هيئة الاتصالات وتقنية المعلومات
Communications & Information Technology Commission

A Public Consultation Document

on the

Draft USF Strategic Plan

Issued by CITC in Riyadh,

04/07/1430H, 27/06/2009G

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1. INTRODUCTION

The public consultation document provides the draft strategic plan of the Universal Service Fund ("USF Strategic Plan") to be implemented to achieve objectives of the Universal Access and Universal Service Policy for voice services and broadband Internet services in the Kingdom of Saudi Arabia.

2. OBJECTIVE AND AIM OF THE CONSULTATION

Objective of this public consultation is to give all stakeholders the opportunity to express their views and opinion on the draft USF's Strategic Plan which contains ("Consultation Questions"), attachment B. This process also aims helping CITC to take its decision on the final version of Strategic Plan.

CITC welcomes all the views, comments and answers submitted on the Consultation Questions. CITC calls upon participants to support their views with data, analyses, relevant benchmarking studies, information on local conditions, and experiences of other countries.

CITC will look unto all the views received. It is, however, not obliged to adopt the participants' views.

CITC invites and encourages all interested parties to kindly provide their views no later than August 29th 2009 (08/09/1430H) to one of the following addresses:

- By Email: **usf-sp@citc.gov.sa**
- Or by mail or courier to (hardcopy and softcopy):
  Office of the USF Administrator
  (2542), Prince Mohamed bin Abdulaziz Road, Olaya
  Unit (3), Riyadh (12222 – 7987)
  Saudi Arabia
  For more information, call USF office number: (01 - 4660789)

3 METHODOLOGY OF PROVIDING THE COMMENTS

Respondents are requested to indicate the number of the Consultation Question(s), or of the clause(s) in the document using the following template. If comments are more extensive than this format allows, then provide attachments with an appropriate reference to this document. Respondents are not required to comment on all Consultation Question(s).

Chapter Number	Question Number	Comments
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Draft

USF Strategic Plan Document

Table of Contents of the Draft USF Strategic Plan

CHAPTER 1. INTRODUCTION

The Government of the Kingdom of Saudi Arabia considers access to voice telephony services ("Voice Services") and broadband internet services ("Internet Services") for all segments of society to be an essential element of its development strategy. The information and communications technologies ("ICT") sector is a driving force for the economy as a whole, for social and cultural enrichment, and for national development.

While significant progress has been made in the expansion and liberalization of the ICT sector, more should be done to bring the benefits of ICTs to all populations of the Kingdom of Saudi Arabia (the "Kingdom"). To achieve this, the Ministry of Communications and Information Technology approved the Universal Access and Universal Service Policy (the "Policy") on 21/05/1427H. The Policy sets out the basis, principles and conditions relating to the provision of universal service and universal access ("UA/US") in the Kingdom. The Policy further directs the Communications and Information Technology Commission (the "Commission") to issue a decision to establish the Universal Service Fund (the "USF").

Accordingly, Decision 165/1428 (the "Decision") was issued on 18/05/1428H. The Decision further specifies the legal and procedural nature of the USF and other necessary ancillary matters, including rules for managing the accounts of the USF.

The Policy also stipulates that the Commission may, in accordance with the Commission statutes, prepare all other measures it deems necessary to implement the Policy. In this context, this Strategic Plan lays out a strategic roadmap for the USF's Programs and Projects that will meet the objectives of the Policy and Decision. This Strategic Plan also provides guidelines on implementation of the USF's Programs and execution of related projects in the most efficient and effective manner over the periods set out in the Policy.

Through the expansion of UA/US, the policy vision of the USF is to achieve the contribution in the national economic, social, and cultural development by promoting greater social equity and inclusion.

The objectives of the USF are to achieve the following targets as originally set by the Policy:

- UA to voice within a period of no more than three years from the date the USF becomes operational.
- US to voice within a period of no more than five years from the date the USF becomes operational.
- UA to Internet within a period of no more than five years from the date the USF becomes operational.
- US to Internet within a period of no more than seven years from the date the USF becomes operational.

1.1 KEY USF PRINCIPLES

The administration of the USF should be guided by a series of inter-related principles, indicated below. The following principles thus support the policy vision and objectives set forth above and underpin the USF implementation approach set forth in this document:

- Competitive Project Selection: A mechanism involving the participation of invited parties in a competitive selection process for a specific USF Project. This shall be through the submission of bids against specific requirements to be prepared and issued by the USF. The mechanism shall promote a fair bidding process among invited parties for the corresponding USF Project.
- Financing of the USF: The financing of the USF shall be obtained from the sources set out in the Policy.
- ICTs as essential element of development strategy: Access to ICT services for all segments of society is considered an essential element of the Kingdom's development strategy.
- Independence: The USF shall be independent and separate from all service providers, and shall not itself become a service provider. Further, the accounts of the USF shall be separate and independent of any other accounts.
- Market-orientation: The USF shall administer and carry out market-oriented USF Programs and USF Projects.
- Regulatory consistency and certainty: The activities of the USF shall be compliant with the applicable regulatory framework in the Kingdom.
- Sequencing: USF Programs shall be based on considerations of logical sequencing of service locations.
- Selective targeting: The USF shall focus exclusively on financing new networks and/or services to provide UA/US to geographic areas that are in the commercially unprofitable underserved zones.
- Targeted subsidies: The competitive project selection mechanism shall be the only mechanism that receives financial support from the USF. The USF shall be used to provide subsidies to compensate USF Service Providers.
- Technology and Service Neutrality: The USF shall ensure that competition in its projects is conducted on a Technical and Service neutral basis.
- Transparency: The USF shall give effect to the Policy in a transparent, non-discriminatory and competitively neutral manner. Further the accounts of the USF shall be audited on a periodic basis. The USF shall publish an annual USF Report.
- USF subsidies: The USF subsidy ("subsidy") approach is designed to be results-oriented, not distort the market, and encourage cost minimization and growth of the market. The USF's concept of the subsidy is to 'kick start' a project or service, with the objective that the service will become commercially viable. These subsidies seek to create the economic incentives

necessary to spur private investment in the provision of USF Services, while maintaining competitive market conditions.

1.2 DEFINITIONS

The terms below are used throughout this Plan.

- Commercially profitable underserved zones: means geographic areas where UA/US is not currently available but where provision of such UA or US is estimated by the USF to be commercially profitable under current and anticipated market conditions.
- Commercially unprofitable underserved zones: means the remaining geographic areas in the Kingdom that are not included in the served zones or commercially profitable underserved zones.
- Fixed Services: means an electronic communications services between fixed or Nomadic apparatus or stations. [Nomadic means the end user termination device may be in different places but stationary while in use].
- Home zone feature: means assigning a specified zone to a mobile telephone subscriber (base station or one of the sectors) to emulate fixed or semi-fixed service, and charging the subscriber at a different tariff, usually nearer to a fixed service tariff .
- Indoor Signal: means mobile network coverage with signal strength of -80dBm or better, at which users should have the ability to receive signal and make calls inside a premises.
- Locality (or location): means any populated location in the official list of place names published by the Central Department of Statistics and Information (CDS). Localities can refer to a District or Mohafadat capital city, any other listed city or town, markaz (center), village or hejira.
- Low Signal: means mobile network coverage with signal strength of less than – 90 dBm where users may have the ability to receive signal and make calls outside the premises.
- Mandatory Service Location: means a specified location in a commercially unprofitable underserved zone that has been designated by the USF to be eligible to receive USF services and USF subsidies.
- Mandatory USF Services: means the designated Internet Services and Voice Services that are required to be provided in the Mandatory Service Locations by a designated USF Service Provider, pursuant to a USF Agreement.
- Operating Plan: means a document approved by the USF Executive Committee that directs the operations of the USF in implementing specific USF Programs and Projects.
- Outdoor Signal: means mobile network coverage with signal strength of -90dBm or better, at which users should have the ability to receive signal and make calls outside the premises.
- Pre-Existing License Locations: means geographic areas or locations in which service is provided or is required to be provided pursuant to either (i) a roll-out obligation included as a

license condition for one or more service provider(s), or (ii) a designation of one or more service provider(s) by the Commission as a "US provider" under the Bylaw.

- Served zones: means geographic areas where service meeting the required standard for UA or US is currently available. For areas where mobile network coverage only exists, the acceptable voice service shall be defined as having indoor signal level.
- UA to Internet Service (UA to Internet): means public access to broadband internet service available in the corresponding Mandatory Service Locations. Internet service in this instance means access to websites, electronic mail, and other Internet functions provided at or above a minimum bandwidth rate of 512 Kbps or such higher bandwidth rate designated by the USF, always on, and at a designated level of quality and reliability.
- UA to Voice Service: means access to fixed or mobile voice telephone service with home zone feature available in the corresponding Mandatory Service Locations. Voice telephone service in this instance means either mobile network outdoor signal or publicly available fixed or mobile facilities providing a population with the ability to place and receive voice telephone calls at a designated level of quality and reliability
- Universal Access (UA): means the provision of public access to Voice and/or broadband internet service, of acceptable and useable quality and affordable tariff, on a universal basis, e.g., anywhere, subject to the definition of mandatory service locations, in the Kingdom.
- Universal Service (US): means the provision of the defined minimum level of Voice and/or broadband internet service to every household demanding service, regardless of location, with adequate quality and affordable tariff.
- US to Internet: means the ability for each household/individual to obtain broadband internet services, at or above a minimum bandwidth rate of 512 Kbps and at an affordable tariff , within 5 days of a service request, in the corresponding Mandatory Service Locations. Internet service in this instance means access to Web sites, electronic mail, and other Internet functions provided at a level of quality and reliability designated by the Commission.
- US to Voice: means the ability for each household/individual to obtain voice telephone services, within 5 days of a service request, in the corresponding Mandatory Service Locations. Voice service in this instance means fixed or mobile voice service with home zone feature providing the household/individual the ability to place and receive calls at a level of quality and reliability designated by the Commission.
- USF Fee: means the fee calculated, charged, paid, collected and managed in accordance with the Policy and the Decision.
- USF Programs: means macro-scale USF initiatives aimed at achieving one or more of the objectives of the Policy, typically over the course of several years. USF Programs define specific targets in terms of specific networks and/or services to be implemented in stages based on funding availability, the priority established by the USF for the objectives of the Policy and other criteria as determined by the USF.

- USF Projects: means specific micro-scale implementation activities related to each USF Program. One or more USF Projects may be implemented at the same time under a given USF Program.
- USF Report: means an annual report prepared by the USF Administration and approved by the USF Executive Committee on the activities of the USF.
- USF Service Agreement ("USF Agreement"): means an agreement between the USF and a USF Service Provider for the construction of the UA/US Network and/or provision of the USF Services and payment of the Subsidy to be granted.
- USF Service Provider: means a facility-based service provider with an individual license in the Kingdom providing the USF Services, pursuant to a USF Agreement.
- USF Services: means the Mandatory USF Services provided by a USF Service Provider.

Consultation Questions for Chapter 1

1. Do you believe that the Policy's time-bound targets for achieving specific UA and US are still realistic for implementation? Please explain why. What changes could be made?
2. Please provide your comments on the principles and definitions which are guiding the USF's approach to meeting the Policy objectives.
3. Do you believe that UA and US may be provided by either fixed or mobile services, provided certain specified QoS and tariff parameters are met? Please explain why.
4. Considering that implementation of the USF programs will be piloted in late 2009 and rolled out commencing in 2010, do you believe that the Internet targets mentioned above are practical and achievable?
5. Do you have any additional relevant information or suggestions? If so, these additional inputs would be welcomed.

CHAPTER 2. MARKET ANALYSIS

This chapter provides an overview of data collection and analyses undertaken to assist with preparation for this Strategic Plan. It provides summaries of the following:

- The Kingdom's population distribution
- The current status of the ICT Sector;
- Findings from the Kingdom-wide demand survey undertaken in mid 2008;
- Best international practices with respect to the Policy and USFs.

