Good morning. I have been asked to comment on the role of ICT-related trade in growth and development and the current WTO negotiations known collectively as the Doha Development Agenda. This is a good and timely topic. Innovation and the practical dispersion of technologies have radically altered the economic landscape over the past several years, contributing importantly to growth in developed and developing countries alike. Technological change will continue to be a dominant characteristic of life in the years to come as we witness the inauguration of new mobile telecommunications systems, the growth of internet networks and widespread use of a broadband infrastructure.

All of this is having a direct impact on the Doha Round negotiations where an increasing number of countries are aiming to use the talks to realize what are often referred to as the “enabling” opportunities afforded by ICT.

ICT-related issues are of growing importance in the Geneva talks and ICT-related trade is increasingly a major element of both developed and developing countries’ trade patterns. Consider the APEC area.

Of the $178 billion of ICT goods imported last year by the United States, 80 percent came from other APEC members and 60 percent, some $108 billion, came from APEC developing countries. For Japan and Canada, the situation is even more dramatic. Japan took 69 percent of all of its ICT imports from APEC developing countries and 91 percent of its total ICT imports from other APEC sources. Canada sourced 86 percent of its total ICT imports from APEC.

That ICTs can make an important contribution to growth in developing countries once their use becomes more pervasive is evident from the impact they’ve made in the developed world. Take the United States as an example. ICT accounts for only 8 percent of US GDP but 29 percent of US exports and has been identified as responsible for 50 percent of the increase in the average annual rate of US non-farm labor productivity growth over the past five years.

What works for one economy usually works in some way for another. That’s why China is reportedly prepared to spend upwards of $200 billion, much of it on ICT-related projects, in its effort to make Chongging the showpiece of its “go-west” strategy.

So it’s no surprise that ICT-related trade features importantly in a significant number of the multilateral negotiations covered in the Doha Development Agenda.
• ICT issues are central to the negotiations on trade in services;
• Notwithstanding the 1997 Information Technology Agreement, continued liberalization of ICT products is also a major objective in the industrial market access negotiations;
• The negotiations on trade facilitation have an important connection to ICT goods and services, because of the impact of ICT on port clearance procedures;
• Access to ICTs and the need for ICT-friendly development strategies have dominated the discussion in recent years in WTO’s electronic commerce work program;
• And, while it remains to be seen what will come of the newly-established working group on trade and technology transfer, I find it hard to see how any fruitful discussion of technology transfer could ignore ICT-related goods and services.

Negotiations on Trade in Services
In the first phase of the WTO services negotiations, WTO members tabled a large number of negotiating proposals for a wide range of services sectors. An important number of proposals were addressed to ICT-related services trade issues.

In the “Issues Paper” prepared for this Conference, the point is made that the scope and potential extent of services and content that will be enabled by the coming rollout of alternative broadband infrastructures and third generation mobile technologies is only now developing. Still, enough is known about the role of these technologies in facilitating trade in other services sectors, that negotiators are demanding full liberalization of communications platforms such as cable networks.

Although it is hard to draw a bright line, proposals tabled so far in the services negotiations have identified a number of issues related to computer-related services that differentiate the sector from telecommunications. Computer services-related proposals often emphasize the importance of improvement to commitments related to eliminating or reducing restrictions on the temporary cross-border movement of executives and employees linked to commercial presence as well as more specialized IT workers.

Technical standards and licensing requirements have been identified in a number of proposals as constituting significant barriers to trade in computer and related services. Regulatory issues bearing on domestic procurement requirements, lack of objectivity and impartiality of administration in regulation and a host of qualification requirements and procedures are also the target of computer services-related initiatives.

The post-Uruguay Round 1997 Agreement on Basic Telecommunications services provided a real liberalizing boost and the unique reference paper on competition policy differentiates telecom from other WTO-covered agreements.

As of last month, eleven separate proposals addressed negotiations in telecommunications services had been tabled in Geneva. The proposals are remarkably uniform in calling for further improvements in market access and national treatment and more widespread adoption of the “reference paper” competition policy commitments.

Among the barriers most commonly mentioned are limits on the number of suppliers (including continuance of monopoly rights) and foreign equity restrictions. Regulatory issues raised in the proposals tend to focus on requirements relating to universal service, management of the radio spectrum, licensing requirements and technical standards.
ICT services that are needed to create the infrastructure for electronic commerce and services that can be delivered electronically are many negotiators’ top priorities for liberalization in the current round. In developed countries, and in many developing countries, there is substantial support for full liberalization of basic and value added telecommunications services, including full market access and national treatment for both narrow band and broadband communications platforms on a technology neutral basis.

Because so much relies on an efficient telecom infrastructure, stronger trade disciplines to ensure cost basis, non-discriminatory access to unbundled elements of basic telecommunications networks and services are seen as the basic building blocks of an environment where ICT-related goods and services can contribute to overall economic growth.

The trade in services negotiations have entered the so-called request-offer phase where the kinds of issues just discussed find their way into the requests WTO Members are tabling to others in Geneva. The first part of this phase is fairly non-transparent, but we should be able to learn more about the treatment of ICT-related services when we pass to the offers stage next April.

**Market Access – Trade in Goods**

Governments which recognize the role to be played in their economic growth positively ICT, and international organizations working with low-income countries know that ICT users must have access to necessary ICT equipment at affordable prices. Countries that cannot competitively produce computers and other information technology products must resist imposing duties and other taxes that undermine the competitiveness of the users of ICT goods.

