INTRODUCTION

Payments services are critical drivers of financial inclusion. In developing countries, they are often the first point of entry for consumers into formal financial services. Globally competitive electronic payment services (EPS) technology provides individuals, especially those in lower-income and remote segments of society, with easier, cheaper, and safer access to financial services.

Access to a diverse and competitive market in EPS is essential to increasing financial inclusion and reducing poverty. As almost two billion people in the world do not have access to affordable financial services, access to EPS systems through ‘mobile money’ and other digital financial services are critical to allowing access to international markets for micro-, small- and medium-sized enterprises (MSMEs).

What policymakers may not realise when they are discussing e-commerce is that payments services are indispensable ingredients to the growth and success of the digital ecosystem and its participants. If a consumer cannot make a safe and secure online transaction, they are unable to participate in the online global economy. EPS are what enable merchants to accept multiple payment types in real time. They can process retail card-present transactions through a virtual terminal or process card-not-present transactions online, allowing you to eliminate the costs associated with maintaining traditional point of sale hardware. Without EPS, there is no e in e-commerce.

SUMMARY

> Electronic payment services are the fulcrum of global e-commerce and an essential topic to be addressed in the ongoing Joint Statement Initiative on trade-related aspects of e-commerce (JSI).

> Facilitating international trade in EPS requires the development of new World Trade Organization (WTO) disciplines, including on cross-border data flows, data storage and localisation, to counter present and future barriers that ultimately impose significant costs on consumers, companies, government, and society at large.

> ICC believes new rules will not secure the benefits of EPS for global e-commerce unless they are accompanied by commitments from WTO members to provide suppliers of these services with market access and national treatment.

> This paper outlines the need for JSI participants to commit to revise their schedules under the General Agreement on Trade in Services (GATS) to provide unconditional commitments on market access and national treatment with respect to EPS.

- Currently, many WTO members have scheduled few or no commitments on EPS—meaning they can deny market access or national treatment to foreign suppliers without violating WTO rules.

- Others have scheduled incomplete commitments that impose a complex web of limitations on foreign suppliers. Only by removing these limitations can the full benefits of a WTO agreement on e-commerce accrue to JSI participants and their local economies, businesses, and consumers.

> “Clean” commitments on market access and national treatment will promote open and competitive markets in EPS and facilitate the transition from cash-based payments to digital payments in both developed and developing countries. This would create a global ecosystem conducive to financial inclusion, economic growth, and innovation in ecommerce.
A diverse and competitive market in EPS can offer enormous benefits while protecting business and consumer interests in choice, affordability and security of financial products.

Importantly, governments will still have ample space under the WTO framework to act to protect the integrity of their financial systems and pursue these and other legitimate policy objectives in a manner consistent with market access and national treatment rules.

This paper is organised as follows:

Section I summarises the key benefits of open and competitive EPS markets, including increasing consumption and economic growth; advancing financial inclusion; enabling economic success of MSMEs, particularly in developing economies; promoting cybersecurity and securing the payments ecosystem; and surfacing local innovation and domestic talent.

Section II describes the limitations of WTO members’ current commitments to provide EPS suppliers with market access and national treatment.

Section III examines the market access and national treatment barriers that inhibit the growth of digital payments in many WTO member countries. With respect to market access, these barriers include foreign equity caps, burdensome licensing requirements, and domestic processing requirements; and, with respect to national treatment, they include requirements to process through local competitors such as state-owned enterprises, data localisation requirements, co-badging requirements, and burdensome standards/technical requirements.

Section IV provides a high-level description of EPS and how such services are supplied.

I. BENEFITS OF OPEN AND COMPETITIVE MARKETS IN EPS

Transitioning to open and competitive markets would enable both developed and developing countries to expand the use of electronic payments and obtain the highest quality electronic payment services. Choice and a diverse supply of payment networks ensures substantial benefits for all segments of society. The specific benefits of open and competitive EPS markets that allow global networks to provide their services unhindered include:

- Advancing financial inclusion: Electronic payments are often the first point of entry for consumers into formal financial services. Globally competitive EPS technology provides individuals, especially those in lower-income and remote segments of society, with easier, cheaper, and safer access to financial services. As noted by the World Bank, “[u]sing basic payment or savings accounts can gradually lead to access to and usage of other financial services, such as credit, insurance or pensions.”

