooperation to develop common approaches. For instance, trade agreements could also encourage mutual recognition of each country's laws on electronic signature.

Some FTAs have also sought to reduce the risks of digital trade arising from different consumer protection laws. For example, the KORUS requires consumer protection agencies in Korea and the US to cooperate in the enforcement of each other's laws against fraudulent and deceptive practices (Articles 15.5, 16.6). Addressing such issues bilaterally is, however, limited due to the global nature of the Internet. This supports the need to more fully engage on these issues in existing plurilateral negotiations such as the TiSA and the TPP as well as at the WTO.

DIGITAL DISPUTES SETTLEMENT

Digitally enabled international trade also requires a new dispute settlement system? As outlined above, digital trade is expected to lead to more trade in low-value goods. The cost and time it takes to use WTO dispute settlement mechanisms makes it uneconomical for almost all such disputes. Another reason the WTO is unlikely to be suitable is that in many cases disputes arising from online trade will be due to private action than a government measure.

An effective dispute resolution system would need to be able to respond to disputes that are often over claims worth less

10 | Hong Kong Ministerial Declaration, WT/MIN(05)/DEC, 22 Dec. 2005, para. 16

11 | UN G.A. Doc. A/RES/51/162, 30 Jan. 1997 with additional art. 5 bis adopted by the United Nations Commission on International Trade Law (UNCITRAL), June 1998.

12 | Electronic Signatures in Global and National Commerce Act (E-Sign), 15 U.S.C. SS 7001-31, 2000.

than US\$100 and to resolve the dispute quickly—such as in a matter of days if not weeks at the most (Cooper et al. 2011: 758).

There are efforts to establish online dispute resolution options for cross-border disputes. For instance, the 2007 OECD Recommendations on Consumer Dispute Resolution and Redress address the need to provide consumers with access to dispute resolution for cross-border disputes. These OECD Recommendations emphasize the need for states to encourage businesses to establish voluntary, effective, and timely mechanisms for handling complaints from consumers and settling disputes, including “private third party alternative dispute resolution services, by which businesses establish, finance, or run out-of-court consensual processes or adjudicative processes to resolve disputes between that business and consumers.” Additionally, the UNCITRAL has established a working group to develop model rules on online dispute resolution, which are “intended for use in the context of cross-border, low-value, high-volume transactions conducted by means of electronic communication.”¹³

What is the role of the WTO here, if any? One approach would be to establish a multilateral dispute settlement mechanism that responds to the needs of digital traders. An alternative approach for the WTO could be to focus on getting commitments by Members to establish domestic dispute settlement systems, to recognize outcomes from other Members' disputes, and to cooperate to enforce the outcomes. The approach that eBay has taken to settling disputes provides some insights into how to develop a dispute settlement system that can settle low-value disputes in a timely manner.

CONCLUSION

The globalization of the Internet and the ability to move data across borders underpins an increasing amount of international trade. What constitutes digital trade is potentially very broad. It can include use of the Internet to search for products, purchase them, and in the case of digital goods, deliver them online. In an international economy where global supply chains are an important feature of international trade, the Internet is also allowing business to participate in supply chains, such as by providing discrete tasks or services.

In addition, the Internet has become an important tool for businesses, whether it be using Skype or Google Hangouts to communicate with consumers and suppliers, for accessing IT in the cloud, raising finance from crowdfunding websites, transferring data globally to manage production schedules, or collaborating in research and development (R&D) with

globally located researchers. All this activity can increase the productivity of businesses, and their levels of innovation and competitiveness, leading to increased opportunities for international trade.

The scope of the impact of the Internet on trade also extends to creating opportunities for people and businesses that have traditionally been marginalized from international levels of innovation and competitiveness, leading to more opportunities for them since the costs of international trade are reduced. For example, the costs of gathering information on overseas markets, telecommunications, and of reaching consumers globally is now the price of an Internet connection. Other more traditional barriers to trade in developing countries such as poor infrastructure, inefficient logistics, and distance to market are also being overcome as the Internet allows for products to be searched for and delivered online.

To maximize the opportunities that the Internet presents for international trade requires a life-cycle approach. This starts with issues around Internet access, including access to mobile phones, the cost of access, and the challenge for those whose language is not English or one of the other main languages used online. It also means that Internet access, in particular the ability to move data across borders, needs to remain free from unnecessary and restrictive rules.

For digital trade to continue to grow, especially to ensure that consumers in the developed world are prepared to purchase digital products from businesses in the developing world, will require trust. This includes trust in suppliers and trust that a product meets applicable standards. For consumers, it will mean opportunities to return products that are defective, ways to safely complete the purchase online, and opportunities to resolve disputes arising out of such transactions in a cost-effective and timely manner.

All these challenges are amenable to being addressed by trade rules. Some of them only require a re-emphasis of existing commitments. For instance, WTO GATS rules already include a number of disciplines that support digital trade. The problem here is that applications of GATS rules and the extent of Members' services commitments to digital trade are unclear because the issue of the application of the GATS to digital trade during the Uruguay Round negotiations was not an issue as the Internet was then in a nascent stage. Similarly, the ITA negotiations present another opportunity to reduce tariffs on IT goods and thereby reduce the costs of Internet access. The WTO Trade Facilitation Agreement uses the Internet to create online windows that traders can use to reduce the costs and time of moving goods through customs. There are, however, new challenges that require new rules. Some of these arise from an increasing range of laws that

¹³ UNCITRAL Working Group III, “Online Dispute Resolution for Cross-border Electronic Commerce Transactions: Draft Procedural Rules,” Note by the Secretariat, A/CN.9/WG.III/WP.123, 9 Sep. 2013, p. 4.

are curtailing the ability to move data across borders. Many of these restrictions on data flows are to achieve legitimate goals such as protecting privacy or limiting access to offensive material. Other restrictions, such as requirements to store data locally, are less easily justified. These restrictions also do not necessarily present fundamentally new challenges for trade law, which has a long history of balancing commitments to non-discrimination and the right of Members to pursue legitimate policy goals in ways that do not constitute unnecessary or unjustifiable discrimination or a disguised restriction on international trade. Such a framework can provide guidance on how to develop a set of rules that maximizes the opportunities for the Internet and data flows, while giving appropriate space for governments to address the social and other harms that can arise.

Given that digital trade will require clarifying existing WTO rules as well as developing new trade rules, the WTO and ongoing bilateral and regional FTA negotiations provide important pathways for developing a digital trade agenda. In terms of the WTO, the Secretariat was given a mandate at the 2013 WTO Ministerial to study digital trade issues, and part of this work should focus on how to update or clarify existing commitments, including in the GATS, the TRIPS, and TBT agreements.

In the more immediate term, the large FTA negotiations, in particular the TPP, TTIP and TISA present the best opportunities for agreeing on new rules. The TPP is expected to be finalized in 2015 and should include digital trade rules that address a number of the challenges outlined above. It, of course, remains a limited FTA in terms of parties, though the intention to expand the number of parties to the agreement means that the TPP will be an increasingly important baseline for digital trade rules. The US-EU TTIP negotiations are less far along than the TPP but given the importance of digital trade for both economies are likely to include new rules that support and promote digital trade. The TISA negotiations present another important opportunity to develop new rules for digital trade, particularly given its focus on services trade and the opportunities that the Internet provides for services to be delivered online. Finally, the Regional Comprehensive Economic Partnership (RCEP) is another large regional FTA. It is not clear what the ambition of this FTA on digital trade is, but the inclusion of large developing countries such as China, India, and Indonesia in it make this another potentially important pathway for agreeing to new rules on digital trade.

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