2.1 THE STUDY METHODOLOGY AND ACTIVITIES

The specific activities undertaken to develop the market analysis are comprised of the following:

1. *Data and statistics collection* – official data from the relevant Government departments were coordinated and collected. These data provide comprehensive national statistics on Population, Demographics, Urbanization, Social Class & Economics (income). These data are organized by District, Mohafadat, Markaz and Village.
2. *ICT Service Coverage Analysis* – geographic coverage inventories of local exchanges, wireless base station coverage, backbone, data and Internet Services were collected;
3. *Mapping* – all population and data collected have been related to an ESRI ArcGIS based GIS model in order to pin-point all data spatially. Mobile service coverage in particular was collected in a GIS format and integrated with the GIS model, so the coverage could be estimated as a percentage of geographic area and of population;
4. *ICT Demand Study covering all Administration Districts* – a national demand survey focused on user preferences, affordability and demand for Voice and Internet services;
5. *Economic Modeling and Market Analysis* – a general economic model has been developed to represent the targeting and achievement of UA/US based on current and future service levels and requirements, affordability estimations, cost estimations, service viability estimations, and identification of specific underserved zones that are either commercially viable, or unviable and requiring subsidies;
6. *Summary of methodologies for Data Gathering & Filing* – design of data filing and research practices, for the purpose of enabling the USF to maintain current and accurate data and sound planning functions.

2.1.1 Data and statistics collection

*Official data sou*rces - e.g., CDS - were used as the main source of administrative structure, locality names, populations and social services infrastructure. Other government departments – namely the Ministries of Rural and Municipal Affairs (MOMRA), Health, Interior, Education and Social Affairs -

were also contacted for supplementary data. In addition, all leading telecom operators were contacted with data requests and also interviewed, while relevant ICT sector data contained in the Commission market surveys, annual reports, etc. have also been used.

Table 2-1 summarizes the type of data that have been collected and related to the ESRI ArcGIS model.

Table 2-1: Database statistics categories

Statistic	Admin. District	Mohafadat	Markaz	Village	Comment
Geographical area (Sq. km)	●	●			
Geographical features - hills/mountains, desert	●	●			
Population	●	●	●	●	
Population growth	●				
Income at household level	●				Urban and rural levels
Internet	●	●	●		
Schools & enrolment	●	●	●	●	All official CDS data
Health Centres	●	●	●	●	"
Government offices	●	●	●	●	"
Electricity	●	●	●	●	
Transportation	●	●	●	●	Included in GIS
Telecom service – Fixed voice	●	●	●		
Telecom service – Fixed data	●	●	●		
Telecom service – Mobile	●	●	●	●	Included in GIS

2.1.2 Industry interviews

Interviews and meetings were conducted with a range of the leading industry players, observers and informants in order to ascertain directly the operators' views on the commercial and regulatory environment, and their constraints and opportunities for reaching the country's under-served communities with Voice and Internet services.

Through the written requests and interviews, the following topics were addressed:

- Network statistics (exchanges, direct exchange lines, subscribers);
- Network geographical coverage to mid 2008
- Cost structure, both CAPEX and OPEX,
- Revenues for various services,
- Expectations for financial returns,
- Experience with reach into rural areas/ underserved communities,

- Experience with deployment of public access facilities,
- Network expansion and investment plans,
- Technologies used and future trends/ preferences,
- Marketing and distribution,
- Strategies Tariffs,
- Strategic ideas & suggestions for UA/US, etc.

2.2 POPULATION OVERVIEW

The CDS maintains a list of all localities in the Kingdom, with their respective populations. The current list is based on the last National Census undertaken in 2004, using officially recognized population growth rates for each Administrative District to estimate the 2008 population. Average growth rate is 2.4% per annum. The CDS list contains a total of 15,791 individual localities, categorized by Administrative District, Mohafadat, Markaz and Hejira (sub-centre or village). A high level summary of the CDS list, with populations projected to 2008 is provided in Table 2-2.

Table 2-2 Overall population distribution 2008

Admin. District	Population	Population of District Capital	Number of Mohafadat	Av. Pop'n of Main Mohafadat Cities[1]	Markaz (rural centers)	Average pop'n of Markaz	Number of villages
Al-Riyadh	6,119,511	4,583,764	20	40,660	358	1,290	1,628
Makkah	6,324,419	1,412,165	12	76,826	100	1,928	3,164
Al-Madina	1,689,399	1,027,526	7	42,131	85	1,380	1,107
Al-Qaseem	1,121,443	416,911	11	36,129	141	1,472	391
E. Region	3,665,615	812,840	11	113,170	87	8,202	459
Assir	1,819,925	219,604	12	29,492	74	1,793	3,596
Tabouk	775,513	495,015	6	29,180	61	1,108	312
Hail	572,554	290,289	4	5,899	81	1,395	541
N. Frontier	306,631	156,927	3	47,443	17	2,185	123
Janzan	1,315,997	114,697	14	19,457	31	2,638	1,944
Najran	469,438	276,532	8	13,018	47	718	214
Al-Baha	394,804	89,182	7	16,145	30	675	925
Al-Jouf	399,291	135,587	3	28,895	30	6,742	127
Totals	**24,974,541**	**10,031,039**	**118**	**38,342**	**1,142**	**2,085**	**14,531**

[1] Excludes the major urban centres

Locality size distribution

Table 2-3 provides a summary of the settlement structure of the Kingdom, reflecting only the population size of localities. The table shows that there are only 29 localities with populations above 100,000, while there are 6,310 localities with less than 100 inhabitants. Out of 15,791 localities listed

officially by CDS, 15,544 have less than 5,000 population and are, for the purposes of this plan, classed as rural. Overall, the Kingdom is 81.9% urbanized, and 18.1% of population classed as rural dwellers.

The total number of localities listed by the CDS is 15,791. However, at the current time, only 13,248 are listed with geographic coordinates. The remaining 2,543, for which geographic coordinates are not available together account for around 1% of the Kingdom's population. Virtually all are very small communities, with an average population calculated as 97 in 2004.

Table 2-3: The Kingdom's population distribution 2008

Locality size	<100	101 to 250	251 to 500	501 to 1000	1001 to 2500	2501 to 5000	5001 to 20,000	20,001 to 100,000	>100,000	Totals
No. of localities	6,310	4,464	2,487	1,350	723	210	152	66	29	15,791
Total Population	269,978	710,189	840,101	920,630	1,066,775	719,858	1,352,842	2,646,188	16,447,980	24,974,541
Av. Population	43	159	338	682	1,475	3,428	8,900	40,094	567,172	
% Total Population	1.1%	2.8%	3.4%	3.7%	4.3%	2.9%	5.4%	10.6%	65.9%	100.0%
Rural / urban	4,527,531 (18.1%) Rural						20,447,010 (81.9%) Urban			

2.3 GEOGRAPHIC ANALYSIS OF ICT COVERAGE IN THE KINGDOM

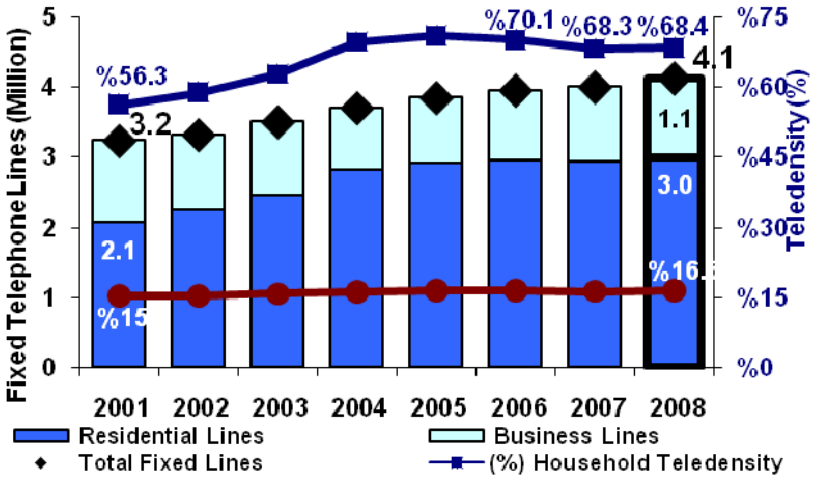
Using the data received from the leading service providers, the USF's objective has been to map network and service coverage on a Kingdom-wide basis and to represent graphically the coverage achieved to date.

2.3.1 Fixed Services

Overall, fixed service subscriptions are growing at around the same pace as the population. However, in reality, the total growth in fixed service is due to an increase in business subscriptions, whereas the residential fixed telephone service currently has had a slightly declining fixed service penetration over the last 4 years. This today stands at around 68% of households, though it is much lower in rural areas.

Figure 2-1 below shows the evolution of fixed service in the Kingdom from 2001 to 2008. Fixed telephone lines reached 4.12 million at the end of 2008, around 3 million (73%) of which were residential lines. This represents a household teledensity of around 68.4%, or 684 residential phones for every 1,000 households. The population teledensity is around 16.5% or 165 telephones lines for every 1,000 inhabitants.

Figure 2-1: Evolution of Fixed Services, 2001-2008



Source: Commission end 2008 Data

2.3.2 Mobile Services

The ESRI ArcView based GIS model was used to calculate the population and geographical area covered, and not covered, by GSM mobile wireless signal.

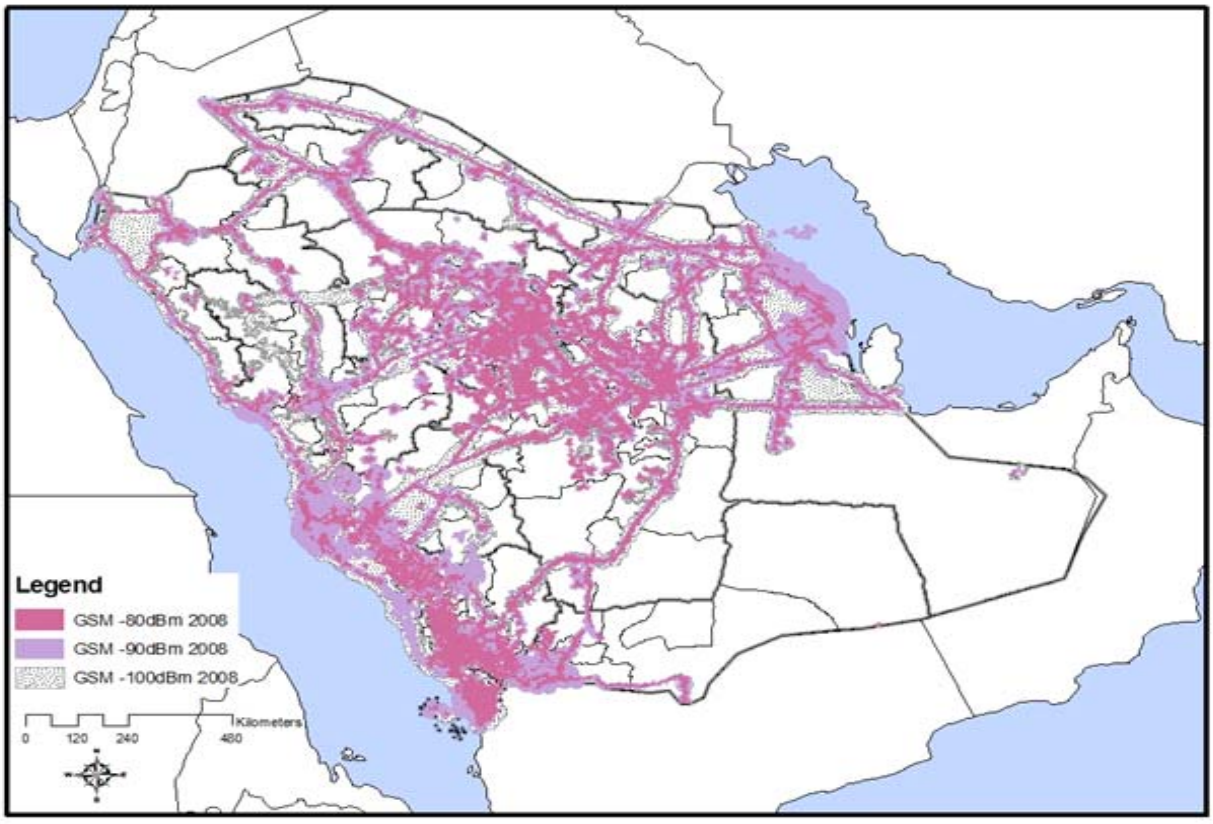
To estimate service coverage, network coverage maps were overlaid with a detailed map of the Kingdom, with accurate Administrative District and Mohafadat boundaries and geographical coordinates (latitude and longitude) for the 13,248 localities for which coordinates are known. These together accounts for over 98.9% of the population[2].

Three levels of documented mobile coverage have been used to analyse the coverage of the licensed operators. The three levels for which GIS based contours have been classified as Low Signal, Outdoor Signal, and Indoor Signal.

Figure 2-2 below provides a comprehensive coverage view of the three cases listed above together.