  A recent research publication by the Consultative Group to Assist the Poor (CGAP) sets out a compelling theory of change that articulates how financial services impact the lives of the world’s poor. The CGAP research found that improved access to financial services enables poor people to (i) build resilience—prepare for, deal with and recuperate after financial shocks; and (ii) capture opportunity—be it investing in a business, or furthering education and social networks.

- Increasing consumption and economic growth: Expanding electronic payments spurs global growth by promoting consumption, reducing graft, increasing efficiency, and improving revenue

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1 World Bank Group, Innovation in Electronic Payment Adoption: The case of small retailers (June 2016). A 2016 report prepared by the World Bank Group’s Committee on Payments and Market Infrastructure on “Payment aspects of financial inclusion” similarly concluded that payment accounts may “facilitate access to broader financial services. For example, often the underlying [payment service provider] itself provides some or even all of those other financial services, and by operating the transaction account, it can more easily obtain some of the key information it needs to offer those additional services, such as whether the customer has a regular income flow.”

2 CGAP, Toward a New Impact Narrative for Financial Inclusion (October 2019).
collection, which in turn creates jobs and economic prosperity. These benefits accrue to countries at every level of development. Increased use of electronic payments over cash offers particular benefits for economies with sizeable informal sectors, by recording and tracking transactions, facilitating tax collection, squeezing out “off the books” transactions, and providing regulators and governments with more precise economic data to inform policymaking.

> Enabling economic success of MSMEs: There is enormous potential to expand the use of digital payments by MSMEs. As is the case with consumers, electronic payments are often the gateway for MSMEs into formal financial services. Electronic payments allow MSMEs to establish a credit history and facilitate access to loans that bridge the financing gap. EPS also allow MSMEs to expand their customer base by selling into global markets, and they also open access to global suppliers that accept payments digitally. Other benefits include security and protections against fraud and theft, easier evaluation of revenue and cost flows, access to new financial services, and the ability to use value-added services.

> Promoting cybersecurity and securing the payments ecosystem: A competitive market for EPS drives payment networks to invest in the most advanced cybersecurity and fraud prevention systems to offer the highest level of protection across the payment ecosystem and for all users of EPS. Centralised global processing ensures that EPS providers have access to broad data sets that enable the most sophisticated artificial intelligence-based cybersecurity and fraud prevention services, as such services depend on the aggregation and analysis of non-personally-identifiable global data sets.

> Surfacing local innovation and domestic talent: In addition to pre-existing opportunities with domestic networks, global networks create new opportunities for local fintechs and other e-commerce startups to develop their own solutions on top of global payment technologies and platforms. Together, global networks and domestic firms, including both networks and fintechs, offer complementary electronic payment services that meet unique market needs. When those services are delivered by a broad range of suppliers, such tools can include access to established networks of tens of thousands of bank clients and billions of consumers, thereby helping local startups achieve scale quickly. Global payment networks may also offer fintechs, coders and entrepreneurs access to their proprietary Application Program Interfaces (APIs), opening the door for these local innovators to develop their own cutting-edge solutions.

Each government has an important choice to make with respect to the provision of EPS in their markets: subject to their WTO commitments and other legal obligations, they can choose to adopt or maintain substantial barriers to international competition, or they can choose to facilitate open and competitive EPS markets. In the current landscape, as discussed in Section II and III, many governments have opted against their interests for closed or highly restricted EPS markets.

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3 Moody’s Analytics analysed data for 70 countries/regions between 2011 and 2015, and concluded that “higher card usage contributed an [estimated] additional $296 billion to consumption... or a 0.1% cumulative increase in global GDP. ... [C]ard usage accounted for about 0.4% of growth in consumption, as well as an average increase of 2.6 million jobs over 2011-2015.” The study further concluded that “[I]ncreased electronic payments resulted in roughly the same percentage increase in GDP between 2011 and 2015 for emerging markets (0.11%) as for developed countries (0.08%).” Moody’s Analytics, The Impact of Electronic Payments on Growth.

