



THE WTO'S DISCUSSIONS ON ELECTRONIC COMMERCE

The WTO has a 1998 Work Programme on E-commerce. This Work Programme provides for the discussion of trade-related issues relating to electronic commerce to take place in the relevant WTO bodies: the Council for Trade in Services; the Council for Trade in Goods; the Council for TRIPS; and the Committee for Trade and Development. The General Council was envisaged to play a review or oversight role.

From July 2016, the debate on Electronic Commerce at the WTO intensified when several Members proposed to negotiate new rules in addition to the existing ones in the WTO Agreements. This suggestion for negotiations was opposed by many developing countries because it goes beyond the 1998 mandate. Many are also keenly aware of how the digital divide still presents enormous hurdles for their full participation in E-commerce, and especially cross-border E-Commerce which the proposed rules would liberalise. This paper sets out to explore the following questions:

I. The Digital Economy and New Business Models

How is the digital economy going to change the business models that we have? How will production and supply patterns change? Where will developing countries' suppliers be situated in this new scenario?

II. What are the Proponents of New Rules (in July 2016) Asking For?

What new rules are being proposed? What are the interests behind them? What are the implications for most developing countries?

III. What is the Reality On the Ground in Developing Countries vis-a-vis E-commerce?

Where are developing countries, for example, Africa today in terms of E-commerce competitiveness? What are the challenges their suppliers face? How are the basic issues of infrastructure, skills upgrading to be overcome? It is not only about having connectivity that we can be successful in e-commerce exports - developing countries' suppliers must also be content creators on the internet.

IV. Questions on the Work Programme: What and Where?

What is the scope of the WTO's E-commerce Work Programme? What are the priorities on the WTO's negotiating agenda? Where and how is this Work Programme to be organised?

V. What Kind of 21st Century Trade Route Would Support Development?

The trade route we currently have is open in places and closed in others for strategic reasons including employment and the needs of domestic suppliers who may not yet be competitive on the world market. As technology advances, this electronic trade-route would become more and more dominant - particularly for services and non-agricultural products. In the context of developing countries' more limited production capacities and the digital divide, what kind of trade route do we want for the 21st century so that development can take place?

January 2017
Geneva, Switzerland



**SOUTH
CENTRE**



Analytical Note
SC/AN/TDP/2017/2
January 2017
Original: English

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A. E-COMMERCE - INTRODUCTION

In July 2016, seven proposals were submitted to the WTO. Since then, the issue of Electronic Commerce has suddenly become the buzz of Geneva. There have been informal suggestions from various quarters that there should be new rules adopted in this area – perhaps already by December 2017 (the next Ministerial Conference). This has taken many other WTO Members by surprise. Ministers in Nairobi had said that the priority would be the ‘remaining DDA issues’. E-commerce is not one of them.

The discourse being echoed many times over is that E-commerce will be the revolution that developing countries have been waiting for. It will provide many opportunities to Micro and Small and Medium Sized Enterprises (MSMEs). Therefore, there should be new rules at the WTO.

Somehow, there seems to be several missing links in this thinking. ‘What kind of rules’ is not being asked. Will there be rules to mandate technology transfer to developing countries in order to bridge the digital divide? Or rules that prohibit such transfer? Will there be rules that allow for market segmentation so that developing countries’ suppliers can lean on the domestic and regional markets as they learn and catch on to the digitisation of everything and every product? Or will the rules prohibit such market segmentation (i.e. no more segmentation of the domestic or regional markets for domestic producers)?

What are the challenges developing countries face regarding e-commerce and more pertinently since the WTO is about cross-border trade, *cross-border* e-commerce? Are new WTO rules somehow going to melt away the E-commerce challenges faced in developing countries?

There are many unknowns regarding the technological advances ahead, and therefore the digital economy. Hence, this paper sets out to visit several issues and mainly to ask questions:

I. The Digital Economy and New Business Models

How is the digital economy going to change the business models that we have? How will production and supply patterns change? Where will developing countries’ suppliers be situated in this new scenario?

II. What are the Proponents of New Rules Asking For?

What new rules are being proposed? What are the interests behind them? What are the implications for most developing countries?

III. What is the Reality On the Ground in Developing Countries vis-a-vis E-commerce?

Where are developing countries, for example, Africa today in terms of E-commerce competitiveness? What are the challenges suppliers face? How are the basic issues of infrastructure, skills upgrading to be overcome? It is not only about having connectivity that we can be successful in e-commerce. To what extent are developing countries’ suppliers also content creators on the internet?

IV. Questions on the Work Programme: What and Where?

What is the scope of the WTO’s E-commerce Work Programme? What are the priorities on the WTO’s negotiating agenda? Where and how is this Work Programme to be organised?



V. What Kind of 21st Century Trade Route Would Support Development?

The trade route we currently have is open in places and closed in others for strategic reasons including employment and the needs of domestic suppliers who may not yet be competitive on the world market. E.g. developed countries maintain barriers in agriculture and in sensitive non-agricultural products such as textiles. Proponents are asking that Members remove any barriers that may in any way close the global e-commerce market. I.e. they want complete free trade. As technology advances, this free trade trade-route would become more and more dominant – particularly for services and non-agricultural products. In the context of developing countries’ more limited production capacities and the digital divide, what kind of trade route do we want for the 21st century so that development can take place?

B. THE DIGITAL ECONOMY AND THE NEW BUSINESS MODELS

We are today only on the edge of the new technology frontier. The digital economy of the future will take speed when we enter the era of 5G, when data rates of tens of megabits per second can move for tens of thousands of users. Only then will we truly be the era of the ‘internet of things’ – where the infrastructure can finally support hundreds of thousands of ‘smart’ things being connected to one another. With this, data is analysed and real-time information is provided to consumers.