[2] Based on the 2004 Census of the Kingdom

Figure 2-2: Three 2008 mobile coverage scenarios



Using the ArcView GIS, the total coverage and total number of localities without mobile signal in 2008 for the three coverage scenarios map cases was estimated as shown in Table 2-4.

Table 2-4: Summary of mobile service coverage at various signal strengths, 2008

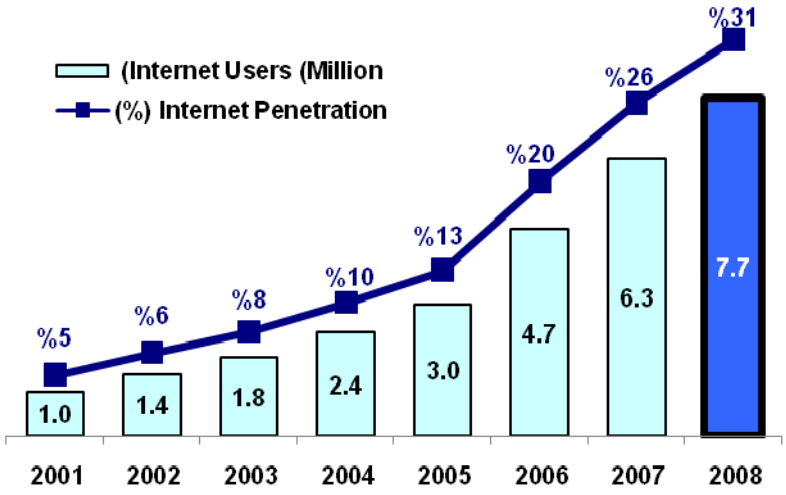
Scenario	Geog area covered	Total minimum estimated population covered	Population uncovered in localities with known cords	Est. Population uncovered in localities with unknown cords	Total estimate of unserved localities	Unserved localities with known cords	Estimated unserved localities with unknown cords
Low signal strength - 100dBm	39.5%	99.1%	0.9%	0.5%	2,201	1,058	1,143
Outdoor signal > -90dBm	31.4%	97.3%	1.7%	0.6%	3,305	1,890	1,415
Indoor medium signal > -80dBm	16.3%	93.2%	6.0%	0.8%	5,867	3,849	2,018

2.3.3 Internet Services

The total number of Internet users at the end of 2008 (i.e., those who use and access Internet service by all means including home subscription, office, school or public cybercafé) is estimated by the Commission at 7.7 million, as shown in Figure 2-3, or 31% of the total Kingdom's population. Annual growth (CAGR) over the last 4 years has been around 34%.

Internet *subscriber* penetration was estimated at 1.8 million (7% of population) in 2007 and is estimated at around 2.2 million at end 2008. It can be assumed that approximately two-thirds are residential subscriptions, which translated to approximately 30% of total households in 2007, growing to more than 36% at end 2008.

Figure 2-3: Internet user market to 2008



In 2007, The Kingdom ranked 78th in the world in terms of Internet users and 7th amongst Middle East and Gulf Cooperation Council (GCC) countries, with a similar ranking in terms of Internet subscriptions. However, while lagging in its Internet market, the Kingdom had ranked top in computer penetration in 2005[3]. This indicated the potential for rapid Internet growth. The last few years' growth can thus be attributed to a take-up of potential, fuelled by factors such as increased public awareness; growth in availability of broadband services; decreasing cost and further acceleration of personal computers as well as Internet access; and enhanced usefulness of the Internet brought about through increased availability of local content, of Arabic language sites, and of e-services such as online banking, e-commerce and e-government applications.

2.3.4 Broadband Services

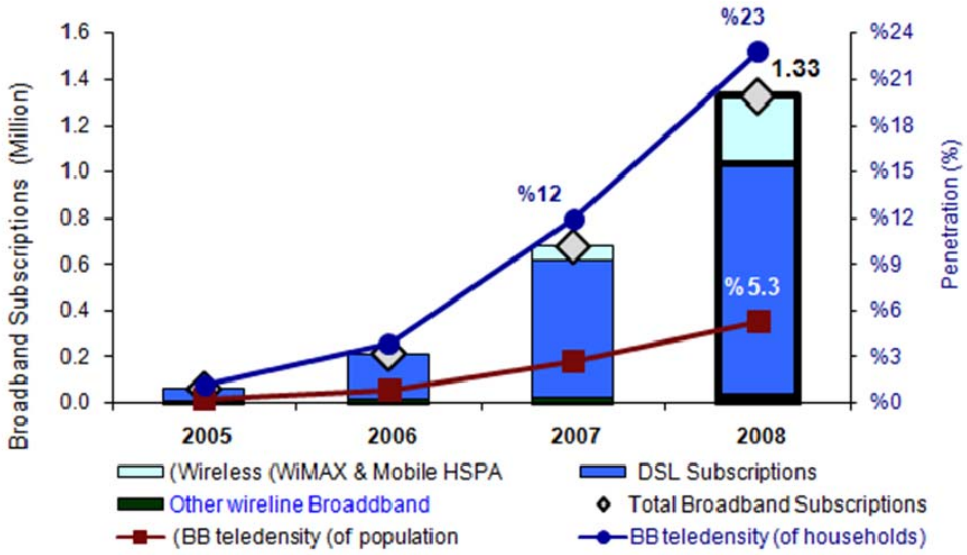
Always on access is now considered essential for information society purposes. Minimum acceptable speeds have risen over the last few years to the point where the International Telecommunication Union (ITU) definition of broadband used in the World Telecommunication Development Report 2007,

[3] Latest available ITU data

is "A sufficient bandwidth to permit combined provision of voice, data and video. Speed should be greater than 256 Kbps, as the sum of capacity in both directions". In addition, (OECD) now targets higher access speeds, e.g., 768 Kbps, 2Mbps.

The Kingdom's broadband access and penetration (i.e., by DSL wire line, or via broadband wireless) was below half of the total access in the Kingdom in 2007, but exceeded 50% by a considerable margin, at approximately 1.33 million, by the end of 2008 and has reach 23% of households. The recent growth of the broadband market is shown in Figure 2.4. The Compound Annual Growth Rate (CAGR) of 175% since 2005 represents a 20-fold increase and doubling over the past one year.

Figure 2-4: Broadband market evolution, 2005-2008



Source: Commission end 2008 Data

Despite the high growth rates however, there will still be room (and necessity) for additional growth in broadband services, especially in small population centres and most rural localities. ADSL services are now provided in all major cities and mohafadat towns. The USF database indicates that ADSL is currently offered in a total of 293 localities, which therefore extends beyond the 118 main mohafadat cities. An additional 324 additional localities are planned for coverage within 1-2 years, however that will still amount to only 40% of Markazes in the country with ADSL.
A full 22.8% of broadband subscribers are now connected by wireless - WiMAX Fixed Wireless Access (FWA) or 3G/3.5G mobile. Also, with the opening of the fixed telecommunications market to competition, the broadband market is expected to continue to grow at a fast pace, as the new service providers roll out their broadband networks and competition picks up to meet the growing demand.

To provide a speed of 256 Kbps or higher on a commercial basis using the mobile networks, will be restricted to customers and institutions located within a short range (e.g., typically less than 5km radius) of the mobile tower. In the rural areas, while most or all base stations are equipped for EDGE

based service, this will be constrained to very limited user capacity unless additional investment is made to enhance base station traffic capacity and backbone transmission bandwidth. This technology is not generally considered to be capable of meeting the USF's UA/US to Internet service targets. At least 3G/3.5G or WiMAX would be required for wireless to meet UA/US requirements. However, in general it must be assumed that the conversion of a 2G mobile network to broadband 3G/3.5G operation requires much more than just the addition of 3G/3.5G transmitters to existing towers sites, if full population coverage is to be achieved. This has been demonstrated by several studies and consultations which have been reviewed.

A summary of all 15,791 localities in the Kingdom, showing populations, geographic coordinates existing voice and broadband internet services, and summary totals, is attached as Annex A.

2.3.5 Existing Licenses Conditions

To determine the reasonable expectations for mobile and fixed services and for required investment in UA/US provision, the existing license conditions, which define operator obligations, were considered.

Mobile License Conditions

The signal indications, which operators are obligated to implement, are as follows:

- A minimum of -80dBm coverage in urban areas and towns with a population of greater than 5,000 inhabitants;
- Following the fifth anniversary of commercial launch a minimum of -70dBm Indoor coverage in urban areas and towns with a population of greater than 5,000 inhabitants;
- A minimum of -84dBm in-car coverage along major highways; and
- A minimum of -90dBm Outdoor coverage in other areas.

As discussed in Section 2.3.2, over 94% of the Kingdom's total population has to date been covered to the level of -80dBm, including 71% of the localities with population below 5,000.

Fixed License Conditions

The Facilities Based Service Provider (FBSP) had the following Minimum Rollout Obligation (MRO):

i. provide Coverage of the population in each of the Provinces within seven (7) years of Effective Date of the License, based on the following schedule:
    a. 3 Years from the Effective Date - MRO in 3 Provinces
    b. 5 Years from the Effective Date - MRO in 7 Provinces
    c. 7 Years from the Effective Date - MRO in 13 Provinces

    The Coverage can be provided using wireline and/or wireless access networks based on the following formula:

C% = X% + Y% where

C% = 15%

X% = % population Coverage using wireline access network, and

Y% = % population Coverage using wireless access network

Wireline access network shall include inter alia, fiber and Hybrid Fiber- Coaxial cable.

ii. Network Rollout Obligations shall not be met by serving Subscribers through local loop unbundling or carrier selection.

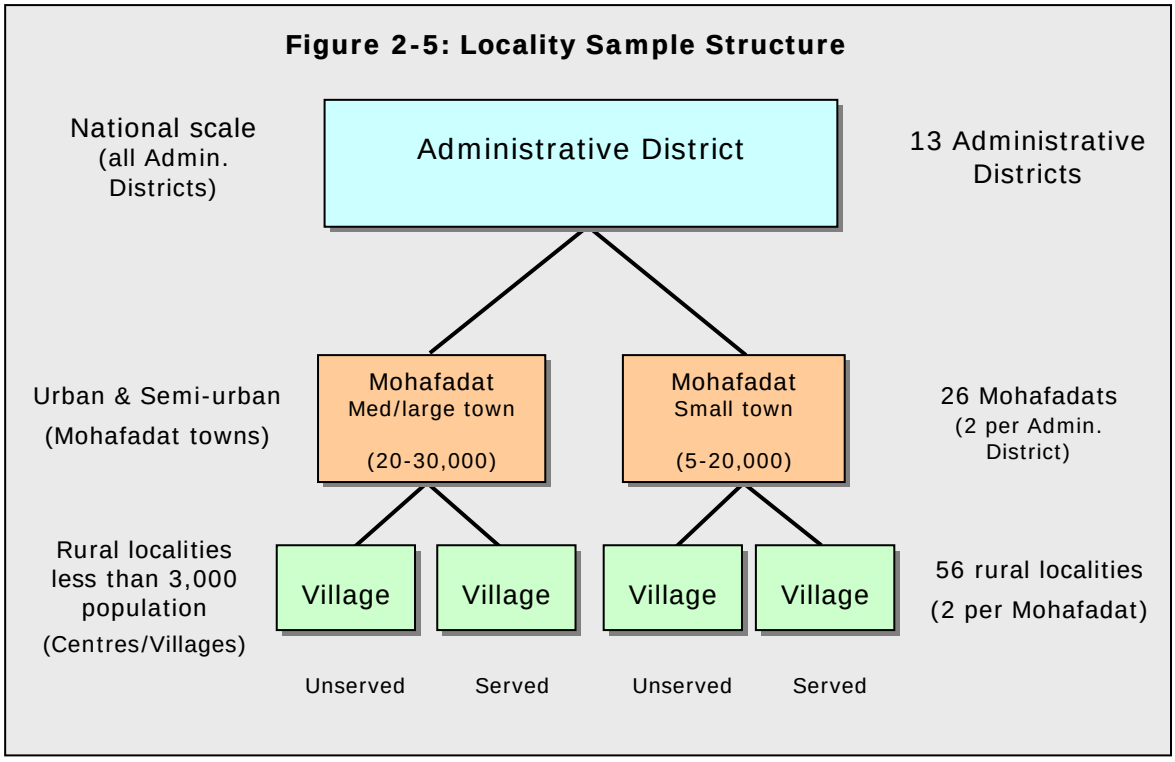
2.4 THE ICT DEMAND SURVEY

A Demand Survey was undertaken to provide an understanding of local requirements for public and private ICT services, user preferences and affordability (willingness to pay) for service. The final output has been used to help with development of the USF strategy for both voice and the Internet services, and also to estimate revenue potential and the size of subsidies required for service provision.

