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Principles for Market Openness in the Digital Age

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Principles for Market Openness in the Digital Age

1. Introduction

1. Digital technologies have made it easier to engage in trade, coordinate global value chains (GVCs) and diffuse ideas, changing how firms organise international trade, what they sell and to whom.¹ This has led to more numerous and complex international trade transactions involving combinations of goods, services and data crossing different borders.

2. In this evolving environment, ensuring that the benefits from these flows are reaped for businesses and consumers has become more complex. It requires not only that trade be faster and more reliable, but also that it meet a range of regulatory requirements that differ across markets. Indeed, although the Internet and other such digital infrastructures tend to be global, they raise important challenges for policy in a world where borders and regulatory differences between countries remain.

3. Increasingly, one important challenge is to enable key policy objectives to be met, including those related to privacy, consumer protection and security, and to preserve and promote the significant benefits from data-enabled trade. In today's more complex trading environment, where the completion of a simple digital trade transaction rests on a series of factors that enable or support the transaction, new approaches to market openness are needed (Lopez-Gonzalez and Ferencz, 2018).

4. This paper discusses what these new approaches to market openness might be, with a view to helping inform the thinking of policy-makers as they consider rules for the digital age. Section 2 begins with a description of the changes that the digital transformation is bringing to trade. Section 3 discusses the importance of holistic and joint approaches to market openness in the digital era. Section 4 discusses how principles of good regulatory practice in relation to market openness, inspired by the basic principles underpinning the multilateral trading system and good regulatory practice more broadly, can provide guidance when approaching some of the emerging challenges. Section 5 provides some initial policy observations.

2. Trade, digitalisation and market openness

5. The digital transformation has had a profound impact on international trade, lowering barriers to internationalisation and contributing to growing trade competitiveness. Firms, especially SMEs, can now more easily bring new products and services to a larger number of digitally connected customers across the globe. They can use new digital tools to overcome barriers to trade, facilitate international payments, enable global collaboration and

¹ As a result, more small parcels and lower-value digital services such as applications are crossing borders, a greater number of services are becoming tradable, and goods and services are increasingly being bundled into 'smart' products (Lopez-Gonzalez and Jouanjean, 2017).

draw on a larger pool of funding (see WTO, 2018, ITC, 2018 and Lopez-Gonzalez and Ferencz, 2018 for recent reviews of these changes).

6. As a result, digitalisation has changed what and how we trade. The growth of online platforms has led to a rising number of small parcels and digital products and services (including lower value services) crossing international borders. New technologies and data-driven business models are also changing how services are produced and supplied, increasing their tradability and blurring distinctions between modes of delivery. The digital transformation is also giving rise to *smart products* that combine goods and services and are constantly connected.

7. In this evolving environment, the nature of the measures that affect how firms engage in digital trade is also changing. Measures that affect access and use of digital networks have become more important. There are also new consequences from some traditional trade issues (such as trade facilitation and *de minimis* thresholds in the context of growing parcel trade); and new measures which raise new issues for trade (e.g. related to the movement of data or the interoperability of e-payment systems).

8. With growing interconnectedness and greater demand for just-in-time delivery, trade also needs to be faster and more reliable than ever before. This means being able to deliver more rapidly and 'on demand', often 24/7, so that consumers can have instant access to the goods and services they need when they need them. For trade to become more agile, and therefore better adapted to the demands of the 21st century, new approaches to market openness are needed.

3. New approaches to market openness in the digital age

9. Market openness is about creating a business-friendly environment that allows "foreign suppliers to compete in national markets without encountering discriminatory, excessively burdensome or restrictive conditions" (OECD, 2010). It helps firms, domestic and foreign, reap the benefits of trade, contributing to economic growth (Romalis, 2007). However, the rise of new data-driven business models, while enabling greater trade, also makes ensuring market openness more complex.

3.1. Market openness needs to be more holistic

10. Today, a simple digital trade transaction rests on a series of trade-related factors that enable or support the transaction. For instance, the ability to order an e-book depends on access to a retailer's website. This in turn depends on the regulatory environment which determines the conditions under which the retailer can establish the webpage as well as on the cost for the consumer of accessing the Internet – a cost which, in turn, is affected by the regulatory environment in the telecommunications sector. The purchase of the e-book will also be affected by other factors, such as the ability to pay electronically and the tariff and non-tariff barriers faced by the physical device used to read the e-book.