What are the new business models of tomorrow? There are several components that are already evident today:

New Business Models	Comments and Questions
<p><u>Goods Delivery - by Drones</u> Physical goods can be delivered easily and cheaply – small packages sent to your door-step for example, using drone technology. Quick, convenient, even cheap?</p>	<p>Today, the problems of postal delivery particularly cross-border delivery discourage domestic consumers from ordering goods online. If these delivery problems could be overcome and consumers (particularly the middle class as they are the ones that are ‘connected’) can order from anywhere in the world, will there be an impact on developing countries’ domestic manufacturers?</p>
<p><u>‘Uberisation of Services Delivery’</u> An app links a supplier with a consumer via a platform. The app provider may be based in one country, the supplier in another and the consumer in a third. We see this in transportation, accommodation, food, it could also take place in health, professional services, financial services etc.</p>	<p>Services can be provided more cheaply, and more quickly. There could be more choices for consumers. Some developing countries may find that they can benefit from supplying in this manner. However, there are also many challenges:</p> <ul style="list-style-type: none"> • Who gets to supply on the platform? Who owns the platform? • How can these services be regulated; if they are regulated, which jurisdictional rules would apply?
<p><u>‘Servisation’ of goods</u></p> <ul style="list-style-type: none"> • General Electric (GE) no longer sells individual radiological equipment to hospitals, but radiological services i.e. 	<p>We are heading towards the era of the smart hospital, smart home, smart car, smart office, smart coffee machine, smart refrigerator etc.</p>



New Business Models	Comments and Questions
<p>radiological equipment that have remote-monitoring capabilities that allow GE to monitor and operate them.¹</p> <ul style="list-style-type: none"> Companies will not sell air conditioners to homes, but the service of ‘chilled air’. ‘Smart’ air conditioners will readjust temperatures according to the weather outside, and to the consumer’s google calendar – to switch on or off at appropriate times. 	<p>Who can produce these goods? Who will own their operating systems?</p> <p>Even in the US and Europe, there are major concerns about the concentration of markets. In the US, the big companies producing traditional goods are worried about the power which the mega-technology companies such as Google and others have since these companies are entering into sectors that were never associated with them e.g. Google in the car sector:</p> <p><i>‘Daimler’s CEO recently expressed concern that traditional car makers may get reduced to becoming the Foxconn (the China-based i-Phone manufacturer) of the car industry, while others own the all-important digital operating system’.</i>²</p> <p>Where will developing countries’ suppliers stand in this digital environment?</p>
<p><u>Data – the Raw Material of the Digital Economy</u></p> <p>The digital economy will be run by data analytics. Those having access to this data will own the market as advertising and supply of goods and services will be provided to consumers in real-time – advertising is adjusted to the target client³, even prices can be adjusted according to the client’s profile which the data analytics have pulled together.</p>	<p>What does data mean to US technology companies?</p> <p><i>‘It is increasingly the case that many of the benefits from information technology come from creating value and insights from data, often in real-time. Virtually every sector of the U.S. economy benefits from the data revolution; the applications for data processing and analytics are quite large. And this value will only increase as the public and private sectors alike become more data-driven’.</i></p> <p><i>‘All that data generates economic and social value. In 2015, big data vendor revenues grew 23.5% from the year before, and that growth is only expected to continue. Data-driven revenues that were \$18.3 billion in 2014 are expected to reach \$92.2 billion over the next ten years.’</i>⁴</p> <p>Can developing countries’ suppliers compete in this new environment, where data coming from the digitalised environment must be processed in real time to create market opportunities and meet demand also in real time? If no, can they compete with companies (most likely in developed countries) using these sales strategies?</p>

¹ See Atkinson R 2016 Testimony before the Committee of Ways and Means Trade Subcommittee, Hearing on ‘Expanding US Digital Trade and Eliminating Barriers to Digital Exports’, July 13, <http://waysandmeans.house.gov/event/hearing-expanding-u-s-digital-trade-eliminating-barriers-u-s-digital-exports/>

² Singh P 2016 ‘A Borderless Economy that Will be Controlled’ May 11, The Hindu <http://www.thehindu.com/opinion/columns/a-borderless-economy-that-will-be-controlled/article8581476.ece>

³ For a more detailed explanation, see IBM’s article ‘Data – A Raw Material to be Mined’ <http://www.ibmbigdatahub.com/blog/data-raw-material-be-mined>

⁴ Padilla C 2016 Testimony before the Committee of Ways and Means Trade Subcommittee, Hearing on ‘Expanding US Digital Trade and Eliminating Barriers to Digital Exports’, July 13, <http://waysandmeans.house.gov/event/hearing-expanding-u-s-digital-trade-eliminating-barriers-u-s-digital-exports/>



Some defining features of the new business models are:

- High levels of concentration especially when goods become 'servicised'. Those that own the technology sit at the top of the chain.
- Data is the raw material or the currency of the economy.⁵ Those who have it will own the markets by providing goods and services to consumers in real time. At the same time, developing countries are asked to hand this data over for free (see discussion on proposals below) and commit to the permanence of such an arrangement through the new rules.

C. WHAT ARE THE PROPONENTS OF NEW RULES ASKING FOR?

The proposals on E-commerce submitted by some Members in July 2016 at the WTO include: JOB/GC/94 (US); JOB/GC/96 (Japan et al); JOB/GC/97 (EU et al); JOB/GC/98 (Brazil); JOB/GC/99 (MIKTA countries); JOB/GC/100 (Japan); JOB/GC/101/Rev.1 (Singapore et al).

Quoting from the proposed rules in the US paper (JOB/GC/94), this section will provide an analysis of some of the key issues raised in that proposal. The same issues are also in the EU and Japan proposals.

i) No Customs Duties/Non Discrimination: A new trade route that is completely liberalised

Proposed rules:

- *'Prohibiting Digital Customs Duties: The complete prohibition on customs duties on digital products ...'*
- *'Securing Basic Non-Discrimination Principles: Fundamental non-discrimination principles are at the core of the global trading system for goods and services. Rules that make clear that the principles of national treatment and MFN apply to digital products can contribute directly to stability in the digital economy'* (US, JOB/GC/94).

Implications:

'Goods' that are transmitted online refer to books, music, videos, software. However tomorrow, as technology improves, many more physical goods will be transmitted digitally. I.e. more and more non-agricultural market access (NAMA) tariff lines will be made duty-free through these rules.

This is about disregarding Members' GATT and GATS schedules and creating a parallel trade route whereby no constraints, tariffs, regulations can come in the way of imports into domestic markets.

National treatment to all goods and services means domestic markets are opened. What are the implications for domestic goods and service providers? E.g. we may have put limitations in our GATS schedule on architectural service suppliers, but with these new rules, the domestic market would be completely open.

⁵ See IBM's article 'Data - Raw Material to be Mined', <http://www.ibmbigdatahub.com/blog/data-raw-material-be-mined>



Might traditional NAMA sectors be negatively impacted in developing /African countries in time to come? E.g. the footwear and clothing sectors: a shoe customer orders an individually customised shoe from amazon.com, receives the digital file and goes to a local printing shop to have it 3-D printed.

ii) Enabling Cross-Border Data Flows

Proposed rule:

- *'Enabling Cross-Border Data Flows: Companies and consumers must be able to move data as they see fit. Many countries have enacted rules that put a chokehold on the free flow of information, which stifles competition and disadvantages digital entrepreneurs. Appropriately crafted trade rules can combat such discriminatory barriers by protecting the movement of data, subject to reasonable safeguards like the protection of consumer data when exported'* (US, JOB/GC/94).

Implications:

Data is the currency of the digital economy. As noted earlier, those with access can do the analytics and customise advertising and sales and have direct access to consumers and markets.