2.4.1 Size and Scope of the Survey

The survey was national in scope, covering all 13 administrative districts, urban and rural towns, and served and unserved villages. 69% of the interviews were undertaken with householders and 31% with small business entities. The sample structure of the survey is indicated in Figure 2-5.

Figure 2-5: Locality Sample Structure



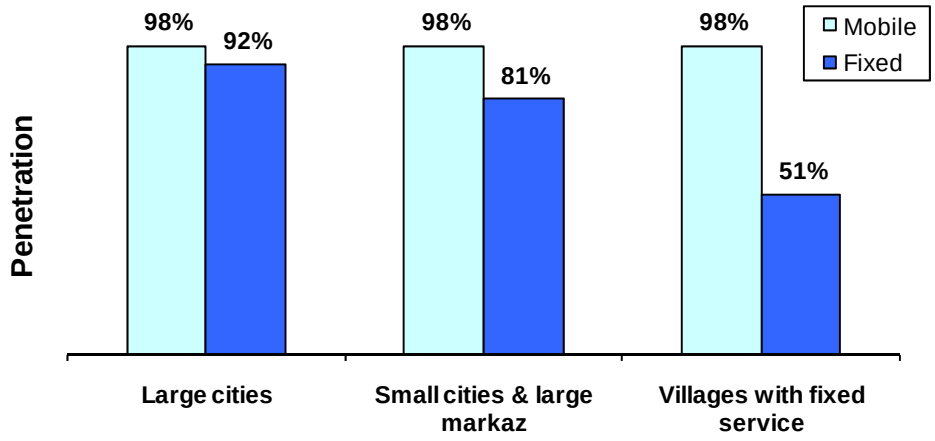
2.4.2 Demand Survey Results

The household incomes in rural villages that are still without ICT services were approximately 20% below the District averages. And the demand for services was found to be high for both voice and Internet services - in localities currently without services as well as those already covered by the major operators.

2.4.2.1 Household Voice Penetration

The study results on current Kingdom-wide penetration of fixed and mobile service, in urban and rural areas, are shown in Figure 2-6.

Figure 2-6: Household Voice Penetration



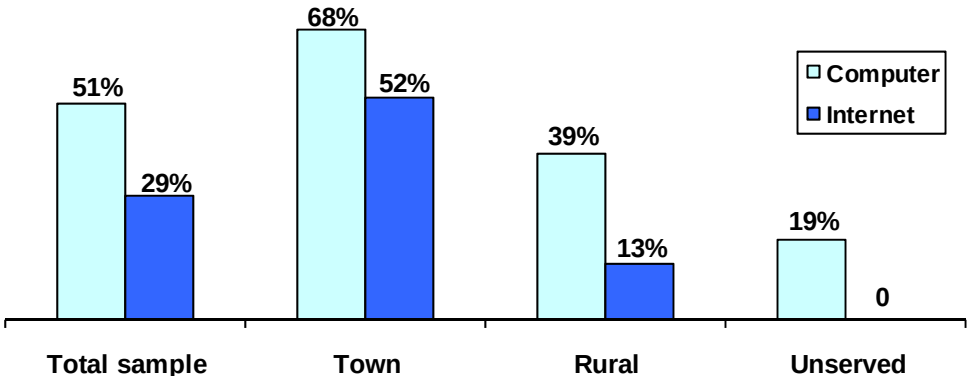
It is important to note that while all respondents demand mobile service and use it more intensely than fixed service, they also retain an interest in fixed service largely because they perceive this as providing access to the Internet.

Furthermore, there is very low demand or expectation for UA (public payphone) service wherever and whenever private service is available, irrespective of locality or population.

2.4.2.2 Computer and Internet Household Penetration

The study results for current Kingdom-wide penetration based on the study sample are shown in Fig. 2-7.

Figure 2-7: Computer & Internet Household Penetration



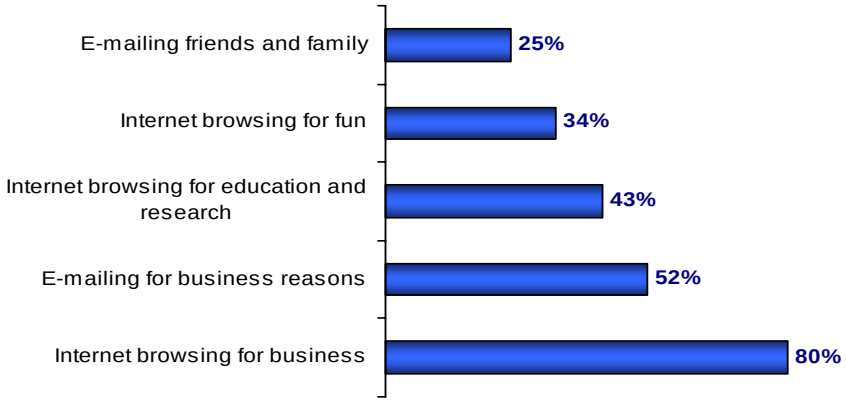
2.4.2.3 Business Internet activities

The demand for Internet by small businesses was strong amongst rural respondents, as indicated by the usage interests of respondents in Figure 2-8.

Other pertinent results related to rural Internet include the following:

- Over 50% of all town based businesses have computers and either use broadband Internet or would demand it if available. This will steadily rise to 75% in the near term.
- 25% of all village based businesses either have computers and are interested in having Internet service, or will be acquiring computers and also wish to have Internet service in the short term. Their interest in using the Internet for business purposes is high.

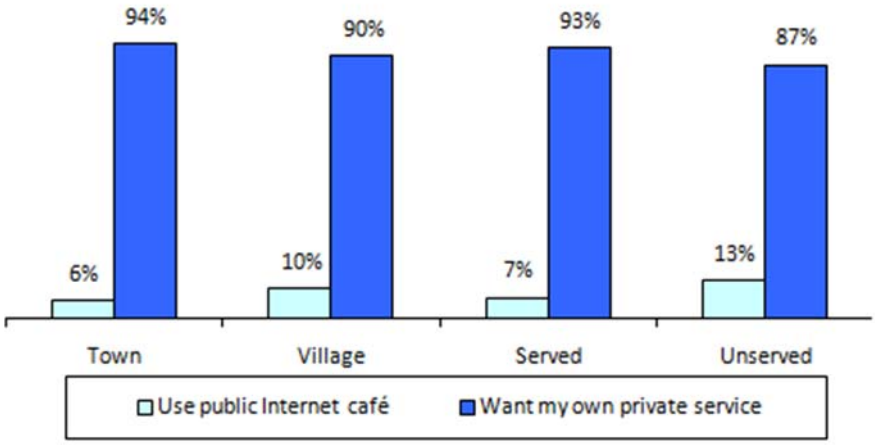
Figure 2-8: Internet activities demanded by village businesses



2.4.3 The need and use for public access to the Internet

The demand for Internet service is high and the vast majority of users – home and business - will be interested in, and willing to pay for, their own private Internet access, as indicated in Figure 2-9.

Figure 2-9: Demand for Public access to the Internet



As with individual household users, only a minority (6 - 8%) of small business owners would use a public cybercafé. This is because the cost of private service is not an issue with most residents or businesses, based on known market prices and willingness to pay. For most users (both business and residential) the cybercafé would be temporary, or possibly as an alternative choice for Internet applications outside the home, since most people will have their own computer and Internet access when private service becomes available.

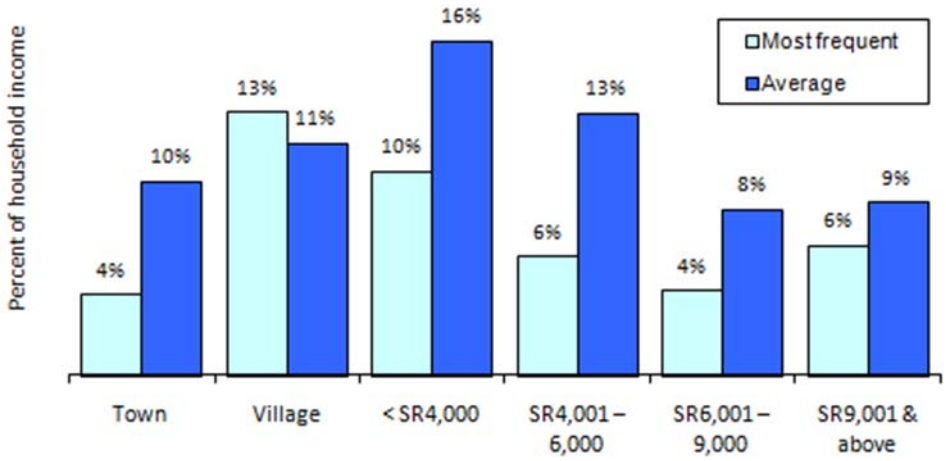
This has implications for UA/US, indicating a higher demand for US as soon as possible in virtually all localities, whether urban or rural.

2.4.4 Expenditure and Affordability

The expenditures people make on telecom and Internet services is surprisingly high and does not vary by very much between town and village, or across income bands. The highlights of the survey findings are summarized in Figure 2-10:

- Between SR 300 and 1,000 is typically spent by households on mobile phone services.
- Households normally have between 2 and 4 mobile SIM cards.
- Between 4% and 12% of household income (average 10%) is spent on mobile service. The graph shows that villagers spend a higher percentage of income on telephone service than urban dwellers, and that low income people generally spend a high percentage.

Figure 2-10: Monthly Expenditure on Mobile



Saudi families with fixed line service also spend an additional 3% of monthly income on fixed service and those with Internet service spend 2-3%.

2.5 USF BENCHMARKING STUDY

Allied with the Strategic Plan preparation, a USF validation study was undertaken to review various aspects of the Fund's administration and strategy in the light of international practices, and to consider possible improvements to the Kingdom's USF.

The study looked into eleven countries' USFs – all having a track record in USF operations - and included primary and secondary research. Each country's relevant documentation was assessed, including laws, procedures, decisions, determinations, policies, decrees, guidelines, and publications. The main scope of the study was to study and benchmark the following:

- USF Design.
- USF Funding.
- USF Operations.
- USF Mechanics and Structure.

Table 2-5 provides an overview of the country USFs studied, the type of funding program each represents, the overall cost and USF levy employed, and the type of service providers contributing to the fund. The Kingdom's USF design was found to be broadly in line with best practices internationlly.

Table 2.5: USF Countries and Type of USF Design				
Country	**Year USF Started**	**Type of Funding Program**	**% collected from operator revenues**	**Type of Provider Contributing to USF**
Australia	1997	Competitive; Assignment & compensation	1 (variable)	All telecom operators
Canada	2001	Assignment & compensation	1	All telecom operators
Chile	1994	Competitive	1.5	Government funded
India	2002	Competitive	1	All telecom operators except pure value added service providers
Malaysia	2002	Competitive; Assignment & compensation	0	All telecom operators
Morocco	2005	Competitive; Assignment & compensation	5	All telecom operators
New Zealand	2008	Competitive; Assignment & compensation	1	Government funded
Nigeria	2007	Competitive	2	All telecom operators
Pakistan	2007	Competitive	6	All telecom operators
Peru	1993	Competitive	1	All telecom operators
Uganda	2003	Competitive	1	All telecom operators

Table 2-6 summarizes the services targeted by each country and indicates that the Kingdom's USF program is both representative of international cases and comprehensive in its scope of targets.

Table 2-6: USFs of 11 countries and their targeted service operations					
Country	**Telephony**	**Mobile Allowed**	**Internet**	**Broadband (minimum download speed)**	**Tele-centre**
Australia	✓		✓	✓ (512k)	
Canada	✓				
Chile	✓	✓			✓
India	✓	✓	✓	✓ (256k)	✓
Malaysia	✓	✓	✓	✓ (256k)	✓
Morocco	✓	✓	✓	✓ (128k)	✓
New Zealand (BIF)		✓		✓ (1000k)	
Nigeria	✓	✓	✓	✓ (512k)	✓
Pakistan	✓	✓	✓	✓ (128k)	✓
Peru	✓	✓	✓		✓
Uganda	✓	✓	✓		✓

In summary, the benchmarking study validated most aspects of the Kingdom's USF as designed and was used to fine tune some aspects of the planned administrative organization, operating rules and the program design options represented in this Strategic Plan.