11. A barrier on one of these linked transactions will affect the need or the ability to undertake the other transactions. This means that market openness needs to be approached more holistically, taking into consideration the full range of measures that affect the ability to undertake any particular transaction. For instance, Internet access may be a necessary but not sufficient condition for digitally enabled trade in goods to flourish. If logistics services

in the receiving (or delivering) country are costly due to service trade restrictions, or if goods are held up at the border by cumbersome procedures, then the benefits of the digital transformation may not materialise.

12. Today, trade policy-makers need to go beyond considering the most visible *specific provisions* in any given transaction and think about how these interact with the *supporting and enabling goods and services* provisions and the underlying *digital infrastructure and connectivity* issues (Figure 1). This is irrespective of whether products traded are digitally ordered goods or parcels or digitally enabled or delivered services. But it is especially important when it concerns bundled or smart products, where a greater number of measures, relating to both goods and services, tends to apply (see ‘bundled products’ column in Figure 1).

Figure 1. Measures affecting digitally enabled trade

	Goods	Bundled products	Services
Specific provisions	NTMs		
	Tariffs		
	Trade facilitation – de minimis, customs handling, pre-arrival notices...		
		Market Access	
		National Treatment	
		Domestic regulation	
Support services and goods	Support services for goods – logistics, transport, courier		
		Supporting goods for services – Computers, smart phones, tablets	
Enabling and supporting services	Support services – retail or financial services (e-payments)		
	Enabling Services – Computer services		
	Business environment – Competition policy, regulations on establishment, local content requirements, dispute settlement, IPR		
	Transparency		
Infrastructure and connectivity	Telecommunications services		
	Technical – measures that affect use of infrastructure – flows of data, technical interoperability, domain names, net neutrality, Internet protocols, e-contract and e-signature provisions		
	Infrastructure – measures affecting the use and access to equipment (cables and wires, wireless networks)		

Source: Lopez-Gonzalez and Ferencz (2018).

13. From a trade policy perspective, the benefits of the digital transformation are therefore contingent on the combined and smooth functioning of issues which span goods, services and digital connectivity. However, a holistic approach to market openness also means going beyond the issues that traditionally concern trade policy-makers and discussing and understanding how these interact with other policy domains. Market openness is itself a necessary but not sufficient condition for drawing benefits from digital trade.

14. New technologies are often made available through international trade, and access to international markets for both inputs and outputs is necessary for scaling production and increasing competitiveness. But taking advantage of this is only possible for firms which have the adequate skills and capacity to adopt new data-driven solutions. Successful firms in the digital age combine both adoption of new technologies and access to global markets.

15. Being able to access new technologies is key, and market openness ensures this, but being able to effectively use these technologies requires leveraging other policies to help the population obtain the appropriate skills. In this context, trade policy needs to be seen in

the context of a range of other policies, which also matter for the shared benefits from digital adoption to materialise.

3.2. Market openness needs to be approached more jointly and through more international dialogue

16. Data and ideas can generally move unimpeded across the Internet, reaching global audiences. This offers firms of all sizes new opportunities to create new products and reach new markets, bringing new benefits to consumers. But in order to access these markets and consumers, products and services are generally subject to a range of regulatory requirements. These can be more traditional technical requirements or they can be new issues related to the interoperability of e-payments or the need to meet consumer protection or privacy requirements.

17. Different countries have different preferences for different types and degrees of regulation, whether on their food products or the privacy or consumer protection they afford to their citizens. These differences are not necessarily, per se, barriers to trade, but they can impact trade, and, in the context of growing interconnectedness between countries, they can have international spillovers. International dialogue, among regulators, and between the regulatory and trade policy communities, is needed to discuss approaches that bridge regulatory differences, making these more interoperable and therefore less likely to undermine the opportunities and benefits for all from digital trade.

18. International dialogue will also increasingly need to involve a range of stakeholders as new business models drive changes in international trade. All have something to contribute: the business community, workers, consumers and governments all bring different perspectives to the understanding the digital economy, and better management of the opportunities and challenges will require all voices to be heard.

4. Drawing on principles of good regulatory practice to approach new challenges

19. To promote more holistic and joint approaches to market openness, and mitigate negative spillovers arising from regulatory heterogeneity, it can be useful to start with the principles that underpin good regulatory practice, both generally and in relation to market openness (OECD, 1997, 2005 and 2010), principles which are embedded in the 2014 OECD Council Recommendations for Internet Policy Making.² These principles are also reflected in, and inspired by, the basic principles underpinning the multilateral trading system.