There are countries that wish to have the data of their citizens localised in servers located within their countries. This could be for economic, political/ security reasons:

- Economic: data is the 'raw material' of the digital economy. It has value.⁶ Countries may want to ensure that they do not set rules that give this data away for free! Should this raw material not be reserved for domestic firms or if provided to foreign companies, should there not be a price charged for this data? Instead the data is given away freely by individuals and countries, collected by the major technology companies and sold at a cost to others.
- Political: For security or political reasons, countries may want to have all or certain types of data generated by their citizens to be located within their national borders. Others may not want foreign countries to conduct surveillance on their citizens. After the Snowden revelations, several countries had serious privacy and security concerns regarding free data flows.

iii) Promoting a Free and Open Internet

Proposed rule:

'A free and open Internet enables the creation and growth of new, emerging, and game-changing Internet services that transform the social-networking, information, entertainment, e-commerce and other services we have today. The Internet should remain free and open for all legitimate commercial purposes' (US, JOB/GC/94).

Implications:

This discourse portrays the internet as being a free and open space as long as there are no 'rogue' states (i.e. developing countries) that are blocking websites for commercial or political reasons.

⁶ The importance of data for is also explained in the testimonies provided by IT companies in the Hearing on 'Expanding US Digital Trade and Eliminating Barriers to Digital Exports', July 13, <http://waysandmeans.house.gov/event/hearing-expanding-u-s-digital-trade-eliminating-barriers-u-s-digital-exports/>



The reality is that there is shadow regulation and sometimes even manipulation on the part of various actors that lie largely outside public purview:

- some powerful governments especially the US
- powerful technology companies that own the critical social media platforms; as well as
- powerful industries.

The large social media and search engine companies do meet to discuss content on their platforms. The US government often works with these big companies. Instead of setting regulation through Congress, sometimes the 'easier' way, outside democratic scrutiny, is to work through the private companies to make decisions on internet content and other matters.

Companies themselves also make decisions that have a bearing on what we see or do not see on the internet e.g. what news items pop up on a platform, and in what order. This content control influences public opinion. Internet content can likewise be manipulated for commercial reasons.

Certain big industries have manipulated the internet to ensure that certain domain names have been deleted. An example is the manipulation by the pharmaceutical industry in the US (BigPharma) to take down sites of certain non-US (Canadian) online pharmacies that are selling legitimate generic drugs so that Americans cannot find them.⁷

Is the discourse of a 'free and open' internet not therefore misleading? Would it not effectively allow some to exercise their 'internet sovereignty', according to their interests, but not others?

iv) No Localisation Barriers

Proposed Rule:

'Companies and digital entrepreneurs relying on cloud computing and delivering Internet-based products and services should not need to build physical infrastructure and expensive data centres in every country they seek to serve. Such localization requirements can add unnecessary costs and burdens on providers and consumers alike. Trade rules can help to promote access to networks and efficient data processing' (US, JOB/GC/94).

The EU's proposal (JOB/GC/97) has a similar item but elaborates on it further by going beyond server localisation:

'Building on existing WTO obligations, disciplines addressing all forms of localisation, including local presence; localisation of computer servers; and local content requirements, subject to appropriate public policy exceptions' (para 20, JOB/GC/97).

Implications:

There are several issues under 'no localisation':

No localisation of servers/Enabling Cross Border Data Flows

The US wants to ensure that its companies can operate in a borderless single market where data can flow and consumers can be sold services with ease. For example, their companies may want to provide health services. The medical equipment a client has may be connected with the health provider in the US, giving the provider real-time information so that the provider can adjust its services accordingly. Due to this real-time connection and data transfer, the health provider could

⁷ See Levitt G 2016 'Protecting Online Access to Safe and Affordable Medication', September 12, http://www.circleid.com/posts/20160912_protecting_online_access_to_safe_and_affordable_medication/



provide very important health services. However, it might also push out many other health providers in the country of the client.

Should data, the natural resource of the digital economy, be given away freely? If the market is segmented – is it a bad thing? Perhaps such segmentation could provide a market for domestic health suppliers? If foreign providers want to enter the market, they could do so by establishing local presence (which they may not, if their services can be delivered online). Should countries think about having local servers and ensuring that data can be localised so that if desired, it could be sold at a cost and not given freely?

There are also privacy issues involved, which is not the domain of the WTO. When data is stored in a cloud somewhere, collected by a US company, e.g. when using Google’s search engine, but physically stored in a server elsewhere, whose privacy laws apply?

No local/ commercial presence

Proponents want to ensure that their companies do not need to incur the extra costs of setting up services, facilities, or offices in other countries. This is an investment issue! Some developing countries, in order to ensure that the supplier brings benefits to the domestic economy, require the commercial presence of the supplier. This could be to encourage skills upgrading of domestic companies; local employment; technology transfer; or to be able to tax the foreign company, which may not be the case if the service is delivered via Mode 1.

There are also regulatory issues involved here. If a service supplier is not located domestically, how can the service be regulated? This could be very problematic for sensitive sectors e.g. health, banking, insurance, medical services. It is also not clear how standards, licensing requirements and qualification requirements can be enforced.

Making such a rule at the WTO would undermine and bypass the consumer protection discussions that are currently taking place under the internet governance multi-stakeholder processes.

No local content requirements in technology

This is dealt with in the section below on technology.

v) Technology Issues (No Technology Transfers; No Technology Local Content; No Source Code disclosure etc)

Barring forced technology transfers

Proposed Rule:

‘Requirements that make market access contingent on forced transfers of technology inhibit the development of e-commerce and a flourishing digital economy. Trade rules may be developed to prohibit requirements on companies to transfer technology, production processes, or other proprietary information’ (US, JOB/GC/94).

Implications:

Sometimes countries allow for companies to enter their markets only when there is some transfer of technology. Such measures are taken by developing countries to attempt to bridge the digital divide. The transfer of technology (or in earlier days, the copying of technology) is a policy tool that all countries which have developed have used.



Technology transfer should be encouraged, rather than discouraged in order to bridge the digital divide.

Furthermore, such a rule would undermine a commitment already taken by WTO Members in the GATS Annex on Telecommunications to provide technology transfer to LDCs to support the development of their telecommunications infrastructure. Article 6d of the Annex says

'Members shall give special consideration to opportunities for the least-developed countries to encourage foreign suppliers of telecommunications services to assist in the transfer of technology, training and other activities that support the development of their telecommunications infrastructure and expansion of their telecommunications services trade'.

Protecting critical source code

Proposed Rule:

'Innovators should not have to hand over their source code or proprietary algorithms to their competitors or a regulator that will then pass them along to a State-owned enterprise. It is important to ensure that companies do not have to share source code, trade secrets, or substitute local technology into their products and services in order to access new markets, while preserving the ability of authorities to obtain access to source code in order to protect health, safety, or other legitimate regulatory goals' (US, JOB/GC/94).