Consultation Questions for Chapter 2

1. Do you have any comments regarding the fixed and mobile service coverage described in this chapter?
2. Please review and update Annex A by the later data available.
3. Do you agree with the GIS based methodology used (section 2.3.2) for determining the total minimum estimated population covered by mobile voice services? If not, how would you improve upon this method?
4. Do you agree that wireless services such as WiMAX/FWA and 3/3.5G will be able – from a technical viewpoint – to deliver a service that meets the requirements of the USF for coverage and download speed within the geographical limits described? If not, please explain why.
5. Do you have any comment on the demand study results and related trends noted in this chapter, in particular specific to the implications with respect to the demand and requirement for UA and US? Please offer insights on specific results if you have them.
6. Do you have any comments regarding the USF benchmarking study that was undertaken? If so, these additional comments would be welcomed.
7. Do you have any additional relevant information or suggestions? If so, these additional inputs would be welcomed.

CHAPTER 3. PROPOSED USF STRATEGY

Based on the foregoing market analysis, this Plan sets out the strategic directions for extending service to the population centres / localities that remain without voice and internet services at all, or without an acceptable quality of voice and Internet services. This Chapter is presenting the proposed strategy for achieving the approved Policy.

3.1 USF VOICE STRATEGY

Based on the analysis of fixed and mobile service coverage, the remaining service gaps, the results of the demand survey, and the QoS standards to be expected, the following is the recommended overall strategy:

- UA and US shall be provided to all localities designated by the USF as a mandatory service location, which are not served to date and therefore eligible for subsidy.
- Pre-Existing License Locations and any locality that is already covered by indoor signal strength are excluded from the mandatory service locations and therefore not to be included in any USF program.
- UA and US to voice shall be provided in terms of fixed service or mobile service with a home zone feature.
- When providing US to voice by mobile service, the acceptable service shall be defined as having indoor signal level.
- UA to voice is considered achieved if outdoor signal is available. Otherwise, it shall be provided by public access telephone, telecenter, or any appropriate methods approved by the USF which provides reliable access to the network and meets a specified QoS standard.
- USF Service Providers are obligated to meet all approved regulations issued by the Commission.

In view of this strategy, three options for UA and US to voice to be financed by the USF are under consideration. Since the existing mobile service licenses require operators to provide indoor coverage to all localities above 5,000 populations (see Section 2.3.5.1), localities in this category shall not be included in any of the options. The UA/US options under consideration are thus defined as follows:

Option 1:

- Mandatory Service Locations for US to voice shall include all localities with population between 500 and 5,000 which are not already covered with fixed voice service or mobile indoor signal strength.

- Mandatory Service Locations for UA to voice shall include all localities with population below 500 which remain uncovered by fixed voice service or mobile outdoor signal strength.

Option 2:

- Mandatory Service Locations for US to voice shall include all localities with population between 250 and 5,000 which are not already covered with fixed voice service or mobile indoor signal strength.
- Mandatory Service Locations for UA to voice shall include all localities with a population below 250 which remain uncovered by fixed voice service or mobile outdoor signal strength.

Option 3:

- Mandatory Service Locations for US to voice shall include all localities with a population below 5,000, which are not already covered with fixed voice service or mobile indoor signal strength. There would be some minimal exceptions in the case of remote localities with very small population, which would be guaranteed UA service.

3.2 USF INTERNET STRATEGY

Based on the analysis of fixed and mobile service coverage, and the remaining service gaps, and the result of the ICT demand survey, the following is the recommended overall strategy for Internet services:

- UA and US to internet shall be provided to all localities designated by USF as mandatory service location.
- UA and US to internet shall be provided in terms of fixed or mobile services.
- UA to internet shall be provided with a telecenter or any appropriate facility approved by the USF which provides reliable access to the network and meets an acceptable QoS.
- Pre-Existing License Locations shall be excluded from USF scope.
- USF Service Providers are obligated to meet all approved regulations issued by the Commission.

Two options for USF support of UA and US to internet are under consideration. These are defined as follows:

Option 1:

- Mandatory Service Locations for US to Internet shall include all localities with a population of 500 or more, with the following speeds:
- 512 Kbps shall be available in all localities with a population between 500 and 5,000.

- 2 Mbps shall also be available to all localities with a population above 5,000 and to all Markazes.
- Mandatory Service Locations for UA to Internet shall include all localities with a population less than 500, which are not already covered by US service, with a minimum speed of 512 Kbps.

Option 2:

- Mandatory Service Locations for US to Internet shall include all localities with a population of 250 or more, with the following speeds:
- 512 Kbps shall be available in all localities with a population between 250 and 5,000.
- 2 Mbps shall also be available to all localities with a population above 5,000 and to all Markazes.
- Mandatory Service Locations for UA to Internet shall include all localities with a population less than 250, which are not already covered by US service, with a minimum speed of 512 Kbps.

Consultation Questions for Chapter 3

1. Do you believe that the Options proposed for Voice service offer realistic alternatives for the USF strategy in the total 5 year Policy time frame? If not, please provide reasons.
2. Which Option for voice service do you favor? Please provide reasons.
3. In the event the USF decides on Option 3 for voice service do you think that all of the most remote, very small population localities can and should nevertheless be provided with US and funded by the USF irrespective of cost? If not, what population do you consider to be a practical cut-off for US?
4. Do you believe that the Options proposed for Internet service offer realistic alternatives for the USF target strategy in the 7 year Policy time frame? If not, please provide reasons.
5. Do the localities, listed as served with DSL in Annex A, offer minimum bandwidths to the level specified in this Strategic Plan? Please provide specific details.
6. Which Option for Internet service do you favor? Please provide reasons.
7. Under the Internet service options, the USF has targeted all markazes for the highest grade of service, on account of their administrative importance, regardless of their population. However it should be noted that approximately 248 of the targeted markazes have populations below 250; and 137 of these are even below 100. Do you believe these should be targeted for US to Internet, or should they *not* be targeted, if there are localities in the same area which meet the US population criterion? Please provide reasons or suggestions.
8. Do you have any additional relevant information or suggestions? If so, these additional inputs would be welcomed.

CHAPTER 4. USF SERVICES GAP ANALYSIS

This chapter describes the results of applying the proposed strategies as specified in chapter 3 on the localities that currently do not have USF services (voice or internet).

The main purpose of this exercise is to classify the three geographical areas (Served Zones, Commercially Profitable Underserved Zones, and Commercially Unprofitable Underserved Zones), in order to develop the USF programs that are required to fulfill the Policy.

4.1 VOICE GAP ANALYSIS

This section describes the voice gap analysis approach and identifies the population and localities that do not have voice service.

4.1.1 Voice Service Zones

As stated in chapter 2, the estimated population reached by mobile signal in mid 2008 ranges from 95.2% with indoor signal to 97.7% with outdoor signal. Table 4-1 summarises the coverage statistics summarized for both 2008, and projected for 2009.

Table 4-1: Summary of Mobile voice Coverage

Factor	2008 (indoor signal)	2008 (outdoor signal)	2008 > -100dBm (unacceptable signal)	2009 > -100dBm (unacceptable signal)
Geographical coverage (Signal reach and percentage of Kingdom's total area)	16.3%	31.4%	39.5%	42.7%
Population coverage considering only the 13,246 localities for which geographical coordinates are known	96.0%	97.7%	99.1%	99.4%
Estimated population coverage including a proportion of the localities for which geographical coordinates are not yet known	95.2%	97.2%	98.6%	99.0%
Considering only the localities with known coordinates: No. of Mohafadats (out of 118) projected to have 100% population coverage	6	30	n/a	56
No. of Mohafadats with less than 100% population coverage, and therefore candidates for USF support	112	88	n/a	62
Including also an estimate of localities without coordinates: No. of Mohafadats (out of 118) projected to have 100% population coverage	4	12	n/a	21
No. of Mohafadats with less than 100% population coverage and therefore candidates for USF support	114	106	n/a	97

The following Table 4-2 provides a District by District summary of columns 1 and 2 of the above table. It provides a summary of Mohafadats that still have localities below 5,000.

Table 4-2: Summary of Mohafadats and localities that do not have voice service

Admin. District	No. of Mohafadats with less than 100% population coverage, and therefore candidates for USF support	Total localities that do have outdoor signal or low signal or not covered
Al-Baha	7	187
Al-Jouf	3	26
Al-Madinah	7	595
Assir	12	657
Eastern Reg.	10	60
Hael	4	180
Jazan	13	266
Makkah	12	1272
Najran	8	75
N. Frontier	3	24
Qassim	9	88
Riyadh	20	299
Tabouk	6	110
Totals	**114**	**3,839**

4.1.2 Voice Service Targets

This section describes the results of applying the proposed strategies in chapter 3 and on all localities below 5,000 population identified in annex A, which do not have voice service to the UA and US levels. Option 1, 2, and 3 described in section 3.3.1, lead to the following alternative targets:

Table 4-3: Voice Target Options, 2008 statistics – Localities with known coordinates

Option	US	UA	US Mandatory Localities	UA Localities	Total localities	US Population %	UA Population %	Total UA / US Population %
Option 1	500 < 5,000	<500	457	1,403	1,860	1.97%	0.79%	2.76%
Option 2	250 < 5,000	<250	1,083	1,167	2,250	2.83%	0.46%	3.29%
Option 3	< 5000	N/A	3,839	-	3,839	4.0%	-	4.0%

In addition, as noted previously there are 2,543 localities with unknown coordinates, with a population representing approximately 1% of the Kingdom. The distribution of served and unserved amongst

these is currently unknown and the situation for these communities will only become evident at the time of geographic survey during the USF bidding process.

4.2 INTERNET GAP ANALYSIS

This section describes the internet gap analysis approach and identifies the population and localities that do not have internet service.

4.2.1 Internet Service Zones

As stated in chapter 2, the internet penetration is still very low in the Kingdom. However, achieving comprehensive coverage into the areas that currently do not have internet service is considered a challenge. As a result of the analysis, Table (4-4) summarizes those localities and their population:

Table 4-4: Internet Targets, based on 2008 figures, localities with known coordinates

Locality Populations	Number of localities that do not have Internet Service	Population %
> 5,000	105	4.2%
5,000 and below	12,856	16.3%
Total	12,961	20.5%

In addition, Table (4-5) provides the details of the internet service zones on the administrative district level:

Table 4-5: Summary of Mohafadats and localities that do not have Internet service

Admin. District	No. of Mohafadats with less than 100% population coverage, and therefore candidates for USF support	Total localities without Internet Services[4]
Al-Baha	7	895
Al-Jouf	3	96
Al-Madinah	7	859
Assir	12	3,341
Eastern Reg.	11	262
Hael	4	470
Jazan	14	1,968
Makkah	12	2,706
Najran	8	221
N. Frontier	3	40
Qassim	11	467
Riyadh	20	1,440
Tabouk	6	196
Totals	118	**12,961**

[4] Includes localities without geographical coordinates

4.2.2 Internet Service Targets

This section describes the results of applying the proposed strategies in chapter 3 on all localities identified in Annex A, which do not have DSL based internet service.

Option 1 and 2, described in section 3.4, lead to the following alternative targets:

Table 4-6: Internet Targets, based on 2008 figures, localities with known coordinates

Option	Locality Populations	Service type	Number of Localities requiring 2Mbps	Number of Localities requiring 512Kbps	Population %
Option 1	All localities > 5,000	US	105		4.2%
	Markazes 500 < 5,000	US	483		2.8%
	Others 500 < 5,000	US	N/A	1,541	6.7%
	Markazes < 500	US	445		0.4%
	Others < 500	UA	-	10,387	6.4%
Option 2	All localities > 5,000	US	105		4.2%
	Markazes 250 < 5,000	US	680		3.1%
	Others 250 < 5,000	US	-	3,645	9.6%
	Markazes < 250	US	248		0.1%
	Others < 250	UA	-	8,283	3.5%

In addition, there are 2,543 localities with unknown coordinates, with a population representing approximately 1% of the Kingdom. The size distribution of served and unserved is currently unknown and the situation for these communities will only become evident at the time of geographic survey during the USF bidding process.

Consultation Questions for Chapter 4

1. Do you believe that, given the USF strategy described in Chapter 3, the number of localities to be targeted by the various Options has been correctly estimated? If not, provide explanation.
2. The USF's analysis indicates that 105 localities with population greater 5,000 (out of a total of 247 in the Kingdom) still do not have high speed Internet service. Do you believe that the USF should target these for subsidy competition, or that they are commercially viable (or will be viable over the next 1-2 years) without subsidy? Provide reasons and market / financial rationale.
3. On surveying the results of this analysis, do you believe that the USF's strategic options under considerations represent a realistic approach to the achievement of UA/US over the respective Policy time frames? Provide reasons or explanation.
4. Do you have any additional relevant information or suggestions? If so, these additional inputs would be welcomed.