20. Principles of market openness aim at supporting a business environment that allows countries to reap the benefits of globalisation and international competition, while efficiently achieving their intended public policy goals. These principles suggest that regulatory approaches:

- a. be *transparent*;

² See further details in the communiqué: <https://www.oecd.org/internet/ieconomy/oecd-principles-for-internet-policy-making.pdf>

- b. be *non-discriminatory*;
- c. be *no more trade restrictive than necessary* to achieve their objective; and that they
- d. be *interoperable*³.

21. In the market openness principles, the concept of *harmonisation* is generally used. However, in the context of digital trade, and given ongoing regulatory differences in a number of areas, OECD work to date has used the broader concept of *interoperability* of different approaches, which can be achieved in a variety of ways (Lopez-Gonzalez and Ferencz, 2018). The importance of interoperability is also reflected in the 2014 OECD Council Recommendations for Internet Policy Making.

22. The principles can be used to guide discussions on a range of topics relevant to the digital economy and where differences among countries in relation to regulatory practice raise issues for trade.

4.1. Transparency

What is it?

23. The transparency and inclusiveness of regulatory decision-making is a fundamental factor facilitating participation in a market, including through digital trade. It relates to the ability of market participants to fully understand the conditions and constraints for entering and operating in a market.

24. In its most basic form, transparency means easy and open *access to information* about regulations, procedures, and other measures that affect market participants' interests and indicate the conditions, constraints and risks that they will encounter in the market. Transparency entails regular *publication of comprehensive and up-to-date* information about *existing and forthcoming* rules, proposed in an *accessible and user-friendly* manner and using a *wide array of dissemination channels*, including through the use of *digital technologies* (which can be leveraged to provide wider and more up-to-date access).⁴

25. A second fundamental aspect of transparency refers to the *openness and inclusiveness of the policy-making process*, in particular the opportunity for stakeholders to participate in formal or informal public consultations.

26. Transparency is a central tenet in WTO agreements, both in terms of publishing regulations, transparency of the process of policy-making, and indeed the requirement to notify proposed and final measures to the WTO. Relevant provisions are numerous, but include GATT Article X and GATS Article III; Agreement on Technical Barriers to Trade (TBT Agreement) Articles 2 and 10; Agreement on the Application of Sanitary and Phytosanitary Measures (SPS Agreement) Article 7 and Annex B; Agreement on Trade-related Investment Measures (TRIMS) Article 6; and the Trade Facilitation Agreement (TFA) Articles 1, 2, 5 and 6.

³ As competition is the subject of work elsewhere in the OECD, it is not discussed in this paper. For a broad discussion see (OECD, 2018).

⁴ For example, under certain transparency provisions in RTAs, the parties agree to publish relevant regulation in an electronic format, and/or in the language of the other party, or in English.

Why does it matter for digital trade?

27. For **firms**, the availability of information removes uncertainty about applicable requirements, helps them better foresee the costs and returns of their trading activities and investments and provides them the time and flexibility needed to adjust to potential changes. In a digital world where companies, including SMEs, can be participating in a large number of markets, this openness is ever more critical (ITC, 2018 and WTO, 2018).⁵

28. For **consumers**, transparency provisions are equally important, helping them better understand and make the most of disciplines meant to protect them. Although originally formulated with businesses in mind, these provisions are an essential means for establishing consumer confidence and trust in the digital economy (see OECD, forthcoming).

29. For **policy-makers**, transparency is crucial because it enhances the efficiency of domestic regulations by revealing the costs and benefits of policy decisions, reducing the risk of capture by specialised interests, helping remove economic distortions that might undermine domestic policy objectives, and improving public confidence in governmental and regulatory performance.

30. Dialogue with stakeholders reduces compliance costs by improving stakeholder buy-in and adjustment to potential changes, a critical element for approaching market openness in the digital era more jointly. Indeed, the 2016 Cancun Ministerial Declaration on the Digital Economy underscores the “need for open, transparent and inclusive processes in global multi-stakeholder Internet governance”.