Implications:

Trade secrets (of which source code is one element) is not covered under the TRIPS agreement. This would be a TRIPS + rule.

Source codes are the basic instructions written into a software programme in human readable text language. The computer translates the source code written by programmers into machine language using combinations of binary digits. Hence the source code is a basic tool that can assist a person to decode the language of a software programme and/or replicate the programme.

Disclosure of soft code of a software programme may be necessary for security reasons, regulatory reasons, and it can also be critical for developing software coding skills. New software can be created, tailored to local preferences and sensitivities, even adapted to be used in local languages when there is the disclosure of source code. This is therefore a major element in supporting developing countries' suppliers in entering domestic/ regional or international e-commerce.

Ensuring technology choice

Proposed Rule:

Innovative companies should be able to utilize the technology that works best and suits their needs. For example, mobile phone companies should be able to choose among wireless transmission standards like Wi-Fi and LTE.⁸ Trade rules may play a role in ensuring technology choice by stipulating that companies are not required to purchase and utilize local technology, instead of technology of their own choosing' (US, JOB/GC/94).

Implications:

This is about expanding the Trade-Related Investment Measures (TRIMS) disciplines disallowing local content requirements and extending this to local technologies and services. The Chinese have very successfully used such technological requirements to ensure that their local technologies are used by internet service suppliers or by domestic consumers. This was the way to ensure their technology firms were able to thrive and invest further in R&D.

⁸ Long-Term Evolution (LTE) is a standard for high-speed wireless communication for mobile phones and data terminals.



Would extending the TRIMS disciplines to disallow local technological content be in developing countries' interests?

vi) Safeguarding Network Competition

Proposed Rule:

'Safeguarding Network Competition: It is important to enable digital suppliers to build networks in the markets they serve or access such facilities and services from incumbents – whether landing submarine cables or expanding data and voice networks – to better access consumers and businesses' (US, JOB/GC/94).

Implications:

When a company provides network service in an area, subscribers to the network will pay for the network use. (Cellphones really have no use unless connected to a network).

Some countries put in place conditions so that foreign network suppliers will have to provide network coverage in urban (more profitable) but also rural (less profitable) regions. Or countries allow foreign network suppliers to operate only in some regions but not others. Such conditions are meant to meet domestic policy objectives, such as providing network infrastructure to all areas – urban and rural, and to force companies to cross-subsidise, rather than simply providing network coverage to profitable regions.

Countries should be free to put conditionalities on foreign network suppliers to meet domestic policy objectives. What is proposed is unlikely to allow for this.

D. WHAT IS THE REALITY ON THE GROUND IN DEVELOPING COUNTRIES VIS-A-VIS E-COMMERCE?

Where are developing countries today in terms of E-commerce competitiveness? What are the challenges their suppliers face? How are the basic issues of infrastructure, skills upgrading to be overcome? It is not only about having connectivity that we can be successful in e-commerce. To what extent are developing countries' suppliers also content-creators on the internet?

A WTO Secretariat publication 'E-commerce in Developing Countries: Opportunities and Challenges for Small and Medium-Sized Enterprises' says that

'E-commerce has been hailed by many as an opportunity for developing countries to gain a stronger foothold in the multilateral trading system. E-commerce has the ability to play an instrumental role in helping developing economies benefit more from trade. Unlike the requirements necessary to run a business from a physical building, e-commerce does not require storage space, insurance, or infrastructure investment on the part of the retailer. The only pre-requisite is a well designed web storefront to reach customers. Additionally, e-commerce allows for higher profit margins as the cost of running a business is markedly less'.

How ready are developing countries in engaging in trade online? Are small and medium-sized enterprises able to easily surpass all the hurdles of offline business and gain export markets easily via e-commerce?