4 See above n 1, p 5: “The global market opportunity for expanding the adoption of electronic payments by merchants is large, estimated at US$19 trillion of payments made and accepted in cash and checks by micro, small and medium retailers (MSMRs) in 2015.”
II. EPS COMMITMENTS AND THE WTO

Unlike commitments on trade in goods, most WTO services commitments do not automatically apply to all of a country’s service sectors. Rather, under the GATS, a country must specifically state which commitments it is undertaking (i.e., national treatment and market access), in which sectors, and by which methods of supply. A country’s “GATS schedule” reflects its specific services commitments.

Most WTO members have incomplete, patchwork commitments with respect to trade in EPS, which frustrates the development of open and competitive EPS markets and the flow of related benefits. This section provides a snapshot of WTO members’ commitments on EPS.

A. Coverage under “all payment and money transmission services, including credit, charge and debit cards, travellers checks, and bankers drafts”

Under WTO law, EPS are financial services that fall within the scope of paragraph 5(a)(viii) of the Annex on Financial Services to the General Agreement on Trade in Services (GATS), which covers all “payment and money transmission services, including credit, charge and debit cards, travellers cheques and bankers drafts.” Consistent with the principle of technological neutrality, “all payment and money transmission services” includes payments through any technological means, including electronic payments.

As the WTO panel in China—Electronic Payment Services stated, “all payment and money transmission services” covers “all services essential to payment and money transmission, all means of payment and money transmission (i.e., paper-based, card-based and others), and all associated business models.” This category also includes “those services that ‘manage’, ‘facilitate’ or ‘enable’ the act of paying or transmitting money” and all services that “must operate together for the payment and money transmission services to be supplied,” including both front-end and back-end processing services.

B. Scope of existing commitments

1. WTO Staff Working Paper analysis

According to a recent WTO Staff Working Paper, only about 18% of all WTO members have a full Mode 1 (cross-border) commitment for “all payment and money transmission services,” and another approximately 25% of all WTO members have a partial Mode 1 commitment. Only approximately 14% of all WTO members have a full Mode 3 (commercial presence) commitment in the sector, and another approximately 54% have a partial Mode 3 commitment.

These figures likely overstate the level of commitments WTO members have made with respect to EPS, as they do not explain whether some WTO members with partial commitments, in fact, may have extended those commitments only to sub-sectors other than EPS within “all payment and money transmission services.”

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5 In GATS parlance, the various methods of supply are referred to as “modes.” Cross-border supply is “Mode 1”; supply to a foreign national who has travelled to the supplying country (referred to as “consumption abroad”) is “Mode 2”; supply via a commercial presence in the foreign country is “Mode 3”; and supply by an individual to service consumers in the foreign country (referred to as “presence of natural persons”) is “Mode 4.”

6 See US—Gambling (Panel), para. 6.285 & fn. 836. The principle of technological neutrality means that, absent specific limitations to the contrary, GATS commitments apply to services delivered through any technological means. Id.

7 See Panel Report, China—Certain Measures Affecting Electronic Payment Services, WT/DS413/R, 16 July 2012, para. 7.99 (China—Electronic Payment Services (Panel)).

8 China—Electronic Payment Services (Panel), para. 7.100.

9 China—Electronic Payment Services (Panel), para. 7.180 (“we agree with the United States’ characterization of subsector (d) as encompassing ‘any service that is essential to “payment and money transmission”’.”).

2. Summary and critique of the commitments of the members participating in the JSI negotiations

The JSI negotiations provide an opportunity for participants to commit to make full market access and national treatment commitments for Modes 1 and 3 with respect to EPS. Providing market access is important, but insufficient, because a payment network or processor would still be discouraged from entering a market (or maximizing and growing its existing investment) if the payment network or processor were susceptible to unfair treatment once it entered. By the same token, national treatment commitments would have limited value if a WTO member were not willing to provide the market access that foreign companies need to supply their services.

An examination of the WTO commitments of the WTO members that initiated the JSI negotiations shows that full EPS commitments are rare and exceptional. For example, it appears that few if any of the 13 non-EU OECD countries that initiated the negotiations—Australia, Canada, Chile, Iceland, Israel, Japan, Korea, Mexico, New Zealand, Norway, Switzerland, Turkey, and the United States—have full EPS commitments. Some have no commitments at all, and some have partial commitments with difficult to interpret limitations.