31. Transparency in policy-making processes might be especially important for digital trade given the complexity of the evolving environment and the speed of change. In the digital age, uncertainties regarding the applicable regulatory framework are magnified because of the increasingly blurred boundaries between goods and services, new issues raised by data and the novel character of many digital transactions and business models. Transparency at all stages is needed to help identify and then communicate the rules that apply to bundled or smart products which can touch on different regulatory spheres. Transparency can also help with the choice of rules applicable for services that have become tradable as a result of digitalisation (e.g. transport services such as ride-sharing).

32. Transparency may also be fundamental in the context of new issues raised by digital trade. For example, different jurisdictions may have different understandings of what constitutes “consent” or “informed consent” when seeking authorisation for the processing of personal data across borders. Similarly, the definition of personal data itself will vary across countries with different understandings of what types of information are personally identifiable.⁶ Transparency in both the process of policy-making and the applicable rules and criteria on these issues are critical in enabling businesses to better face some of the uncertainties and complexities related to operating globally in a novel digital trade environment.

⁵ Helping SMEs overcome informational asymmetries with respect to larger firms and face exporting and importing costs.

⁶ Moreover, what might be considered non-personal data today, can become personal data tomorrow. For the case of IP addresses, see judgement of the European Court of justice Case 582/14 – Patrick Breyer V Germany.

How has this principle been approached in the context of digital trade?

33. Specific disciplines on electronic commerce or digital trade included in recent RTAs touch upon aspects of transparency and inclusiveness of regulatory decision-making to varying degrees.⁷ While publication and consultation requirements are generally set as an overarching commitment covering all disciplines in agreements, e-commerce chapters often spell out specific commitments regarding consultations, or consumer protection.⁸ For instance, Art.14.5 of the Comprehensive and Progressive Agreement for Trans-Pacific Partnership (CPTPP), or Art.19.5 of the United States - Mexico – Canada Agreement (USMCA) request Parties to “*facilitate input by interested persons in the development of (their) legal framework for electronic transactions*”, highlighting also the importance of open and multi-stakeholder approaches for digital trade. As governments regulate in complex areas in the digital economy, transparency is critical in ensuring both that regulations are effective and that all parties understand the requirements.

34. The importance of transparency in policies designed to promote consumer confidence is highlighted in CPTPP Art.14.7, which calls on Parties to “*adopt... and maintain... transparent and effective measures to protect consumers from fraudulent and deceptive activities*” (see also EU-Japan Economic Partnership Agreement Art.8.78) and to “*publish information on the personal information protections it provides to users ... including how (a) individuals can pursue remedies; and (b) business can comply with any legal requirements*” (CPTPP Art.14.8.4, see also USMCA Art.19.8.5).

35. The effectiveness of digital technologies in promoting transparency is also widely acknowledged: The CPTPP (Art.14.9) encourages Parties to “*make trade administration documents available to the public in electronic form*”, while the USMCA (Art.19.18) incites Parties to “*ensure that (government information made available to the public) is in a machine-readable and open format and can be searched, retrieved, used, reused and redistributed.*”

4.2. Non-discrimination

What is it?

36. In the context of the multilateral trading system, non-discrimination means that all like goods and services seeking to enter the national market, irrespective of whether digitally enabled or delivered, should have equal access, regardless of origin (i.e., unjustified discrimination *among* countries is prohibited under the Most Favoured Nation, or MFN, principle). Non-discrimination also requires that once foreign goods or services enter a market, they should be treated no less favourably than their like domestic counterparts (referred to as National Treatment, NT).

37. Non-discrimination is embedded in a similar way in WTO Agreements: both MFN and NT are basic, unconditional commitments in the context of GATT (Articles I and III), SPS Agreement (Article 2.1), TBT Agreement (Article 2.1) and TRIMS (Article 2), but only MFN applies unconditionally in the framework of GATS (Article II), while Members are able to limit NT to the sectors inscribed in their schedule and subject to any conditions and qualifications set out therein (Article XVII). TRIPS requires all Members to accord NT and

⁷ References to RTAs in the text are illustrative and by no means comprehensive.

⁸ See also OECD recommendations on consumer protection in e-commerce which highlight, among other principles, the importance of transparency (OECD, 2016).

MFN to other Members (Articles 3 and 4), subject to a number of exceptions defined by the agreement or by reference to other international conventions. Non-discriminatory treatment of products relates not only to access conditions and treatment once on the market, but also from a procedural point of view, with respect to their capacity to demonstrate that they fulfil those applicable, non-discriminatory, conditions (see TBT Art.5). In the context of services the elaboration of disciplines on domestic regulation are still work in progress.