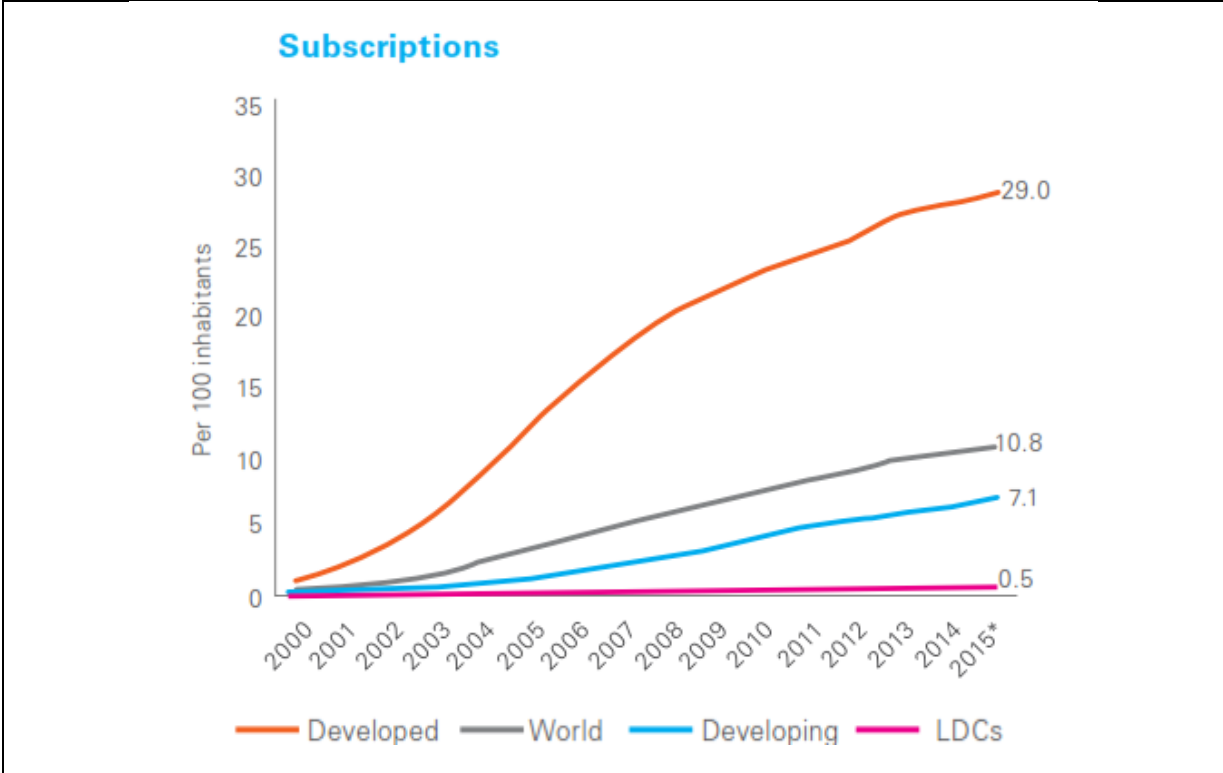
The Digital Divide

The ITU's 2015/2016 statistics are quite sobering.⁹

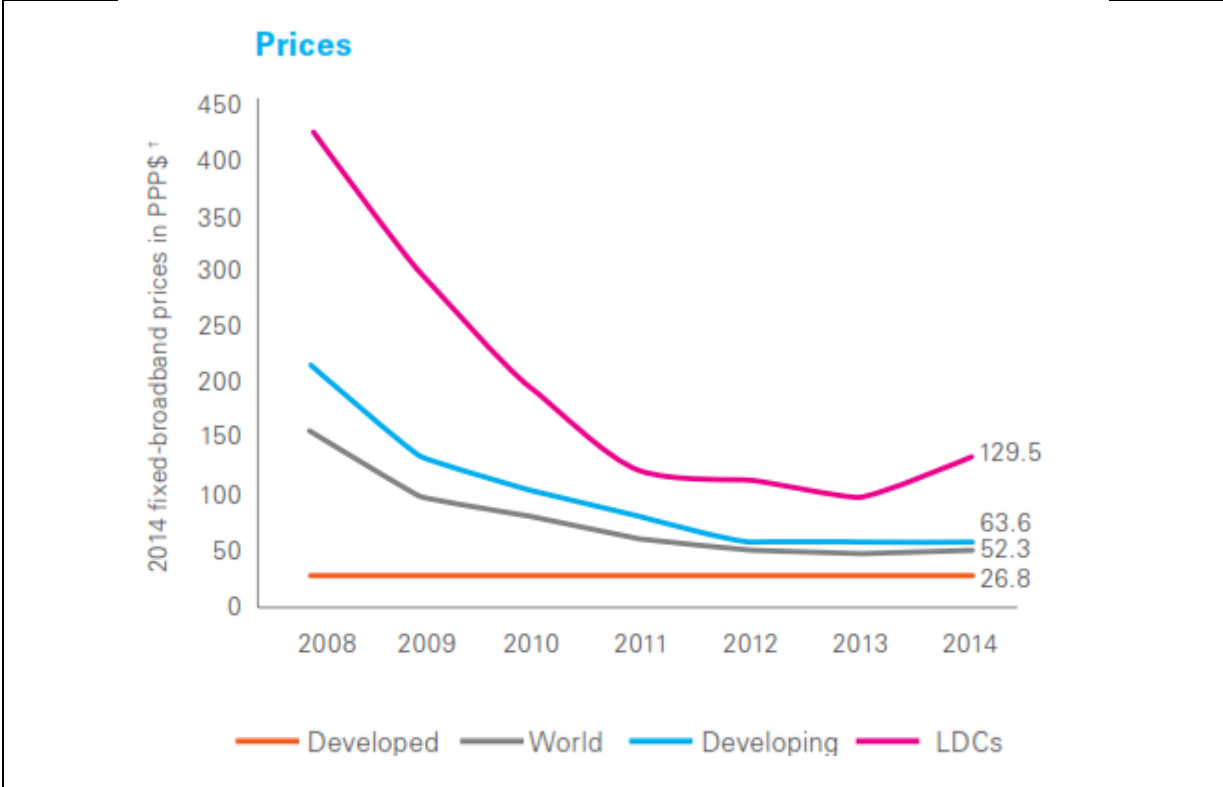
- 4 billion people from developing countries remain offline, representing 2/3 of the population in developing countries.
- Mobile-broadband subscriptions are around 78 active subscriptions per 100 inhabitants in Europe and US. Africa is the only region where mobile broadband penetration remains below 20%.
- Africa is the region with the fewest fixed-broadband subscriptions at less than 1%. Similarly, fixed-broadband penetration remains at less than 1% in LDCs (see figure below).
- The price of fixed broadband plans are the highest in LDCs, compared to the prices payed in developed and other developing countries. In fact, according to ITU (2016), 'for the majority of the world's poorest countries broadband remains unaffordable (see figure below).
- Broadband speed is critical when it comes to doing business online. Compared to other regions, Africa has the slowest broadband speeds (when this is available) (see graphs below).

⁹<https://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2015.pdf>;
<http://www.itu.int/en/ITU-D/Statistics/Pages/facts/default.aspx>

Graphs - Fixed broadband subscriptions: developing countries lag behind as prices stagnate



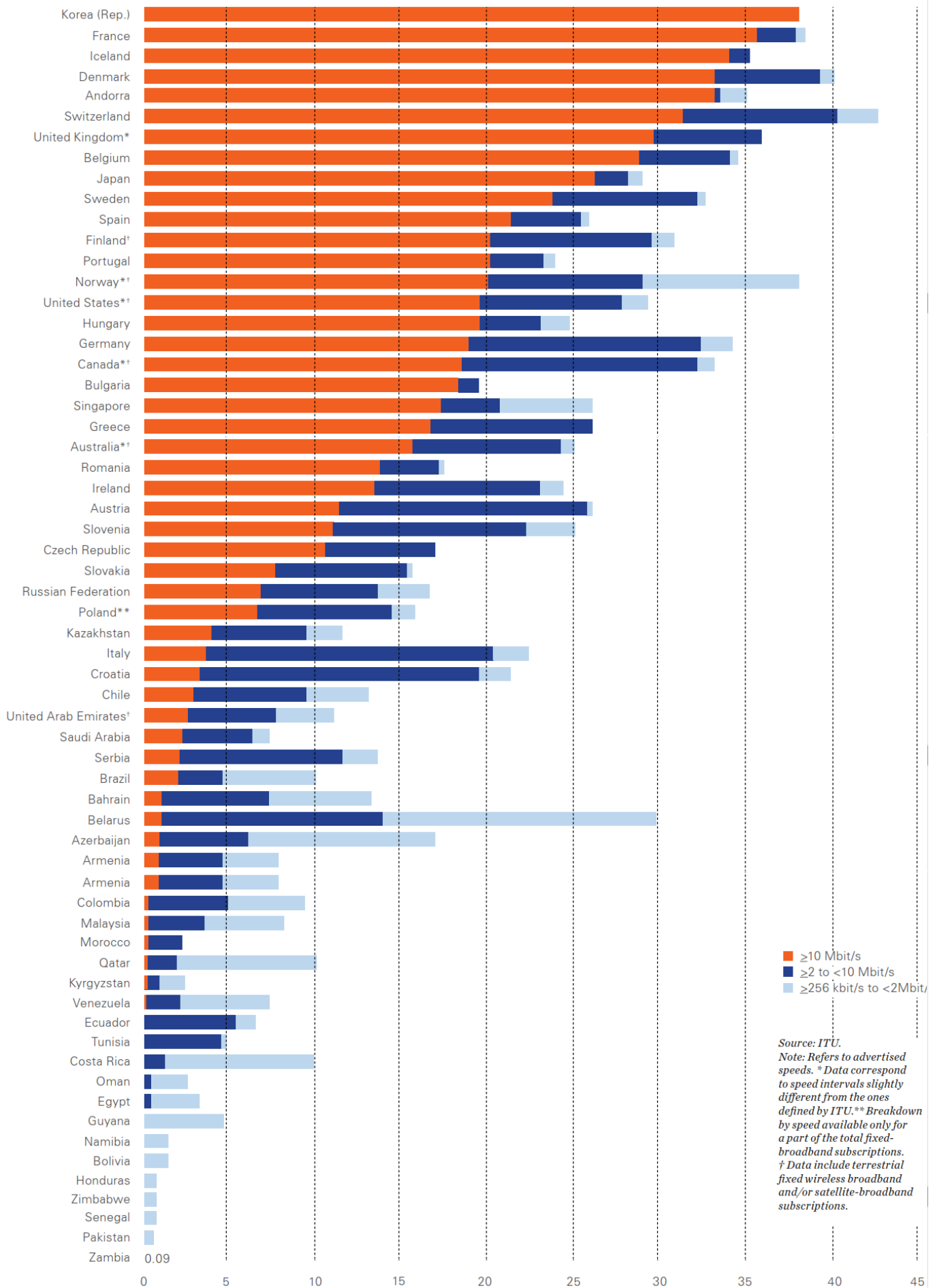
Fixed-broadband uptake remains slow in developing countries and particularly in LDCs, where penetration rates are now at 7% and less than 1%, respectively.



