information that will promote greater education, employment, health, safety and security, and for economic gain.

### **E-government**

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agencies, and provide information about government policies, procedures, benefits and programs.

#### Broadband-

bureaucratic silos. Broadband holds the potential to move all government forms online, eliminating paperwork. Broadband allows for online tutorials for simple government services, which can help free government employees to focus on the most complicated cases. Broadband can increase efficiency by increasing the speed and depth of cooperation across departments and across different levels of government.

### **Economic development / e-commerce**

Broadband can promote economic development and revitalization through electronic commerce by creating new jobs and attracting new industries, and provide access to regional and world markets. The United Nations Conference on Trade and Development (UNCTAD) recent information economy report (2010) shows that the increase in use of ICTs by small and medium sized enterprises (SMEs) has led to improvements in their business performance. ICTs could easily enhance efficiency in productive activities and improve competitiveness of SMEs.

# DISCUSSION(S),

## In the light of the above:

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However, achieving this with fewer base stations and low cost is equally critical, which further raises the question of accelerating the release of the

## POLICY AND REGULATORY FRAMWORK

South Africa is working on a policy and regulatory framewor

broadband, interventions on lowering the cost of telecommunication services and a model that will address market failures, especially lack of sufficient rural connectivity.

This national e-strategy is outlined in our National Development Plan vision 2030 and will cut across all Government departments and sectors.

The national e-strategy aim to create sector growth and innovation through policy coordination that drives public and private sector investments in areas such as network upgrade and extension, particularly in mobile broadband.

The national e-strategy will also ensure that South Africa engages effectively and coherently on issues of regional integration and harmonization interacting with various institutions, including Information Communication Technology (ICT) governance agencies such as the International Telecommunication Union (ITU) and the World Trade Organization (WTO).

#### **FUNDING CHALLENGES**

We have observed a lack of funding for unprofitable areas which then implies that Mobile Network Operators must cross-subsidize rural areas from profits in urban areas. In this regard the Government intends to work hand-in-hand with the private sector to find solutions within the framework of the national e-strategy.

consumers from being locked into long-term contracts with mobile operators.

According to the new regulations, consumers will be given the option to choose the period of their mobile phone contracts, from six, twelve, eighteen, to 24 months. This move, as well as efforts in the policy and regulatory environment, is to promote increased competition, and more affordable pricing.

### Modernizing universal service programmes and funds

We believe that including broadband internet access in the universal service definition can be a first step to bridging the current digital divide. In addition, a national universal service programme that incorporates a framework to ensure blanket access to essential broadband services can be chosen. Universal service needs to be defined in a technologically neutral manner, that is, by defining services rather than networks or technologies.

Regulators and policy makers may consider transforming existing universal service programmes into programmes for digital inclusion that support broadband services for all citizens. Universal service programmes could be financed by revenues raised from the activities of a wide range of market players as well as from alternative sources.

### Universal Access/Service Fund (UASF) could be modernized:

- A. To serve as a facilitator of the market, piloting innovative rural services and applications, creating demand for advanced ICT connectivity and services (i.e., through financing broadband access for schools and hospitals, and direct subsidies to users); and/or
- B. To serve as a funding mechanism for broadband networks into rural and high cost areas through support both at the retail end (e.g., shared access), as well as at the wholesale end (e.g., through subsidizing intermediary network facilities such as backbones, wireless towers and other passive infrastructure).

### IN CONCLUSION,

# 100% broadband possible with satellite:

In South Africa, the government's target of 100% broadband penetration by 2020 could be reached sooner than that if it uses satellite services. There is a potential role of satellite in the national broadband project. The present geographic coverage of around 30% could be widened using Satellite technology. Including satellite services could take these parameters to 100% geographic coverage and 100% population coverage, but [with] limited speed and affordability.

Most of the existing coverage is in urban areas, leaving huge tracts of rural regions without internet access. It is not economical for telecommunications

companies to lay fibre in these areas, owing to fewer potential users. The lack of rural connectivity is due to "market failure". Although some mobile operators may see rural markets as the next growth frontier, it remains very hard for them to find commercial viability in connecting remote connectivity to national backbones.

### **USE OF TV WHITE SPACES FOR BROADBAND**

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enabling more powerful broadband services.

TV White spaces are the unused channels in the broadcast TV spectrum. New radio and database technologies allow that spectrum to be used to transmit wireless Internet over distances up to ten kilometers. As a result, white spaces can be used to deploy broadband access and other mobile data technologies.

For example, In South Africa we have piloted a project in Cape Town on the use of the unused spectrum for television broadcasting. The Cape Town TV White Spaces Trial is being conducted with the support of ICASA, the communications regulator of South Africa. A group of partners is setting up a TV White Spaces (TVWS) trial for ten schools in the Western Cape over a six month period. The trial partners include CSIR Meraka, and Google. The goals of the trial are to:

1. Demonstrate that TV White Spaces can be used to deliver affordable broadband and Internet services without interfering with TV reception

2. Increase awareness of the potential for TV White Spaces technology

in South Africa and across the continent.

The partners will periodically update ICASA, Sentech, the Joint Spectrum

Advisory Group, broadcasters and other constituents on trial outcomes,

including spectrum measurements and reported interference.

The TV White Spaces network will consist of multiple base stations located

Tygerburg, Cape Town, which will deliver broadband Internet service to ten

schools within a 10 kilometer radius. The ten schools have been pre-

selected based on proximity to the base station, local IT and network

support, and other connectivity requirements.

rollout strategy, as well as the infrastructural and regulatory challenges that

we seek to address. We hope that this input adds value to the deliberations

of the Workshop as well as to the ongoing work on e-commerce in the

WTO.

Thank you.

**END OF THE SPEECH** 

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