Why does it matter for digital trade?

38. Non-discrimination can help ensure a level-playing field between like goods, services and service providers, minimizing distortions in a marketplace and enabling greater benefits from trade.

39. For **firms**, it provides for equal competitive opportunities, allowing them to earn market share on the basis of the merits of their product or service, irrespective of their origin. For **consumers** and **policy-makers**, favouring product or service characteristics (quality, cost-efficiency, qualifications, innovation) over origin brings benefits in terms of economic efficiency and consumer welfare.⁹

40. In the context of digital trade, non-discrimination could also relate to ensuring equal treatment for ‘analogue’ and ‘digital’ trade. That is, that market actors be treated the same irrespective of the way in which they deliver goods and services.¹⁰

41. However, non-discrimination raises several issues for digital trade. The principle relates to equal treatment for like goods, services and service suppliers, but what is or is not “like” can be difficult to establish. Is a ‘smart’ speaker a like product to a traditional speaker? If so, how should restrictions affecting the delivery of the services related to the ‘smart’ element of the speakers be treated?

42. The novel character of many digital products and services, but also the rapid pace of change in their technological characteristics raises other issues. Is a 3D printed item a good or a service? Is a platform enabled ride-sharing service a transport service or is it an intermediation service? Given that trade rules permit different application of non-discrimination between goods and services, and that commitments on national treatment can vary by service, these decisions matter and pose challenges in digital trade. Finally, it might also be the case that technology might also raise new questions about what is discriminatory. For example, a requirement to locate computing facilities domestically means that international suppliers of services would be required to cover the costs of additional data servers in the foreign country as a condition for market access which could be argued to alter the conditions of competition for them. However, if local companies were also seeking to use cloud storage options from global suppliers, such a requirement could arguably impose a similar burden on them.

How has this principle been approached in the context of digital trade?

43. Difficulties over the differences in treatment between goods and services and the status of digital products are managed in the context of e-commerce-specific provisions in some recent RTAs, while noting that the definition of a digital product “*should not be*

⁹ The costs and benefits of non-discrimination in the context of trade can be traced back to the work of Viner (1950) on trade creation and trade diversion, highlighting how preferential liberalisation can affect consumer and producer welfare.

¹⁰ This might also be relevant in the context of requirements that companies engaging in e-commerce have to establish physically to fulfil licensing and registration requirements.

understood to reflect a Party's view that digital products are a good or are a service" (USMCA Art.19.1, see also CPTPP Art.14.1).

44. In these two agreements, like digital products "*created, produced, published, contracted for, commissioned or first made available on commercial terms in the territory of another party or (...) of which the author, performer, producer, developer or owner is a person of another Party*" are accorded non-discriminatory treatment (CPTPP Art.14.4, USMCA Art.19.4), while "*measures affecting the supply of a service delivered or performed electronically*" are subject to the agreement's provisions on investment and services and to the limitations, exceptions and non-conforming measures contained therein (CPTPP Art.14.2, see also USMCA Art.19.2). The two agreements also explicitly highlight non-discrimination in the context of the protection of personal information ("*endeavour to adopt non-discriminatory practices in protecting users ... from personal information protection violations*" CPTPP Art 14.8.3, USMCA Art.19.8.4).

45. The EU-Japan Economic Partnership Agreement (EPA) calls for a "*reasonable, objective and impartial*" administration of all measures of general application affecting e-commerce (Art.8.74), although certain service sectors are explicitly carved out from the scope of the e-commerce provisions, as is the case with RTAs involving other parties. All three agreements (CPTPP, USMCA, EPA) adopt a negative list approach for non-discrimination for services.

46. In addition, RTA e-commerce chapters contain provisions generally preventing Parties from denying the legal validity of e-signatures and e-transactions solely on the basis of their electronic form (CPTPP Art.14.6.1 and 14.9(b), EU-Japan EPA Art.8.76 and 8.77.1, USMCA Art.19.6.1 and 19.9). The EU-Japan EPA (Art.8.70), also includes an explicit reference to the importance of technological neutrality.

4.3. Avoiding unnecessary trade restrictiveness

What is it?

47. Particular challenges for market participants, foreign or domestic, in entering and operating in a market can arise when regulatory measures are more restrictive for trade and investment than is necessary to achieve their intended objectives. In this context, avoiding unnecessary trade restrictiveness might be about finding balance between meeting policy objectives and ensuring that the benefits from trade can be effectively reaped.