While the prices of fixed broadband plans dropped sharply between 2008 and 2011, costs have even increased slightly in LDCs in recent years. Unfortunately, LDCs and developing countries face the highest costs in relation to accessing fixed broadband.

Source: ITU, ICT Facts & Figures, The world in 2015, <https://www.itu.int/en/ITU-D/Statistics/Documents/facts/ICTFactsFigures2015.pdf>

Fixed-broadband subscriptions per 100 inhabitants, by speed, early 2014 (selected countries)



Source: ITU.
 Note: Refers to advertised speeds. * Data correspond to speed intervals slightly different from the ones defined by ITU. ** Breakdown by speed available only for a part of the total fixed-broadband subscriptions. † Data include terrestrial fixed wireless broadband and/or satellite-broadband subscriptions.



How Ready are Developing Countries in Engaging in Cross-border E-commerce? The Case of Africa

To answer this question taking the case of Africa, data is taken from an ITC report 'International E-commerce in Africa: The Way Forward'. The key points in the report are:

- i) Domestic e-commerce is thriving in some African countries with large domestic markets (Nigeria, Kenya, South Africa). However, this is not the case in smaller African countries.
- ii) Even for these bigger African markets, the report notes that e-commerce '*would appear to be blocked*' when it comes to cross-border e-commerce.

The paper identifies 6 main issues representing the greatest obstacles to cross-border e-commerce:

- **Difficulties with international banking transactions.** These include domestic restrictions on the amount of money that can be transferred cross border; domestic banks are not well linked with the international banks meaning that costly intermediaries are required if foreign credit cards are used to make purchases from African suppliers; foreign bank accounts may be needed by African customers to procure from abroad; compliance with banking regulations and other private sector rules; trust and security issues to be able to export.
- **Exclusion from international e-market places or platforms:** SMEs of many African countries are blocked from listing their products on international platforms eg. E-bay or Amazon etc. The banking barriers are a recurrent problem - even if they were provided entry onto these platforms, there would still be the problem of making the payments.
- **Infrastructure deficit:** Poor domestic and regional physical infrastructure - roads, ports, air transportation, reliability of electricity supply - are all serious obstacles to e-commerce. Whilst local solutions have emerged (eg. Motorbike delivery), international logistics is more complicated and costly, putting many African countries at a disadvantage. (This is also true for many other developing countries).
- **Inexperience with sales tax and import duties.** It is a common experience for African SMEs to export through e-commerce without charging sales or import duty taxes. The collection of these Delivered Duty Paid services are only offered by a few transportation partners, is expensive, and can result in a costly return shipment or loss of business.
- **Sociopolitical barriers:** Companies are challenged by the cultural requirements of doing business abroad including foreign language skills and customer service orientation. '*An ability to get products known and recognised in international markets may be the biggest barrier of all*'.¹⁰ Promoting goods through online channels in developed countries is expensive especially when digital marketing becomes the mainstream form of all marketing communications. '*There is limited space in this for an African enterprise to stand out. Even more fundamentally, the use of English, and cultural understanding of how to communicate to target markets, can put African firms at a disadvantage*'.¹¹
- **The remaining digital divide.** Internet connectivity still lags behind other regions, including limited access to broadband.

¹⁰ ITC 'International E-commerce in Africa: The Way Forward', p. 30.

¹¹ ITC, *ibid*, p. 30.



Real Fundamental Challenges Persist

There are many success stories in developing countries, including Africa regarding domestic e-commerce taking off and local innovations that are laudable. Nevertheless, there are still very basic issues that continue to hold many developing countries back. Once again, taking the case of Africa, the following, although only news reports, nevertheless give a sense of the extent of these challenges.

Electricity Supply still Lagging

The significance of the internet to reboot Africa was a question asked to Akinwumi Adesina, the President of the African Development Bank recently. His response was sobering. Only one-third of people in sub-Saharan Africa have access to grid electricity.

'If you can't have electricity you can't drive an industrial development... Electricity drives everything, so until we fix that problem Africa faces huge challenges'.

Source: The Guardian 'Can the Internet Reboot Africa?' 25 July 2016

Success in Mobile Telephony but IT Readiness Still Low: Example of Kenya

“Don't let success stories like M-Pesa in Kenya fool you: the worldwide digital divide is still increasing and Africa remains the biggest victim.”

So says Soumitra Dutta, Dean of Cornell's Johnson School of Management, talking to beyondbrics at the launch of the World Economic Forum's Global Information Technology Report 2013.

M-Pesa, the highly successful mobile payments service in Kenya, has attracted global attention. Used by the vast majority of Kenyans, M-Pesa is so successful that, according to Quartz, a massive 31 per cent of Kenya's GDP is spent through mobile phones.

It was proof that technological progress could happen in low-income countries with poor infrastructure...

“Clearly, simple technology [like M-Pesa] can lead to effective solutions. But that's not enough, because the worldwide bar in IT keeps moving, and many EMs are once again missing the boat,” he told beyondbrics.