The WTO Information Technology Agreement negotiated in late 1996 makes a major contribution to making ICT products available to users around the world at duty-free prices. The ITA covers trade in six major product groups: computers, telecom equipment, semiconductors, semiconductor manufacturing and testing equipment, computer software and scientific instruments.

While countries accounting for well over 95 percent of all world production of these products have signed on to the ITA, there is nevertheless a larger problem with participation.

Far less than half of all WTO Members are associated with the ITA. This means that most developing countries – countries where affordable ICT equipment is key to benefiting from the promise of the digital economy – continue to penalize their own growth and development prospects by levying duties on ICT goods, often at very high rates. This is not an issue for most APEC countries, although there are still some in the region not associated with the ITA, but it is a serious problem in other geographic regions.

Even for those who are currently participants in the ITA, the negotiating story is far from over. First, there is the ongoing effort in the ITA to tackle the non-tariff barriers, particularly in the standards area, that continue to complicate and frustrate trade in ITA products even where they are free of duty. Second, there continues to be an effort to expand product coverage of the original ITA through an ITA II. With the rollout of new technologies and new product descriptions, the time will come when the current ITA definitions will be inadequate.
But the ITA is not just for the producers of ICT products. It is worth noting that the large number of developing countries that signed on to the ITA were not, and did not expect to become ICT product exporters in the near future. They were not looking for reciprocity, but were responding to the perceived need to liberalize and promote competition and investment in these sectors, all of which were seen as vital components of a national economic infrastructure in which competitiveness could thrive.

**Trade Facilitation**

Under discussion already since the 1996 Singapore Ministerial, an agreement on trade facilitation would enable participating countries, particularly developing countries, to make use of ICT to reduce the paperwork, time and costs associated with the import and export process itself. The significance to developing countries is obvious. Real world experiences have shown how countries have saved huge investments in port infrastructure by speeding import and export transactions, reducing the time ships spend in port and goods spend in warehouses. Through dramatically reduced administrative costs, Chile reportedly recouped its sizeable investment in its ICT-connected trade facilitation project in just over two months.

In a paper tabled in Geneva at the beginning of December, the Australian delegation argues that governments should incorporate into WTO Articles a number of high level principles for formalities and procedures, including the adoption of modern techniques such as risk management and the maximum practicable use of information technology. Rules requiring the advance electronic provision of information for the clearance of goods would provide longer lead times for assessment by authorities and make possible faster and more sophisticated risk management analysis.

For those interested in how ICT can be used to facilitate trade, I highly recommend the website of the UK-based SITPRO organization (www.sitpro.org.uk). SITPRO has developed a system that goes by the name WebElecTra. The system described is not merely a dream but a product that can actually be made use of today. It takes very little imagination to see how a combination of efficient, computerized port facilities, WTO rules on trade facilitation and user-friendly ICT-based approaches like WebElecTra can work to speed import and export transactions and reduce the costs of both traders and governments.

**ICT-Related Trade and Development**

The United Nations “Final Report of the Digital Opportunity Initiative” finds that the role assigned to ICT can be broadly characterized in one of two ways: ICT as a production sector (growth of computer hardware, software, telecommunications equipment and ICT-enabled services) and ICT as an enabler of socio-economic development (harnessing ICT to accelerate a wider development process). The report makes clear that although not all countries can benefit from a focus on developing ICT as a sector, all can benefit from using ICT as an enabler.

Last May, speaking on the topic of “The Global Innovation Divide”, Professor Jeffrey Sachs opined, “the challenges of economic development are not going to be addressed properly until we better integrate issues of science and technology into the basic economic development strategies of low-income countries”. Sachs indicated that he did not believe it likely that low-income countries could move up this ladder solely through access to assistance or technology – they also needed an effective industrial policy. He argues for a development strategy that integrates ICT into the overall plan.
Among the key elements of a comprehensive and holistic approach to ICT and development are:

• a liberal trade regime (in order to avoid penalizing the users of technology),
• an ICT-friendly legal and regulatory environment, including rules to guarantee competition in the marketplace (again to keep costs down),
• and a national strategy that recognizes how the intelligent integration of ICT can be the enabler of economic development.

This is perhaps the most important aspect of ICT in trade and development. And this explains why many developing countries not producing ICT goods joined the WTO ITA.

ICT as an enabler:
According to the UN Report, the six largest distance-learning universities in the world are located in developing countries: Turkey, Indonesia, China, India, Thailand and Korea.

In Chile, the Enlaces Project wired 50 percent of the primary schools for collaboration between students and teachers and, in Chile, once again, an internet network among farmer organizations has dramatically increased farmers’ incomes by providing information about crop status, weather, global market prices and training.

The current round of multilateral trade negotiations is known popularly as the Doha Development Agenda. We should do what we can to ensure that we realize the opportunities to make this a real development round through agreements involving liberalization of ICT-related trade.

Tariffs continue to be a problem in many countries despite the ITA agreement and that agreement by itself has not fully addressed all barriers to trade in ICT products. Non-tariff measures, such as product standards and regulatory requirements continue to frustrate free trade. And the coverage of the agreement needs to be modernized.

Similarly, ICT use and diffusion is affected importantly by restrictions in trade in services and there are many opportunities in the Doha Round to liberalize in sectors like computer-related services and telecommunications services.

Finally, I have touched on the role for ICT in trade facilitation, where the impact of liberalization and use of new technologies can have particularly significant effects for developing countries.

This round of negotiations is supposed to be the development round. Liberalization of trade restrictions affecting ICT goods and services can help us to realize that development potential.

Thank you very much for your attention.