48. The concept of unnecessary trade restrictiveness is expressed in various WTO disciplines. A positive requirement to prepare, adopt and apply regulations in a way that does not create unnecessary obstacles to international trade is found in the TBT Agreement (TBT, Articles.2.2 and 5.1.2), which also includes explicit avenues for achieving it (see TBT Articles 2.3, 2.4, 2.7, 2.8, 5.2). For services trade, GATS Art.VI.4(b) provides that the Council for Trade in Services shall "*develop any necessary disciplines*" with the aim of such disciplines being to ensure that measures relating to qualification requirements and procedures, technical standards and licensing requirements are, *inter alia*, "*not more burdensome than necessary to ensure the quality of the service*". The concept of necessity is found in GATT Article XX and GATS Article XIV in relation to exceptions.

49. GATT also contains a general recognition in Article VIII.1(c) of the need to minimize the incidence and complexity of import and export formalities and to decrease and simplify import and export documentation requirements (which formed the basis for later developing TFA Articles 7 and 10).

Why does it matter for digital trade?

50. For **firms**, policies and regulations that are established and implemented so as to avoid unintended trade restrictive effects help reduce the cost of doing business, both directly and by minimizing delays and uncertainties caused by complex and cumbersome regulatory requirements. Too much red tape is one of the most common complaints from businesses, as filling out forms, asking for permits and licences often result in high costs, especially difficult to bear for SMEs. Excessively burdensome procedures also tend to affect disproportionately foreign enterprises, because of the cost to collect information, understand and comply with administrative requirements that differ from country to country.

51. For **consumers**, policies that avoid unnecessary trade restrictiveness are especially important, touching on various economic, social and cultural aspects such as prices, health and/or consumer protection. **Policy-makers** will need to find balance between enabling that important and legitimate regulatory objectives are met in a way that is least burdensome for trade, so that consumers can avail themselves with a wider array of cheaper and better quality products through trade.

52. Digital infrastructures such as the Internet were designed to be borderless, but they operate in a world where borders remain. This means that as interconnectedness grows, local regulatory measures can increasingly have global effects, often through trade channels, and affecting smaller firms. Growing heterogeneity in approaches to digital trade related issues can therefore pose new challenges. Regulatory approaches seeking to be least trade restrictive in achieving their intended objectives should help ensure that legitimate regulatory objectives are met in a way that ensures that the benefits from digital trade can continue to be reaped.

53. This principle is not meant to question the underlying legitimate policy objective (such as protection of health and safety, quality control, or, in the case of digital trade, privacy protection or cybersecurity), but to steer toward a less trade restrictive option among the array of equally effective domestic policy choices. These choices are informed by the expertise of the relevant policy community and by international standards, where they exist. Consideration of approaches that may be no more trade restrictive than necessary to achieve a legitimate objective thus requires drawing on the expertise of other policy communities and regulatory circles. In the digital context, this can include the identification of technological solutions.

How has this principle been approached in the context of digital trade?

54. E-commerce specific chapters in some recent RTAs explicitly recognize the importance of avoiding unnecessary barriers to the use and development of electronic commerce in order to benefit from the opportunities that it provides (CPTPP Art.14.2 and USMCA Art.19.2), and also encourage Parties to “*avoid any unnecessary regulatory burden on electronic transactions.*” (CPTPP Art.14.5(a) and USMCA Art.19.5.2(a).

55. The central role of the underlying policy objective is highlighted in CPTPP Art.14.11 which requires that measures which restrict the cross-border transfer of information by electronic means with a view to achieve a legitimate public policy objective, shall not be “*applied in a manner which would constitute a means of arbitrary or unjustifiable discrimination or a disguised restriction on trade, (nor) impose restrictions on transfers of information greater than are required to achieve the objective*” (see also USMCA Art.19.11). CPTPP Art.14.13 contains similar provisions on the location of computing facilities. USCMA further recognizes the importance of “*ensuring that any*

restrictions on cross-border flows of personal information are necessary and proportionate to the risks presented” (Art.19.8.3).