His case in point: M-Pesa is based on simple mobile telephony, using SMS messages to send and receive money. But this use of “mobile technology” is misleading. Says Dutta: “The most impactful IT innovations these days are based on mobile internet, not telephony.” And in mobile internet, the gap between DM (developed markets) and EMs (emerging markets) is still widening, he says...

Yet betting on progress in telephony alone or, worse, not participating in the IT race at all, is not an option for any country, says Dutta...

Returning to M-Pesa, Dutta says the problem with the highly popular service is that it makes people believe Kenya is bridging the IT gap when, in effect, it is not. In the WEF's ranking on “IT readiness”, Kenya is ranked in 92nd place worldwide, up only 1 slot from last year. Other African countries lag even further behind...

“Despite the government's strong vision for developing information and communications technologies, Kenya's overall [IT] readiness remains low because of insufficient development of an



infrastructure that is costly to access, combined with a weak skill base that suffers from low secondary enrolment rates and high level of illiteracy.”

That is not to say praise for M-Pesa is misplaced, says Dutta. “M-Pesa has played a wonderful role as an ambassador for mobile technology in EMs. People in these poor countries needed success stories and M-Pesa was such a story.”

But Kenya and its followers should now extend their innovation in IT to access to other sectors and other technologies.

“Mobile telephony alone will not allow developing countries to bridge the digital divide. The same degree of innovation [must] spread to other technologies,” Dutta concludes. “What matters now is how they do in fields like education and health care. Only then can they move to the next level.”

Source: Financial Times ‘Africa’s Digital Divide: Still Gaping’, 15 April 2013

E-commerce Companies Still Struggling

‘This year, Africa Internet Group (AIG), the parent company to e-commerce brands such as general retailer Jumia and travel site Jovago, became the first venture capital-backed business in Africa to be valued at \$1 billion after sizable rounds from the likes of insurance giant AXA and French mobile network operator Orange.

AIG is not the only e-commerce focused business to have received large amounts of funding over the last few years, with Nigerian online retailer Konga and South African e-commerce firm Takealot also taking on significant investment.

Yet, behind the scenes, all is not as rosy. Within weeks of the AIG funding announcement, Jumia laid off dozens of staff. Konga and DealDey have had to do the same. Takealot was forced to merge with its closest competitor, Kalahari. For all the excitement, Africa’s highly funded e-commerce companies are simply fighting to stay afloat right now.

There are a number of reasons why e-commerce is taking its time to take off. PwC says online retail sales in South Africa, for example, will rise to \$770 million, while Frost & Sullivan believes the African e-commerce market will be worth \$50 billion, both by 2018. Yet the current viability is minimal.

South Africans, for all the potential of e-commerce, still prefer to use physical shops. Even the many Africans that would like to shop online are inhibited by low levels of connectivity, with only around 20% of Africans connected to the internet, according to the Internet Society. Poor infrastructure also poses problems, with the likes of Konga having to roll out their own expensive fleet services to combat logistical problems. There is also a lack of trust in online payments, requiring the adoption of services such as pay on delivery at additional infrastructural costs.”

Source: Quartz 2016 ‘The Dawn of An African E-Commerce Goldrush May be a False One’, 23 May. <http://qz.com/689864/the-dawn-of-an-african-e-commerce-goldrush-may-be-a-false-one/>



E. THE WTO'S E-COMMERCE WORK PROGRAMME: WHAT AND WHERE

What Work to be Undertaken in the Work Programme: No Mandate for Negotiations, only Discussions

The mandate of the WTO's Work Programme on Electronic Commerce is 'to examine all trade-related issues relating to global electronic commerce, taking into account the economic financial, and development needs of developing countries'.

Importantly the scope of this mandate is not about negotiations on e-commerce, but simply an examination, or in WTO jargon, 'discussions' on trade-related issues relating to e-commerce.

If there are Members that want to negotiate new e-commerce rules, the current mandate of the Work Programme will need to be changed. There will need to be a decision taken by the Membership to agree to a different and new mandate. Until this happens, the mandate in the Work Programme, adopted by the General Council on 25 September 1998 stands.

Nairobi Ministerial Declaration: Prioritise the Remaining DDA Issues

The Nairobi Ministerial Declaration puts the 'remaining Doha issues' at the center of the WTO's negotiating agenda.

Para 31: '...there remains a strong commitment of all Members to advance negotiations on the remaining Doha issues'.

Para 34: 'While we concur that officials should prioritise work where results have not yet been achieved, some wish to identify and discuss other issues for negotiation; others do not. Any decision to launch negotiations multilaterally on such issues would need to be agreed by all Members'.

As there is no negotiating mandate in the E-commerce Work Programme, e-commerce is a 'new issue'. The Membership should focus on implementing the Nairobi Ministerial Declaration, which is to focus efforts on the 'remaining Doha issues'.

Where should the Work Take Place? Examination 'in the Relevant Bodies' (Goods, Services, TRIPS, Development)

The 1998 Work Programme on E-commerce (WT/L/274) organised the discussions such that it was a bottom-up process. The issues would be discussed in four relevant bodies and sent up to the General Council.

Para 1.1: *'The General Council therefore establishes the (work) programme for the relevant WTO bodies as set out in paragraphs 2 to 5.'*

Paragraphs 2-5 are the issues to be taken up by the Council for Trade in Services (para 2); the Council for Trade in Goods (para 3); the Council for TRIPS (para 4); and the Committee for Trade and Development (para 5).



Paragraph 1.2 gives the General Council a mandate to play the coordinating role and to deal with all the issues regarding customs duties on electronic transmissions: *'The General Council shall play a central role in the whole process and keep the work programme under continuous review through a standing item on its agenda.. In addition, the General Council shall take up consideration of any trade-related issue of a cross-cutting nature. All aspects of the work programme concerning the imposition of customs duties on electronic transmission shall be examined by the General Council'*.

The short Ministerial Decision on E-Commerce agreed to in Nairobi also reinforces the work of the relevant bodies:

Para 1 notes *'To continue the work under the Work Programme on Electronic Commerce..., based on the existing mandate and guidelines and on the basis of proposals submitted by Members in the relevant WTO bodies as set out in paragraphs 2 to 5 of the Work Programme'*.

Para 2 describes the coordinating role of the General Council: It is *'to hold periodic reviews ... based on the reports that may be submitted by the WTO bodies entrusted with the implementation of the Work Programme and report to the next session of the Ministerial Conference'*.