CHAPTER 5. PROGRAM AND PROJECT DEVELOPMENT

This chapter defines the guidelines under which the USF programs are designed as well as the locality selection criteria and costing methodology which allow the implementation of USF programs and projects in a coordinated, effective and efficient manner.

The Main dimensions of the USF's Programs will include the following:

- Program targets - which means the specific and scope of services to be provided under the USF program.
- Geographic and population scope and coverage - which mean defining the specific locations that are eligible to receive USF services and subsidies.
- The duration of each USF Program, in terms of the number of years over which it is intended to achieve its target goals.
- Estimated cost to support each USF program.

5.1 PROGRAM DEVELOPMENT

Based on the proposed strategy described in chapter 3 and the gap analysis described in chapter 4 and in order to meet the Policy vision and objectives for the development of USF Programs, two alternative proposals are considered and defined as follows:

Proposal 1

The UA/US Programs would comprise the following general components:

- Program 1: UA to Voice.
- Program 2: US to Voice.
- Program 3: UA to Internet.
- Program 4: US to Internet.
- Program 5: Special Projects & Promotions.

Proposal 2

The UA/US Programs would comprise the following general components:

- Program 1: UA/US to Voice.
- Program 2: UA/US to Internet.
- Program 3: Special Projects & Promotions.

5.2 PROGRAM DEVELOPMENT FOR PROPOSAL 1

This section provides a description of the specified program in proposal 1 stated above in section 5.1.1. The following proposed programs are excluding the localities with unknown coordinates (2,543 localities) which represent 1% of the Kingdom's population.

5.2.1 Program 1: UA to Voice

This program would focus on providing UA to voice for locations designated by the USF as mandatory service locations according to the proposed strategy stated in section 3.1. This would lead to the following:

Table 5-1: UA to Voice Options for Localities with known coordinates

Option	UA	UA Mandatory Localities	UA Population %	Duration
Option 1	<500	1,403	0.79%	3 years
Option 2	<250	1,167	0.46%	
Option 3	N/A	-	-	

These are the maximum number of localities under this program. The final number will be reduced in order to exclude localities which become covered by the US Program described in Section 5.2.2.

5.2.2 Program 2: US to Voice

This program would focus on providing US to voice for locations designated by the USF as mandatory service locations according to the proposed strategy stated in section 3.1. This would lead to the following:

Table 5-2: US to Voice Options for Localities with known coordinates

Strategy Options	US	US Mandatory Localities	US Population %	Duration
Option 1	500 < 5,000	457	1.97%	5 years
Option 2	250 < 5,000	1,083	2.83%	
Option 3	< 5000	3,839	4.0%	

5.2.3 Programs 3: UA to Internet

This program would focus on providing UA to internet for locations designated by the USF as mandatory service locations according to the proposed strategy stated in section 3.2. This would lead to the following:

Table 5-3: UA to Internet options for localities with known coordinates				
Option	**Locality Populations**	**Number of localities requiring UA to 512Kbps**	**Population %**	**Duration**
Option 1	All localities < 500 excluding markazes	10,387	6.4%	5 Years
Option 2	All localities < 250[19] excluding markazes	8,283	3.5%	

As in the case of UA to voice, these are the maximum number of localities under this program. The final number would be reduced in order to exclude localities which become covered by the US Program described in Section 5.2.4.

5.2.4 Program 4: US to Internet

This program would focus on providing US to internet for locations designated by the USF as mandatory service locations according to the proposed strategy stated in section 3.2. This would lead to the following program options:

Table 5-4: US to Internet options localities with known coordinates					
Option	**Locality Populations**	**Number of Localities requiring 2Mbps**	**Number of Localities requiring 512Kbps**	**Population %**	**Duration**
Option 1	All localities > 5,000	105	-	4.2%	7 Years
	Markazes 500 < 5,000	483	-	2.8%	
	Others 500 < 5,000	-	1,541	6.7%	
	Markazes < 500	445	-	0.4%	
	Totals	1,033	1,541	14.1%	
Option 2	All localities > 5,000	105	-	4.2%	
	Markazes 250 < 5,000	680	-	3.1%	
	Others 250 < 5,000	-	3,645	9.6%	
	Markazes < 250	248	-	0.1%	
	Totals	1,033	3,645	17.0%	

5.2.5 Programs 5: Special Projects & Promotions

This Program will develop a set of activities and targets associated with the general UA/US activities, which are beyond the scope of the main subsidized projects but which may be an integral part of the USF objectives. .
Examples of possible activities are as follows:

- *Special program for Government and institutions:* such as educational, health and other high priority service points.
- *Initiatives and programs for ICT services usage awareness:* including study, analysis and promotion of internet and e-transactions benefits to society, issuing general guidelines, and providing training on the usage of Internet and technology.
- *Customer satisfaction:* The USF shall consider special research and/or the establishment of an administrative mechanism to enable users of USF sponsored services, including public access facilities, to report their comments, complaints or USF service notifications.

5.3 PROGRAM DEVELOPMENT FOR PROPOSAL 2

This section provides a description of the specified program in Proposal 2 stated above in section 5.1.2. The following proposed programs are excluding the localities with unknown coordinates (2,543 localities) which represent 1% of the Kingdom's population.

5.3.1 Program 1– UA/US to Voice

This program would focus on providing both UA and US to voice for locations designated by the USF as mandatory service locations according to the proposed strategy stated in section 3.1, as an integrated and coordinated program. This would lead to the following program options:

Table 5-5: UA/US to Voice Options for Localities with known coordinates

Option	US	UA	US Mandatory Localities	UA Localities	Total localities	US Population %	UA Population %	Total UA / US Population %	Duration
Option 1	500 < 5,000	<500	457	1,403	1,860	1.97%	0.79%	2.76%	5 Years
Option 2	250 < 5,000	<250	1,083	1,167	2,250	2.83%	0.46%	3.29%	
Option 3	< 5000	N/A	3,839	-	3,839	4.0%	-	4.0%	

5.3.2 Program 2 – UA/US to Internet

This program would focus on providing both US and UA to internet for locations designated by the USF as mandatory service locations according to the proposed strategy stated in section 3.2, as an

integrated and coordinated program. Identified localities, population coverage and program duration would be as follows:

Table 5-6: UA/US to Internet options for localities with known coordinates						
Option	**Locality Populations**	**Service type**	**Number of Localities requiring 2Mbps**	**Number of Localities requiring 512Kbps**	**Population %**	**Duration**
Option 1	All localities > 5,000	US	105		4.2%	7 Years
	Markazes 500 < 5,000	US	483		2.8%	
	Others 500 < 5,000	US	N/A	1,541	6.7%	
	Markazes < 500	US	445		0.4%	
	Others < 500	UA	-	10,387	6.4%	
	Totals	UA/US	1,033	11,928	20.5%	
Option 2	Above 5,000	US	105		4.2%	
	Markazes 250 < 5,000	US	680		3.1%	
	Others 250 < 5,000	US	-	3,645	9.6%	
	Markazes below 250	US	248		0.1%	
	Others below 250[19]	UA	-	8,283	3.5%	
	Totals	UA/US	1,033	11,928	20.5%	

5.3.3 Program 3 – Special Projects & Promotions

As described in section 5.2.5

5.4 PROGRAM COST ESTIMATIONS

This section provides an overall estimated Subsidy cost, based on the financial model developed by the USF. The final program cost will be refined and will become more accurate after the pilot projects have taken place.

Table 5-7 summarizes the projected cost for subsidies of the total UA / US to Voice Program.

.Table 5-7: Voice Services Estimated Subsidy			
Program	**Estimated cost of subsidy**		
	Option 1 SR Millions	**Option 2 SR Millions**	**Option 3 SR Millions**
UA/US to Voice	1,750	2,000	2,400

Table 5-8 summarizes the projected cost for subsidies of the Internet Program.

Table 5-8: Internet Services Estimated Subsidy		
Program	**Estimated cost of subsidy**	
	Option 1 SR Millions	**Option 2 SR Millions**
UA/US to Internet	4,100	5,500

5.5 PROJECTS DEVELOPMENT

This section provides general description of the design and Priority Criteria of the projects that will be executed to fulfil the objectives of the Policy.

5.5.1 Project Design

As laid out in Chapter 1, the US/UA programs shall be technologically neutral and shall comprise a series of competitive projects which together offer subsidies for the localities specified in each program described in sections 5.2 and 5.3. However, it is reasonable to assume that underserved localities will be reached largely in clusters, within territorial areas. The most practical smallest area for conceptual design has been to consider the USF targets on a mohafadat by mohafadat basis.

The main options related to competitive bidding projects are therefore whether each Administrative District or even each mohafadat in each District should be bid as a separate entity, allowing operators to select only those areas they are specifically interested in, and to bid accordingly on an individual basis, or whether the bidding strategy should link various areas and Districts together in such a way as to enforce a mixing of near-viable and less attractive areas together. The following related options are as follows:

a) Design projects to allow operators to bid on a mohafadat by mohafadat basis, and to select only the mohafadats they wish to bid for. In this case, less viable (high subsidy) and near viable (low subsidy) mohafadats could be selected individually.

b) Design projects to allow bids for mohafadats individually, but require that bidders must pair each mohafadat with relatively high viability with at least one mohafadat whose performance will be lower viability.

c) Design projects in Administrative District-wide bid lots (i.e., all the USF supported mohafadats in one District must be included in each bid).

d) Collect Administrative District into projects – paired on a geographically contiguous or non-contiguous basis - and bid as considerably larger mandatory bidding lots.

5.5.2 Project Priority Criteria

Based on the option to be selected from Section 5.5.1, it is necessary to define criteria for determining highest priority and the sequencing of the projects. The following are the proposed criteria and most likely priority sequence:

a) Projects focused on US (voice or internet) to have higher priority than other projects, in order to be able to determine full US coverage before remaining UA localities are targeted.

b) Projects for localities with larger population and all (or a high number of) Markazes to have highest priority, in order to achieve population coverage and higher penetration in the early stages of implementation.

c) Projects with localities that require both voice and internet services to have higher priority; and

d) Projects that have the lowest cost per targeted unit of population to have highest priority.

5.5.3 Locality and Mohafadat Priority Criteria

In order to maximize the benefits of implementing the Policy, it is also necessary to determine which geographic locations and target populations should receive priority treatment in the implementation and identification of Projects. This still, of course, has to recognize that projects will focus on areas and not individual localities. Thus individual localities, or even mohafadats, are only components that could make up targeted bidding areas.

In general, the areas and population groups that should receive priority are those that are most at risk of "market failure," i.e., where the market will not readily meet the demand for ICT services. Therefore it is necessary to define the criteria to determine localities that should receive a highest priority in the implementation phases. This would result in a ranking of locations according to greatest need for service or access to the service.

However, it should also be recognized that localities which have the greatest risk of market failure will often be the most remote, smallest and highest cost ones.

In principle, the following criteria have also been under consideration in determining the implementation priorities in the localities.

- The USF should only contribute support in locations where the market is incapable of providing needed services on an economic basis.
- USF projects should emphasize and provide priority to unserved localities with the Public Utility availability of such as Electricity, Water, Health, etc..
- Localities with partial infrastructure shall have high priority over those requiring new infrastructure.
- Provision of access to ICT services and applications for localities with Government departments, schools, and medical centers should be given high priority. .