56. Acknowledging the capacity of economic operators to identify efficient approaches for implementing requirements, CPTPP Art. 14.6.2 rules out measures for electronic authentication that would “*prohibit parties to an electronic transaction from mutually determining the appropriate authentication methods for that transaction; or prevent (them) from having the opportunity to establish before judicial or administrative authorities that their transaction complies with any legal requirements with respect to authentication.*” In order to ensure that the necessary regulatory safeguards can still be established, the agreement recognizes (Art.14.6.3) that Parties “*may require that ... the method of authentication meets certain performance standards or is certified by an authority accredited ...*” (see also USMCA Art.19.6.2 and 19.6.3; EU-Japan EPA Art.8.77.2 and 8.77.3).

57. RTAs also encourage the use of different regulatory and non-regulatory alternatives, including self-regulation. CPTPP Art.14.15 and USMCA 19.14 invite Parties to cooperate in order to “*encourage development by the private sector of methods of self-regulation that foster electronic commerce, including codes of conduct, model contracts, guidelines and enforcement mechanisms.*” USMCA Art. 19.15.2 seeks to promote self-regulation on cybersecurity, calling on Parties to “*encourage enterprises within its jurisdiction to use risk-based approaches that rely on consensus-based standards and risk management best practices...*”.

58. The impact of burdensome requirements on the provision of digital services is acknowledged by EU-Japan EPA Art.8.75, which encourages Parties “*not to impose prior authorisation or any other requirements having equivalent effect on the provision of services by electronic means*” unless it concerns “*authorisation schemes which are not specifically and exclusively targeted at services provided by electronic means*”. In its provisions to promote cybersecurity, USMCA Art.19.15.2 recognizes that “*Given the evolving nature of cybersecurity threats (...) risk-based approaches may be more effective than prescriptive regulations in addressing those threats. Accordingly, each Party shall endeavour to employ (...) risk-based approaches (...) and risk management best practices to identify and protect against cybersecurity risks and to detect, respond to, and recover from cybersecurity events.*”

4.4. Interoperability

What is it?

59. Interoperability refers to the capacity of systems, regulatory frameworks, technologies or standards to interact, communicate and function with those of other operators or countries. In the digital economy, the concept is often used to refer to information exchange and data, but in the context of digital trade it might be used in broader terms, including the interoperability of regulatory approaches, without prejudice to how it is achieved. For example, interoperability can be achieved via convergence to international standards, or by recognition of equivalence or adequacy. Greater dialogue among regulators is also critical in moving towards interoperability.

60. In the context of “traditional” trade, the impact of differing standards and regulations on trade transaction costs and paths for addressing it can be found in TBT Articles 2.4, 2.6, 2.7 and in the TBT Code of Good Practice. In GATS, relevant disciplines in relation to qualification and licensing requirements and technical standards in sectors

where Members have undertaken commitments can be found in Article VI.5(b). TFA Art.10.3 also encourages the use of relevant international standards.

Why does it matter for digital trade?

61. Interoperable and open standards and platforms may increase innovation and competition giving rise to benefits for **firms** and **consumers** (see Kerber and Schweitzer, 2017). Interoperability can increase consumer welfare by reducing information costs, enabling more efficient sharing of goods and services across different platforms, lowering prices through increased competition and enabling greater choice and reducing lock-in effects (making it easier to access goods and services). For **policy-makers** interoperability might result in regulatory approaches more conducive to tackling emerging global challenges such as cybersecurity.

62. However, there are also costs associated with interoperability. For instance, uniform technical standards and interfaces can lead to reduced possibilities for firms to develop their own specific products, in turn reducing innovation and the products that consumers can access. Interoperability is therefore also about finding balance.

63. In the context of digital trade, the capacity of systems to interact is not just an important tool for overcoming technical and regulatory heterogeneity; it is an essential condition for enabling the seamless sharing of information to facilitate trade, increase supply chain security and enable SME participation in digital trade. Indeed, the Ministerial Declaration on the Digital Economy – the Cancún Declaration – “underlines the critical need for continued multi-stakeholder, consensus-driven approaches to developing global standards that enable interoperability and a secure, stable, global, open, and accessible Internet”.

64. In the context of the Internet of Things (IoT), interoperability will become increasingly important to ensure that devices, made by different manufacturers, are able to speak and interact with each other while maintaining the security and integrity of the system in delivering services to consumers.