The highly technical nature of the issues also means that these questions are more appropriately directed at the relevant bodies. Take the following examples:

- Any issue around source code needs to be discussed in the TRIPS Council, in the context of a bigger discussion on trade secrets. This would be too technical a discussion at the General Council.
- There are many questions around GATS that remain open and need attention. As technology progresses and more services are traded online, will there not be a growing tension and contradiction between Members' GATS schedules (where limits to market access and national treatment have been taken), and the temporary moratorium on electronic transmissions, allowing effectively no barriers?
- There are also other very technical GATS issues – on classification regarding modes of supply; classification of new services; on how licensing and qualification requirements can be dealt with in online trade.
- Similarly, further examination must take place in the Committee on Development regarding the challenges of infrastructure; how to support developing countries in the context of changing business models and a digital economy that is high technology driven; and the urgent need for transfer of technology.
- There are also the tensions vis-a-vis regional integration and the regional market especially if rules are established along the lines of the proposals submitted. For example, members of the African Union are building a Continental Free Trade Area. Will the continuation of a moratorium on customs duties undermine this effort of building a regional market as technology advances and more goods and services are traded online? Could there be a scenario whereby customers in



Africa, with a few clicks of the button, are able to access goods and services from outside the continent perhaps even more quickly, easily and more cheaply than from local suppliers?

(The importance of the regional market that could be lost should not be underestimated. Currently, 60% of East African Community (EAC)'s exports to other EAC countries consist of manufactured products. 50% of EAC exports to Africa are manufactured products. In contrast, only 6% of EAC's total exports to the EU are manufactured products¹² despite having had duty-free access to the EU market. The regional market is therefore critical for supporting countries in their industrialisation process.)

- In the Goods Council, there is a need to discuss the classification issue. Is a good transmitted online a good or a service and what are the implications of one or the other for developing countries in the context of wanting to support domestic suppliers? Might contradictions and even tensions not arise in time, between Members' GATT schedules and the moratorium waiving customs duties?

F. WHAT KIND OF 21ST CENTURY TRADE ROUTE CAN SUPPORT DEVELOPMENT?

The trade route we have today is a segmented one, and for important reasons including infant industry protection, industrial development, macro-economic reasons, employment - giving a market to domestic suppliers who may not be competitive on the world market. Such barriers are being put forward by developed and developing countries alike.

It is for this reason that much caution has gone into the tariff discussions in the Doha negotiations, in agriculture and also in NAMA. The Membership has also acknowledged the importance of tariffs (i.e. market segmentation) for development reasons, hence LDCs in the Doha negotiations have not had to undertake tariff reductions.

What has happened to the concerns about employment and infant industry when it comes to electronically transmitted trade? This may not be an issue that is the most pressing today because online trade is expanding but still limited. However, if decisions are to be made today, we will need to project ourselves to the era of 15 - 25 years from now and beyond (the world of 7G?) where the electronic transmission of 'goods' is likely to have overtaken the volumes of physical goods traded on the traditional trade route by manifold.

Google says that the Internet is the trade route of the 21st century. What is this trade route that we want to create, so that developing countries can not only industrialise, but also 'technologise' - building production capacities that are also on the technological edge?

¹² The data here on EAC includes Kenya, Tanzania, Uganda, Rwanda and Burundi. The data comes from calculations using UNCTADSTAT trade figures for 2015.



G. CONCLUSIONS

Existing mandates:

- 1) The E-commerce Work Programme provides a mandate for discussions, not negotiations. The Nairobi Ministerial Declaration states that the priority must be the remaining DDA issues. E-commerce is not a remaining DDA negotiating issue.
- 2) The E-commerce Work Programme also provides a clear description of where and how the discussions take place. The process is bottom-up. Discussions are to take place in the relevant bodies on e-commerce in relation to the existing Agreements dealt with by the relevant bodies (the Council for Trade in Services; the Council for Trade in Goods; the Council for TRIPS; the Committee for Trade and Development).

Why the necessity to have discussions in these relevant bodies? The nature of the issues that are to be discussed is highly technical, hence the need for experts of the relevant bodies to be deliberating in detail on those issues, often in relation to other matters in that subject area. The E-Commerce Work Programme (WT/L/274) paras 2-5 already provides a list of technical issues for each of the relevant bodies.

The General Council provides an oversight function and can be the place to discuss residual cross-cutting matters. The bottom-up process outlined in the Work Programme is a bottom-heavy one i.e. the bulk of work is in the relevant bodies pertaining to the existing Agreements.

Development:

- 3) Thorough discussions must take place in the Committee on Trade and Development. Much needs to be understood about how developing countries' are going to be impacted by the rise of cross-border e-commerce in relation to
 - Current production and trade patterns - what will happen to domestic suppliers in the age of smart goods and services? (I.e. almost every good and service will have a technological component to it).
 - Is the rationale for market segmentation (by way of tariffs and GATS limitations) - such as employment and considerations regarding industry sensitivities - not still valid in the economy of tomorrow? How can the carefully and strategically segmented trade route of today be replicated in the trade route of tomorrow to provide domestic suppliers with the breathing space to industrialise and 'technologise'?
 - The challenges to regional markets and integration in the face of increasing cross-border e-commerce. These challenges apply both in the area of physical goods (possible marginalisation of local suppliers if domestic customers order physical goods from abroad and these are delivered cheaply and quickly with drones for example); and online goods and services - local providers may be less cost effective compared to foreign providers. In these ways, the availability of the regional market for domestic/regional suppliers will be challenged. Is the regional market still important?



- Financial implications if there is a continuation of no customs duties for electronic transmissions. This may be a small issue now, but its relevance will increase as technology improves to allow for more goods that are today traded physically to be traded electronically. There will also be financial losses when investors, rather than establishing local presence, prefer to provide services online. Countries will experience losses from taxation foregone.
- Development implications of what would be the growing contradictions between Members' GATT / GATS schedules and the temporary moratorium on customs duties.¹³ As e-commerce becomes more prevalent, free trade would effectively take place bypassing Members' GATT tariffs or GATS scheduled limitations. In addition, this raises several questions - in some places, an argument has been made that the same rules for a particular service or good should apply whatever the method of transmission. The WTO has also treated 'like' services in largely the same way. Should there now be different WTO rules applied to effectively 'like' products/ services i.e. zero duties for those transmitted electronically, but duties and GATS limitations for those delivered via traditional methods?
- Access to infrastructure challenges and technology transfer etc. How can Members support developing countries in these areas so that they too can become e-commerce exporters?
- Transfer of technology - This is an area which developing countries have faced roadblocks from their developed country partners. Yet if genuine multilateral support is sought to be provided, and given the critical importance of technology in the digital economy, support in terms of transfer of technology is paramount. How do partners suggest providing such support to bridge the technological divide? Is this even a realistic request in the light of the submissions by some proponents?

¹³ Since the 1998 WTO Ministerial Conference when Members adopted a temporary moratorium of not imposing customs duties on electronic transmissions, this moratorium has been renewed at the WTO Ministerial Conferences.