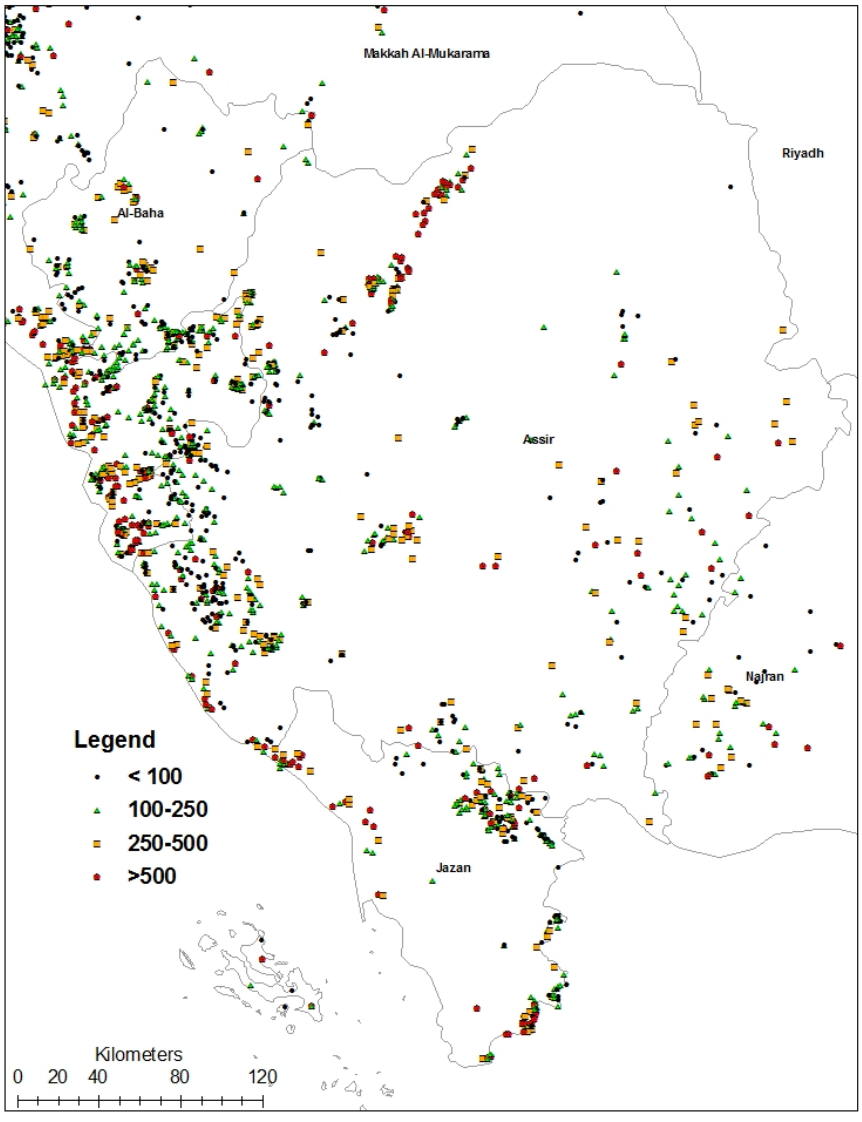
In summary, considering all possible priorities, the USF will develop a set of projects which balance a number of considerations, including practical and manageable project size, in order to develop its final program.

5.5.4 Geographic design considerations

Project design needs to be considered in the light of the USF's detailed GIS based study of the unserved localities. For USF services, it is particularly important to consider that many localities *in various population categories* are clustered closely together. This implies that these should be served in the same project, due to their geographic proximity to one another, and that many small sized localities otherwise fitting into the UA program category could possibly receive US on an accelerated basis. On the other hand, some localities (usually in the smaller population categories) are relatively isolated from one another.

Both of these realities are illustrated for the case of voice service by Figure 5-1, which shows the distribution of unserved localities in the Administrative Districts of Al-Baha, Assir and Jazan.

Figure 5-1: Unserved localities in Asir, Al-Baha and Jazan



5.6 OPERATING PLANS

After the completion and approval of its final Strategic Plan, the USF will establish, on an annual basis, an Operating Plan that sets forth the broad objectives, targets, USF Programs, and USF Projects that the USF will seek to accomplish during each operating year.

The Operating Plans will identify estimated budget resources to support USF Programs and USF Projects, and the intended allocation of these resources among different projects that will be supported during the next funding period.

At the end of each annual cycle, the USF shall review progress toward the targets established in the Strategic Plan, and prepare any necessary adjustments and reconciliation with available resources and anticipated developments in the revised Strategic Plan. This modification will be reflected in the following year's Operating Plan.

Each annual Operating Plan can consist of multiple USF Projects under one or more USF Programs, as well as potentially combined projects falling under multiple Programs.

USF Programs and USF Projects may extend beyond a one-year period in any given Operating Plan, but these must be renewed in each subsequent Operating Plan, taking into account the revised and updated Strategic Plan.

5.7 COSTING METHODOLOGY

In accordance with the Policy, the USF's financial model identifies which areas that still appear to be uncovered are nevertheless likely to be covered commercially, and which will require USF intervention due to non-viability.

The model uses a revenue / cost equation, and for practical reasons the following is assumed:

- USF areas will be released for bidding based on chosen Project Design criteria.
- The principles of least-cost design and risk minimization for low-viability areas are assumed.

It is also assumed that even after an operator receives a subsidy for a USF targeted area, it could still face market competition, which reduces its total revenue. This means the receipt of a USF subsidy is not accompanied by any right of exclusivity.

The viability of each USF area is estimated based on the assumption that, to be viable, revenues must reach a certain rate of return on investment or capital payback target, after all factors are considered, to enable the operator to operate commercially. When revenues fall short of the criterion, the area is judged to be unviable; the financial gap is estimated as the required subsidy. Since the USF's model

assumptions are conservative, each subsidy estimate for a given area is expected by the USF to represent a maximum subsidy required by bidders.

Following initial estimates, to judge each area's viability and subsidy requirements accurately, the USF may use a detailed cash flow including separate CAPEX and OPEX elements to finalise its estimates for each project before the final bidding documents are issued.

The selection of the winning bidder will be based on an evaluation methodology which will be included in the RFP.

Consultation Questions for Chapter 5

1. Which proposal for program organization set out in Section 5.1 (i.e., Proposal 1 or Proposal 2) do you believe to be the better way of organizing USF's Programs, considering the geographical distribution of localities, pattern of demand and other factors? Please provide reasons and/or offer suggestions.
2. Do you concur with the Program Development details for the various UA and US options? If not, please provide your reasons.
3. Which of the four project design bidding options in Section 5.5.1 do you favor? Please provide reasons.
4. Which of the project prioritization factors in Sector 5.5.2 should be the most important for USF to apply for the purpose of project design? Please discuss and provide reasons for your opinion.
5. Do you concur with the proposed cost methodology for the USF's estimation of the financial gap and subsidy calculation? Please discuss whether you believe this provides sufficient guidance to operators wishing to bid for USF subsidies.
6. Do you have any additional relevant information or suggestions? If so, these additional inputs would be welcomed.

CHAPTER 6. EXECUTION METHODOLOGY

This chapter will cover the Competitive Bidding Process and the Project Implementation Management. In addition, this chapter will go over the Regulation, and obligations of the USF Service Providers.

6.1 COMPETITIVE BIDDING PROCESS

USF projects shall be awarded using a competitive bidding process designed and implemented by the USF in accordance with the approved Policy. The following subsections describe in greater detail the competitive bidding processes for awarding the USF Projects.

6.1.1 Eligibility to bid

Only Facility-based service providers with individual licenses in the Kingdom shall be eligible to bid in a competitive bidding process. The USF may stipulate certain additional eligibility requirements in the RFP.

6.1.2 Publicity

The publicity undertaken by the USF for the competitive bidding process for each USF Project shall:

- be sufficient to notify a reasonable pool of potential bidders in advance of the competitive bidding process.
- be conform, at a minimum, with the Public Notice requirements specified in paragraph (6.1.7) of this Chapter.

6.1.3 Criteria for Evaluation

The USF shall develop qualification criteria which bidders must meet or exceed to be eligible for award of a USF Agreement. These will vary depending on the specific nature of the USF Project.

6.1.4 Evaluation, Award and Notification

The USF shall evaluate bids for each USF Project, using the following process, as follows:

- All bids submitted prior to the deadline specified in the RFP shall be reviewed.
- Technical proposals containing all information required by the RFP shall be submitted in one envelope
- Financial proposals containing the bidders' subsidy request shall be contained in a separate envelope.

- Technical proposals shall be opened while the financial proposals still sealed till the technical offer had completed. They shall be reviewed first to ensure compliant with each of the qualification criteria established for the USF Project as set forth in the RFP.
- Those technical proposals that do not meet the qualification criteria or that are otherwise disqualified pursuant to the terms of the RFP shall be disqualified and removed from further consideration in the competitive bidding process. Written notice of same, briefly setting out the grounds for disqualification, shall be sent to the unqualified bidders. Envelopes containing such bidders' financial proposals shall be returned to them unopened.
- Those bidders whose technical proposals meet all qualification criteria, shall be invited to participate in the opening ceremony of the remaining financial proposals and shall be eligible for further consideration in the competitive bidding process as follows:
- Where the competitive bidding process is a minimum subsidy auction, the financial bids of each qualified bidder shall be reviewed and the qualified bidder that has submitted the lowest financial bid shall be awarded the USF Project Agreement, and notice of same shall be sent to the qualified bidders.
- Where the bidder awarded the USF Project Agreement does not execute the USF Project Agreement, comply with any other requirements of the competitive bidding process in the time period specified by the Administration, another qualified bidder shall be awarded the USF Project Agreement, and notice of same shall be sent to the qualified bidders, in accordance with the following:
- Where the competitive bidding process is a minimum subsidy auction, the qualified bidder that has submitted the next lowest financial bid shall be awarded the USF Project Agreement.

6.1.5 Disqualification

In addition to circumstances in which bidders are disqualified for failure to meet the qualification criteria set forth in the RFP, bidders shall be removed from further consideration in a competitive bidding process for any one or more of the following reasons:

- Failure to submit the bid by the prescribed deadline.
- Failure to submit a complete bid in accordance with the RFP.
- Failure to comply with any of the procedures or other requirements established by the RFP.
- Failure to submit the Bid Bond amount specified in the RFP.
- Serious inaccuracy or misrepresentation of any material facts in any part of the bid.
- Any "corrupt practice", meaning the offering, giving, receiving or soliciting of anything of value to influence the action of a public official in relation to the competitive bidding process established by the RFP, the execution of the USF Project Agreement.

- Any “fraudulent practice”, meaning a misrepresentation of facts in order to influence the results of the competitive bidding process established by the RFP, the execution of the USF Project Agreement.
- Any “collusive practice”, meaning a scheme or arrangement between two or more bidders (prior to or after bid submission), designed to establish bid prices at artificial, non-competitive levels and to deprive the USF of the benefits of free and open competition.
- Any “coercive practice”, meaning harming or threatening to harm, directly or indirectly, persons or their property to influence their participation in the competitive bidding process established by the RFP, or to affect the execution of the USF Project Agreement. .

If evidence of any of the reasons for disqualification described above is disclosed after the USF Project Agreement has been awarded, the USF Executive Committee may terminate the USF Project Agreement without compensation.

The USF Executive Committee shall declare a bidder ineligible, either indefinitely or for a stated period of time, to be awarded a USF Project if he at any time determines that the bidder has engaged in corrupt, fraudulent, collusive or coercive practices in applying for, or in executing, a USF Project.

Before taking action against a bidder pursuant to the disqualification provisions in this Chapter, the USF shall send a written notice to the bidder:

- Identifying the circumstances and practices relied on to support such action.
- Inviting the bidder to submit a written response within a period of not more than 10 working days from the receipt of the notice.

The USF Executive Committee shall consider any response of the bidder in making its determination regarding taking action against a bidder pursuant to the disqualification provisions in this Chapter.

6.1.6 Cancelling a Competitive Bidding Process

Where fewer than two bids have been submitted prior to the deadline specified in the RFP for a USF Project, the USF may, subject to its discretion, continue the competitive bidding process after getting the approval from the USF Executive Committee.

Where a competitive bidding process has been so cancelled, the USF shall undertake a review to determine the most likely reasons. Based on the results of this review, the USF may:

- Restart the competitive bidding process in its original form.
- Restart the competitive bidding process following revision of one or more of its terms or conditions, including, but not limited to, the amount of subsidy available.
- Abandon the competitive bidding process.

6.1.7 Competitive Bidding Process Documents

The following subsections describe the documents to be used in the implementation of competitive bidding processes for the award of USF Projects.

Public Notice

The USF shall issue a public notice to announce the competition for the USF Project and alert potential bidders (the "Public Notice").

The Public Notice shall be issued on the USF website and in at least two widely circulating national newspapers in the Kingdom.

The Public Notice shall contain at a minimum:

- A brief description of the USF Project.
- An indication of the date on which the RFP for the USF Project shall be made available.
- A telephone number, e-mail address, and mail address at which potential bidders may contact the USF for further information regarding the Projects.
- The Public Notice shall be in a standard form approved by the USF.