III. KEY EPS MARKET ACCESS AND NATIONAL TREATMENT BARRIERS

In today’s environment of sub-optimal WTO commitments on EPS, electronic payments are subject to a wide range of trade barriers that have stunted the growth of open and competitive international markets. This section outlines key examples of such barriers, which are divided into market access and national treatment issues based on the GATS framework.11 These types of barriers need to be eliminated—and unconditional WTO commitments on market access and national treatment are needed to replace the current insufficient commitments that have enabled these barriers—in order to expand the use of electronic payments and deliver the benefits of high-quality EPS services to all countries.

A. Market Access

Where a WTO member has made a market access commitment, subject to any limitation specified in its GATS schedule, that Member may not maintain or adopt certain types of market access restrictions—such as quantitative restrictions on the number of suppliers or volume of services, restrictions with respect to juridical form, or the imposition of caps on foreign equity investment.12 Numerous WTO members have adopted market access restrictions with respect to the provision of EPS. For example, some countries have introduced restrictions including but not limited to: foreign equity caps, and burdensome processing requirements. Illustrative examples of such measures are described in the appendix.

B. National Treatment

Article XVII(1) of the GATS (National Treatment) requires that, “in the sectors inscribed in its Schedule, and subject to any conditions and qualifications set out therein, each Member shall accord to services and service suppliers of any other Member, in respect of all measures affecting the supply of services, treatment no less favourable than that it accords to its own like services and service suppliers.” Numerous WTO members have adopted measures that raise questions about national treatment with respect to the provision of EPS. For example, some countries have introduced requirements to process through local competitors or SOEs, co-badging requirements and burdensome standards/technical requirements. Illustrative examples of such measures are described in the appendix.

11 For the avoidance of doubt, some of the specific barriers discussed in this section may pose both market access and national treatment issues.
12 See Article XVI of the GATS.
IV. EXPLANATION OF ELECTRONIC PAYMENT SERVICES (EPS)

EPS are services provided by payment networks that enable transactions to occur digitally among consumers, merchants, governments, or other accountholders, as an alternative to cash or check. EPS include services through which individual payment transactions are verified and through which transfers of funds between banks participating in the transactions are managed and facilitated.

EPS facilitate transactions conducted not only through payment cards (e.g. credit, debit, or prepaid cards), but also any other devices that enable digital payment (e.g. mobile phones or “smart” devices and their digital wallets) as well as devices leveraging application programming interfaces (APIs) and open banking models.

A variety of service providers offer innovative methods to pay in-person, and for transactions between two parties in disparate locations. EPS’ are critically important for e-commerce as they enable secure, convenient transactions between buyers and sellers regardless of their physical location or currency. To provide their services, networks rely on commercial partnerships with domestic banks as well as non-traditional partners such as fintechs to deliver solutions that are locally relevant and accessible. It is this ecosystem that produces the multiplier effect of benefits across local economies as discussed in Section I.

Four-Party Model

Many global payment networks—such as China Union Pay, Visa, and Mastercard—utilise the four-party model for the provision of EPS. In this model, the payment network enters into relationships with financial institutions (such as banks) that sit on either side of a transaction known as “issuers” and “acquirers.” An “issuer” would be a bank that is licensed by the network to offer a payment account to the bank’s customers to pay digitally—whether individual, small business, or government clients. An “acquirer” would be a bank that is authorised by the network to enrol customers—most often merchants—to be paid digitally.

In a typical transaction, the payment network fulfils three central functions: authorisation, clearing, and settlement. Diagram A depicts the four-party model, including the message flow that occurs during authorisation, as described below.

Diagram A

![Diagram A](image)

Typically, authorisation is initiated when a consumer enters payment information on a website and the merchant sends transaction details to its acquirer bank. The payment network typically provides the communication infrastructure to transmit messages between the acquirer bank and the consumer’s issuer to verify that the consumer has adequate funds. Global payment networks and other transaction stakeholders employ advanced fraud detection and analytics to assess the validity of each transaction, informing the ultimate decision of whether to authorise or decline a transaction. Authorisation occurs on a transaction-by-transaction basis, meaning each transaction is evaluated individually at the time of purchase.