65. Digital interoperability is often understood as a technical issue, referring to the “ability to transfer and render useful data and other information across systems, applications or components” (Palfrey and Gasser, 2012). However, legal and regulatory interoperability aspects are equally important. Technical interoperability might be, to a large extent, in the hands of the private sector and past experience has shown it tends to be regulated by the market. On the other hand, regulatory interoperability is entirely in the remit of policy makers.

66. However, achieving regulatory interoperability is not without challenges, and as discussed earlier harmonisation might not always be desirable. There will also always be legitimate differences in country preferences as regards policy objectives such as consumer protection, and the paths for achieving them. However, seeking to promote the greater alignment of procedures, or at least non-conflicting requirements among the various countries where digital transactions take place, might allow to mitigate the effects of such differences. Questions will however remain as to the relative roles of the private and public sectors on deciding about the underlying standards and about the levels that will deliver the desired objectives.

How has this principle been approached in the context of digital trade?

67. Interoperability is explicitly promoted in e-commerce chapters of recent RTAs, such as in CPTPP Art.14.6.4 and USMCA 19.6.4, which require Parties to “*encourage the use of interoperable electronic authentication.*”

68. CPTPP Art.14.8.5 encourages the development of mechanisms to promote compatibility between parties’ differing legal approaches to personal information protection, including “*the recognition of regulatory outcomes*” (see also USMCA Art.19.8.6). Furthermore, CPTPP Art.14.8.2 calls on Parties to “*take into account principles and guidelines of relevant international bodies*” in the development of their legal framework for the protection of personal information (see also USMCA 19.8.2).

5. Policy observations

69. The digital transformation presents many new opportunities for consumers and businesses, but it also raises important challenges. In view of making the most out of the evolving digital trade environment, new approaches to market openness are needed. This means that trade policy needs to be more holistic, considering issues related to goods, services and digital connectivity jointly. Trade policy also needs to be leveraged in the context of other important policies that matter for the adoption and use of new technologies. Market openness will not deliver appropriate gains if it is not accompanied by targeted interventions seeking to upskill the labour force and encourage the adoption and use of data-driven innovation. This also includes policies related to competition and taxation.

70. Market openness for digital trade also needs to be approached through more international dialogue. As the digital transformation further reduces trade cost and increases the tradability of goods and services, growing interconnectedness will imply that spillovers from regulatory heterogeneity will arise more regularly. International discussions involving different stakeholders and policy communities should help mitigate the impact of negative externalities and promote positive externalities, such as increased trust, to deliver more inclusive digital trade outcomes for all.

71. For those willing to discuss digital trade issues internationally, the principles outlined in this paper can be useful. They require that approaches to digital trade be:

- *Transparent*: helping reduce the costs of operating across different markets and clarifying the rules that apply to different products by providing up-to-date information and enabling access for different stakeholders to the policy-making process.
- *Non-discriminatory*: ensuring that domestic incumbents are not favoured over foreign firms, or certain foreign firms over others, when operating in the digital space and selling like products in view of levelling the playing field.
- *Not unnecessarily trade restrictive to meet desired policy-objectives*: ensuring that the least trade restrictive tool is being used to meet desired objectives. This might involve drawing on the expertise of different policy communities and business. For instance, where digital trade might raise technical problems which might best be tackled through technical solutions.

- *Interoperable*: helping devices better speak to each other through more private sector discussion on technical specifications and allowing flexibility so that rules or standards are also based on common understandings, or at least offer possibilities of not mutually exclusive coexistence. Interoperability need not be forced, it might come naturally as a result of the processes that the above stated principles support.

72. While self-standing, these principles are also mutually reinforcing. For example, without transparency -- which is a foundational principle -- it is difficult to ensure, or even ascertain, whether regulatory approaches are non-discriminatory or no more trade restrictive than necessary to attain their legitimate objectives. Transparency is also a prerequisite for efforts to pursue technical and regulatory interoperability.

73. Non-discriminatory regulations also matter for interoperability between technologies and standards. For example, the potential of digital signatures to enable faster and more efficient trade is evident. However, digital signatures need to have their legal validity recognised; that is, regulation should not discriminate between digital and analogue signatures. At the same time, non-discrimination might be a helpful reference point in efforts to promote less trade restrictive regulatory approaches; to achieve a particular regulatory objective there is little reason to distinguish between like domestic and foreign products.

74. In turn, interoperability, such as through the use of international standards, might be an effective path for ensuring that adopted regulatory approaches are no more trade restrictive than necessary to achieve their legitimate objectives.

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