Request for Proposals (RFP)

The USF shall issue a request for proposals document to specify the details of the USF Project and the related competitive bidding process for potential bidders, as follows:

- The RFP shall be in a standard form approved by the USF.
- The RFP shall be issued on the USF website, either concurrently with or subsequent to the issuance of the Public Notice for the USF Project.
- The RFP shall contain fully detailed descriptions of:
- The technical and operational requirements of the USF Project.
- The competitive bidding process for the USF Project, including:
- An estimated timeline for key steps in the competitive bidding process.
- The minimum service, qualification and other requirements for eligible bidders, and related evidentiary requirements.
- The rules for evaluating bids and selecting one or more winning bidders.

Bid Bond

The USF shall specify in the RFP a form of financial security to be submitted to the USF by bidders for a USF Project to secure their bids (the "Bid Bond").

USF Agreement

The USF shall specify in the RFP a form of agreement to be awarded by the USF and executed between the USF and a winning bidder to establish the winning bidder's obligation to implement the USF Project, the USF's obligation to pay the corresponding subsidy, and all related necessary matters, as determined by the "USF Service Agreement".

Performance Bond

The USF shall specify in the RFP the form of financial security to be submitted by a winning bidder for a USF Project to secure its USF Project obligations (the "Performance Bond").
The specified form of Performance Bond shall contain, at a minimum:

- The required amount of the Performance Bond.
- Details of the events triggering forfeiture of the Performance Bond.

The date by which the Performance Bond will be released by the USF
All Performance Bonds shall be released by the USF in accordance with the requirements specified in the USF Service Agreement.

6.2 PROJECT IMPLEMENTATION AND MANAGEMENT PROCESS

This section provides the details of the Project Implementation and Management process.

6.2.1 Key Activities

In this context, the USF shall:

- Conduct Pilot Projects to develop and enhance its operating procedures.
- Manage USF disbursements to USF Service Providers.
- Manage and oversee implementation of USF Projects, through appropriate mechanisms such as:
- Establishment of and participation in public coordination committees.
- Direct on-site support and oversight.
- Monitor all USF Projects to determine progress in implementation, reaching targets.

6.2.2 Disbursements for USF Projects

The subsidy may be disbursed by the USF in one or more payments to correspond to milestones established by the USF. All subsidy disbursements shall be made in tranches and may commence with a down payment upon signature of the USF Agreement setting out terms and conditions. One or

more subsequent payments shall be made upon certified completion of the installations and establishment of the Project. The subsidy disbursement schedule shall always be spelled out in the RFP documents (i.e., in the Draft USF Agreement).

The USF shall also prepare payment certifications, from time to time, which shall certify that the subsidy recipients have met the obligations or milestones specified in their USF Agreements. Based on this, the USF shall execute payment to the designated recipients within 60 days of receipt of the USF Service Provider's request.

The USF shall notify subsidy recipients directly in cases where payments will not be made because of milestones and requirements not being met, and shall issue a demand for explanation and/or remedial action and statement of possible recourse for non-performance, in accordance with the terms of the USF Agreements.

In-service completion and final service quality performance shall be audited by the USF. Details of payment milestones, certification and auditing shall be set forth in the RFP and USF Agreement.

6.2.3 Project Management and Evaluation

The disbursement of the subsidies in accordance with the payment schedule included in the USF Agreements shall be subject to inspection and monitoring by the USF or its designated independent project monitors. The terms of reference for the project monitors, and the requirements on service providers for periodic reporting to meet their obligations, will be fully spelled out in the respective USF Agreements.

USF Service Providers will be required to submit annual reports on the financial, economic, and market performance of the services that they implement through USF Projects. These annual reports shall include, at a minimum, the following information with respect to their respective Projects:

- Total capital investment in network facilities and equipment, for each location where services are provided, broken down according to classifications of network components (e.g., backbone, access, CPE, other).
- Annual operating expenses for each location, including maintenance, service provision, customer support, management, interconnection, and other recurring operating expenses.
- Revenues for each service, by location, including average revenues per user (ARPU) of service.
- Any anticipated changes in the levels of costs and revenues for the next year.

The USF shall evaluate these USF Project reports and compare progress toward the designated targets, identifying any deviations (positive or negative) from contractual timetables and obligations. Any significant delay or inadequacies in implementing required project deployments may be cause for withholding of Fund disbursements or other sanctions, as appropriate.

6.3 REGULATION, RIGHTS & OBLIGATIONS OF USF SERVICE PROVIDERS

The USF Service Providers have certain specific obligations in relation to USF Projects that are in addition to the rights and obligations that flow from the application of the legal and regulatory framework generally applicable to service providers in the Kingdom. These specific rights and obligations are fully described in the USF Agreement.

6.3.1 General Regulation of USF Service Providers

This section provides a listing of certain pertinent aspects of the legal and regulatory framework in the Kingdom.

6.3.1.1 Interconnection

Interconnection between a USF Service Provider's network and other licensed telecommunications networks in the Kingdom is governed by:

- The Commission Statutes, including the Interconnection Guidelines.
- The USF Agreement.

6.3.1.2 Numbering and Electronic Addressing

Any numbers or electronic addresses used in the Kingdom by a USF Service Provider shall be in accordance with the Commission Statutes and any applicable numbering or electronic addressing plans established by Commission pursuant to the Commission Statutes and the USF Agreement.

USF service provider shall provide Number Portability to their Subscribers pursuant to the CITC's Number Portability policy.

6.3.1.3 Type Approval

Any telecommunications equipment or facilities used in the Kingdom by a USF Service Provider shall be subject to the type approval requirements of the Commission Statutes.

6.3.1.4 Retail Tariffs

The tariff rates charged by a USF Service Provider for services will be subject to the Commission Statutes. Further, as an additional specific obligation, the tariff rates charged by a USF Service Provider for the Mandatory USF Services must also be in accordance with the tariff provisions of the USF Service Agreement, as summarized in the Specific Obligations section below (6.3.2).

6.3.1.5 Access to Public and Private Lands

A USF Service Provider shall have access to public and private lands, and the rights of inspection and entry, in accordance with the Commission Statutes.

6.3.1.6 Authority to Construct and Use Facilities

Subject to the commission statutes and the terms of the USF Agreement, a USF Service Provider will be authorized to construct all telecommunications facilities required to provide the USF Services. A USF Service Provider may utilise any appropriate wireless or wireline technologies in the provision of the USF Services subject.

6.3.1.7 Frequency Spectrum

A USF Service Provider's usage of the frequencies shall be subject to the rules stated in the Commission Statutes and consistent with what will be enacted of provisions and principles in the following documents issued by the commission:

- The National Frequency Spectrum Plan, and
- The Frequency Spectrum Management Procedures.

6.3.2 Specific Obligations of USF Service Providers

This section describes the specific obligations of USF Service Providers that are in addition to those that flow from the application of the legal and regulatory framework. These specific obligations are fully described in the USF Agreement.

6.3.2.1 Construction of Network and Supply of Services

The Network shall be constructed and the USF Services shall be supplied by a USF Service Provider in accordance with the USF Agreement.
All telecommunications facilities and equipment installed by a USF Service Provider shall be:

- New when first installed.
- Field-proven.
- So far as reasonably practicable, state of the art technology that complies with internationally recognized standards.

6.3.2.2 Service Availability and Quality Specifications

The availability and quality of the USF Services shall be in accordance with the USF Agreement and Commission statutes.

Quality of service reports for the USF Services shall be filed in accordance with the USF Agreement and Commission statutes.

6.3.2.3 Tariffs

The principle to be applied to USF Service Provider's specific obligations with respect to the tariff for the USF services is based on the Commission statutes.

Consultation Questions for Chapter 6

1. Do you have any comments on the competitive bidding process methodology which USF intends to use for the UA and UA subsidy distributions?
2. Do you have any comments on the specific bidding conditions or USF evaluation and monitoring principles described in this chapter?
3. Do you have any comments regarding the general rules and regulations governing the USF programs?
4. Do you have any additional relevant information or suggestions? If so, these additional inputs would be welcomed.

CHAPTER 7. USF REVIEW

The USF shall review its Strategic Plan within two years from the date on which the USF becomes operational, in order to ensure that the Strategic Plan and Programs reflect the latest ICT market reality and UA / US funding needs. The USF may review and update the Strategic plan as necessary required.

GLOSSARY OF TERMS

Abbreviation	Term	Description
2G (Network)	2nd Generation Network	The second generation of mobile phone standards, technically the first digital system standard following the first generation mobile phone standards for analog systems.
3G (Network)	3rd Generation Network	The third generation of mobile phone standards and technology, superseding 2.5G. It is based on the International Telecommunication Union (ITU) family of standards under the IMT-2000.
3.5G (Network)	3 Network.5 Generation Network	Also known as High-Speed Downlink Packet Access, or HSDPA, which is a more advanced mobile phone standard and technology superseding 3G and allowing higher data transmission (broadband).
ADSL	Asymmetric Digital Subscriber Line	ADSL is a form of Digital Subscriber Line (DSL), a data communications technology that enables faster data transmission over copper telephone lines than a conventional voice band modem can provide. It does this by utilizing frequencies that are not used by a voice telephone call.
ArcView	Geographical Information System Software	ArcView is geographic information system software product produced by ESRI
CAPEX	Capital Expenditures	Investment costs to create or expand a network or service
CDS	Central Department of Statistics & Information	The Central Department of Statistics falls under the authority of the Ministry of Economy and Planning and is the principal agency in the Kingdom for the collation, analysis and distribution of statistical information
dBm	1/1,000th fraction of a Decibel	A measure used to describe the strength of a signal – e.g., a mobile radio signal - in a certain area and is also used for quantifying the “signal to noise ratio” of a wireless or wire transmission
DSL	Digital Subscriber Line (originally Digital Subscriber Loop)	DSL or xDSL, is a family of technologies that provides digital data transmission over the wires of a local telephone network.

Abbreviation	Term	Description
EDGE	Enhanced Data rates for GSM Evolution	EDGE is a backward-compatible digital mobile phone technology that allows improved data transmission rates, as an extension on top of standard GSM. EDGE can be considered a 3G radio technology and is part of ITU's 3G definition,
ESRI ArcGIS		ESRI ArcGIS is a suite consisting of a group of geographic information system software products produced by ESRI.
FWA	Fixed Wireless Access	A term used to describe non-mobile broadband wireless technology systems such as WiMAX.
GIS	Geographic Information System	A computer based software system that captures, stores, analyzes, manages, and presents data that refers to or is linked to locations. ArcGIS is a GIS Software package supplied by ESRI company that is used in the USF market analysis for tracking and estimating the geographical and population coverage of the mobile operators.
GSM	Global System for Mobile communications	GSM is the most popular standard for mobile phones in the world.
ICT	Information and Communication Technology	All telecommunications and information technology services, including the Internet, fixed or mobile telephony, satellite communications and television over cable or aerials.
ISP	Internet Service Provider	A company which provides their customers with access to the Internet. The ISP connects to its customers using a data transmission technology appropriate for delivering Internet Protocol datagrams, such as dial-up, DSL, cable modem or dedicated high-speed interconnects.
ITU	International Telecommunication Union	ITU is a United Nations agency for information and communication technology issues, and in this regard the global focal point for governments and the private sector in developing networks and services.
Kbps	Kilo bit per second	A measure used to quantify the throughput of data per time, here 1000 bit per second
OECD	Organisation for Economic Cooperation and Development	An international organisation of thirty countries that accept the principles of representative democracy and free-market economy.
OPEX	Operational Expenditures	On-going cost for running a network

Abbreviation	Term	Description
QoS	Quality of Service	Quality of Service indicators and target values established by CITC to achieve certain telecommunication policy goal (e.g. ensure service quality in rural areas). Refer to document "Quality of Service Scheme for the Kingdom of Saudi Arabia, April 2009)
RFP	Request for Proposal	RFP is an invitation for facility-based service provider licensed in Saudi Arabia to submit a proposal on one or more specific US/UA projects.
USB	Universal Serial Bus	A serial bus standard to interface devices to a host computer and in mobile world used to allow access of computers to the 3G network
USF	Universal Service Fund	USF means a separate entity established within the Commission and linked directly to the Governor of the Commission, according to decision number 165/1428 with the primary goal to implement the Universal Access and Universal Service Policy, including the achievement of the objectives set forth therein.
WiMAX	Worldwide Interoperability for Microwave Access	A telecommunications technology that provides for the wireless transmission of data using a variety of transmission modes, from point-to-point links to full mobile cellular-type access.

ANNEX A: USF STATUS OF KSA LOCALITIES 2008