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13 For clarity, this discussion describes a typical flow of information and funds within the basic four-party model of payment processing. In reality, payment processing, particularly for online sales, typically involves additional entities, including local firms, that facilitate the flow of information and funds among the four core parties.
Clearing occurs on a batch basis, and typically daily. In this step, the acquirer bank receives a daily transaction summary from each merchant, which it bundles and sends to the payment network. The payment network then aggregates transaction information from each client to determine each bank’s net debit or credit position and sends payment instructions to each client. Settlement is the final step and refers to the actual exchange of funds between the issuer bank and the acquirer bank according to the amounts assessed by the payment network during clearing. The issuer bank sends funds to the designated settlement bank in the amount of the settlement obligation, and the designated settlement bank then transfers funds to the acquirer bank, which is also facilitated by the payment network.

**Three-Party Model**

In addition to the four-party model, some market participants in EPS utilise a three-party model. Examples of card schemes that utilise this model include American Express and Diners Club. In this model the same payments provider plays the role of both issuer and acquirer, providing accounts and payments hardware both to consumers and merchants (e.g. a point-of-sale (POS) terminal to a merchant and a card to a consumer). Diagram B depicts the three-party model.

**Diagram B**

Digital Wallets

A digital wallet is a software-based system for making e-commerce transactions. By using a digital wallet, online purchases can be easily made through many devices, including computers, tablets and smartphones. In general, bank accounts of individual users are linked with their digital wallet. In a digital wallet system, user credentials are securely stored and verified during transactions. Digital wallets are not only used for online purchases but also for user authentication. A digital wallet can store complete user information including credentials, transaction history and personal details. Digital wallets can also be used in combination with other mobile payment systems.

**CONCLUSION**

E-commerce will expand and thrive if electronic payments and the services that make them possible are permitted to reach their global potential. As set out above, a wide range of barriers to EPS exist in both developing and developed countries that prevent consumers, businesses of all sizes, and governments from securing the full benefits of EPS and e-commerce. These barriers are enabled by inadequate WTO commitments on EPS.

Creating open and competitive markets in EPS requires WTO members to make full, unconditional GATS commitments on market access and national treatment on EPS. WTO members that have no commitments on EPS in their GATS schedules would benefit from revising their schedules to make full, unconditional commitments, and WTO members that have qualified commitments on EPS (e.g., permitting foreign equity caps that would otherwise deviate from market access rules) would similarly benefit by eliminating those limitations. Such “clean” commitments can help ensure the seamless operation of global e-commerce and make the opportunity to participate in such commerce more available to all populations. New and modern consensus rules on e-commerce will enable WTO members to fully leverage EPS to make progress towards a digital economy, increase financial inclusion and boost economic growth.

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14 Also known as a ‘three corner’ or ‘closed loop’ model.
APPENDIX

A. Market Access

1. Foreign equity caps
Foreign equity caps are limitations of the percentage of equity that a foreign company can obtain in a venture. WTO members have a wide variety of foreign equity caps in place with respect to EPS. Some impose stringent caps that permit only a nominal amount of foreign equity, some are designed to ensure that domestic companies maintain control of the venture, and on the other end of the spectrum, some require a nominal degree of participation in the venture by domestic companies. No matter the type or scale of the foreign equity cap, the common feature of these restrictions is that they prevent foreign companies from supplying EPS on their own to local markets.

Some governments view foreign equity caps as an effective way to facilitate the exchange of know-how and build up domestic capacity. However, in practice, the downsides of this approach are substantial. Smaller markets may find it difficult to attract international EPS companies at all, particularly in today’s competitive landscape for access to capital. Bigger markets may attract international companies, but a partial opening to investment will yield only partial benefits in terms of access to technology, innovation, security and services.

2. Burdensome licensing requirements
WTO members are fully entitled to ensure that payment networks and processors meet certain requirements to protect the integrity of the financial system. WTO members also have different approaches to rulemaking and governance. However, some WTO members impose unnecessarily burdensome licensing requirements—including equity caps, as described in Section I—that discourage or even prevent foreign companies from entering the market or growing their investments.

For example, one WTO member requires companies interested in processing transactions denominated in the local currency to obtain a license, and to do so, the company must establish a domestic entity to apply for the license and provide the payment services, use domestic technology, and undergo an extensive pre-licensing preparatory phase. Another WTO member is considering requiring multiple, potentially duplicative licenses for companies to provide a range of intermediary payment services. In most instances, the principal payments players, such as banks, are already licensed to perform payment activities, and there is little apparent benefit to requiring licensing for companies providing supporting services.

These types of burdensome licensing requirements are in tension with GATS market access rules, where a government has made such a commitment. Providing a formal legal avenue for foreign companies to obtain market access is important, but not sufficient, if in practice the ability to enter to the market is frustrated or even rendered impossible due to burdensome licensing requirements that go beyond the need to protect the financial system or achieve other legitimate policy objectives.

3. Domestic processing requirements
The authorisation, clearance, and settlement of an electronic payment, discussed in Section IV, is a complex series of steps that are necessary to process the electronic payment. Payment networks and processors need the flexibility to process transactions outside the country in which the services are supplied so that they can competitively deliver the highest quality of services, including state-of-the-art fraud protection that is fundamental to continued and expanded use of digital payments. High rates of fraud, or decline rates, stunt the uptake of digital payments.

Some WTO members, however, currently require electronic payments to be processed in-country. As discussed below in the discussion of national treatment barriers, some WTO members go a step further and also require transactions to be processed domestically by local competitors such as state-owned enterprises. But, even if a foreign payment network were permitted to use its own...
infrastructure to process electronic payments, where that infrastructure is required to be located in-country, such requirements are in tension with a WTO commitment to provide market access for Mode 1 (cross-border) supply of EPS. They also slow introduction of new technologies and best-in-class security to these markets. In practice, these requirements stymie the development of an open and competitive market in EPS.

B. National Treatment

1. Requirements to process through local competitors such as SOEs

The value of market access for payment networks and processors is substantially limited if they are required to go through local entities to process their transactions, given the central role that processing plays in an EPS transaction. The absence of international competition for processing will also reduce the overall quality of services offered generally, and also for underserved populations, which stand to gain the most from innovative and secure payment services. This is especially the case if there is also little or no domestic competition because processing is routed to state-owned enterprises or another domestic entity.

Notwithstanding the negative effects of these types of requirements to process through local entities, these requirements are increasingly commonplace. Some measures require transactions to be processed by local companies generally. For example, one WTO member requires any company with foreign equity greater than 20% to go through at least two switching institutions to process their payments onshore. The central bank must approve such business arrangements, and approval is contingent on the foreign company making a contribution to the national payment system, such as technology transfer. Other measures require transactions to be processed by state-owned enterprises or other state instrumentalities. For example, several WTO members require transactions to be processed by entities owned or controlled by the central bank. These requirements are particularly egregious because they permit the state to act both as market regulator and participant, which is not conducive to creating a level playing field for foreign companies.

These requirements are not only in tension with WTO national treatment rules but may also raise concerns regarding market access to the extent that they result in local monopolies.

2. Physical Co-branding requirements

The enablement of dual network options on payment products improves efficiency and provides network redundancy. Free market access should not inhibit the ability of multiple networks to be available on a particular payment product. However, payment stakeholders should have flexibility to determine which brands and logos are displayed on their payment products provided such branding does not result in customer confusion about the payment product capabilities. Legitimate concerns regarding fair competition and choice can be addressed in a manner consistent with market access and national treatment rules.

For example, a WTO member had introduced a measure requiring that all debit cards issued domestically display the logo of the national payment switch in combination with other regional and/or international service marks. This requirement may dilute the value of the foreign payment network’s trademark and impair the competitiveness of the foreign EPS payment network’s services.

3. Burdensome standards/technical requirements

The international trade in goods and services benefits from agreement on core international standards and technical requirements. In the case of EPS, agreement on core consensus international standards and technical requirements enables inter-operability of cards and other payment devices across borders, as opposed to requiring consumers to use a separate and unique payment device in each country. In the EPS sector, however, some WTO members have recently established national standards
or technical requirements that deviate from international practice that complicate inter-operability and raise questions regarding national treatment because of the disproportionate impact on foreign service suppliers.

For example, a WTO member established a new national standard for QR codes that is based on the international standard but is sufficiently different to create inter-operability challenges for foreign companies. Another WTO member is considering establishing a requirement for any payment scheme wishing to participate in the government-supported national transit card system to use a specification that is currently not publicly available and that was developed and is owned by the largest domestic payment scheme. This puts foreign companies at an obvious disadvantage. It also presents an unnecessary barrier for tourism as it disadvantages foreign travellers, who are unable to use their existing cards to access public transit.