



FINAL

Universal Service Fund Policy

IT and Telecommunication Division
Ministry of Information Technology
Government of Pakistan



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1 Introduction

This document presents the policy of the Ministry of Information Technology (MoIT) for the Universal Service Fund. The Policy presented is consistent with the De-Regulation Policy for the Telecommunication Sector issued by the MoIT on 13 July 2003, the Mobile Cellular Policy dated 28 January 2004, and the Broadband Policy dated 22 December 2004.

The policy has been developed consistent with the needs of Pakistan, using international best practice where appropriate and useful. For example an international institution states that:

“For bridging the access gap, many governments in South Asia, Latin America and Africa have intervened in the market over the last several years through Output-Based Aid (OBA) type schemes. This involves the provision of a one-time subsidy (or grant) for private operators, and bidding the subsidy on competitive basis to keep the cost as low as possible. This ensures the maximum private investment in achieving universal service goals, while the process remains transparent. No exclusivity rights or technology restrictions apply.”

This USF Policy is set out in the following sections:

- Section 2 – Universal Service Fund Policy Objectives
- Section 3 – Status of Universal Service in Pakistan
- Section 4 – Goals for Universal Service
- Section 5 – Universal Service Fund Policy
- Section 6 – Review of Policy
- Section 7 – Regulatory Changes.



2 USF Policy Objectives

The Objectives for the Universal Service Fund (USF) are based on the Universal Service Policy and on the Fixed and Mobile Policies. The Government has designed the market liberalization policy to maximize the commercial availability and coverage of telecommunications and ICT services in Pakistan. The Government recognizes, however, that even with market liberalization, and under strictly commercial considerations, there may exist certain populations or geographic areas that would remain un-served or relatively underserved. The Government's universal service policy is designed to ensure that these designated populations and geographic areas gradually receive defined adequate services (including e-services) in a sustainable manner as resources permit.

Making telecommunications service available to the people and businesses country-wide, increasing teledensity, and kick-starting broadband penetration, are the priorities. In this Policy, MoIT is setting specific targets for rural teledensity and access.

The telecommunications sector is now fully competitive; hence it is not appropriate to impose Universal Service Obligations on a single operator.

The USF will finance the spread of network coverage and service to previously un-served or under-served areas and will make it possible for operators to supply individual service on normal commercial terms¹ in areas which are covered through the USF, in order to reach defined teledensity and broadband penetration targets.

Meeting the needs for basic telecommunication and ICT services in un-served and under-served areas throughout the length and breadth of the country implies that:

- Access to and coverage of networks shall be extended to un-served or under-served areas
- Access to services shall be offered by operators, both through shared access points as appropriate, and to all customers requesting service in the areas now covered through the support of the USF, at published national tariffs
- Services shall be affordable to the majority of households and individuals.

Universal Service Fund Policy is:

- Built on the objectives of Broadband, Fixed and Mobile Sector Policies
- Consistent with fair competition in the telecoms sector amongst mobile, fixed line and broadband operators
- Effective and well-defined, and operated on a fair and transparent basis
- In harmony with international best practice.

¹ Given that local de facto dominance of a particular supplier in a rural area may exist, the policy includes provisions for the control of retail tariffs charged by operators undertaking contracts to supply under the USF scheme, and to ensure that wholesale tariffs for interconnection and backhaul services charged to these operators are cost-based and non-discriminatory.



3 Universal Service in Pakistan in 2005

Despite major increases in penetration, of both fixed and mobile services in Pakistan, particularly in the last 5 years, this development has been mainly concentrated in cities and larger towns; little progress has been made by the operators in providing telecom services in rural areas. There is considerable evidence internationally that the availability of adequate telecommunications service is a necessary prerequisite for development, facilitating economic development, efficient delivery of social services (education, health, etc.) and social cohesion. The relationship between GDP per head and teledensity is strongly positive.

Even with six cellular and some twenty WLL operators, progress in telecommunications supply to rural areas has been slow. USF is expected to work as a catalyst to motivate all licensed operators to penetrate right into the heart of un-served and under-served areas.

To date, out of 348 Tehsils there are 337 in which at least one network is present. But this does not mean these areas are fully covered, or that service is immediately available to all potential subscribers. Covering all the Tehsil Head Quarters is only the first step in reaching the rural areas. So far, only 80% of Pakistan's total population has been covered by the fixed line, WLL, and cellular operators jointly. Only approximately 70% of the rural population² in Pakistan is covered by at least one telecom service provider, and in many areas there is a lack of capacity so even if a subscriber requests service, he may not immediately be satisfied. Areas in which there are significant waiting lists are described as under-served areas.

Rural teledensity to-day, including fixed, WLL and mobile services, is estimated at about 1%.

Another problem is the uneven population spread and density across the four Provinces of Pakistan, and the uneven supply of telecommunications. The Province of Punjab accounts for 26% of the surface area of Pakistan and accommodates 56% of the population, creating a population density of 402 people per square kilometre. However, Baluchistan covers almost 50% of the surface area of Pakistan but has a small population, less than 5% of the total, yielding a population density of only 19 people per square kilometre.

As a result, while one or more services cover about 65-75% of the rural populations overall in rural Punjab, Sindh and NWFP (with a lot of variation between areas within each Province), in Baluchistan service access is available to only 14% of the rural population. With such a wide geographical spread, it will take well organized and planned effort to cover the remaining rural populations during the next decade, which amounts to 30 million unserved people. As income levels rise, there is a large and growing unmet demand for telecommunications and ICT services amongst these people.

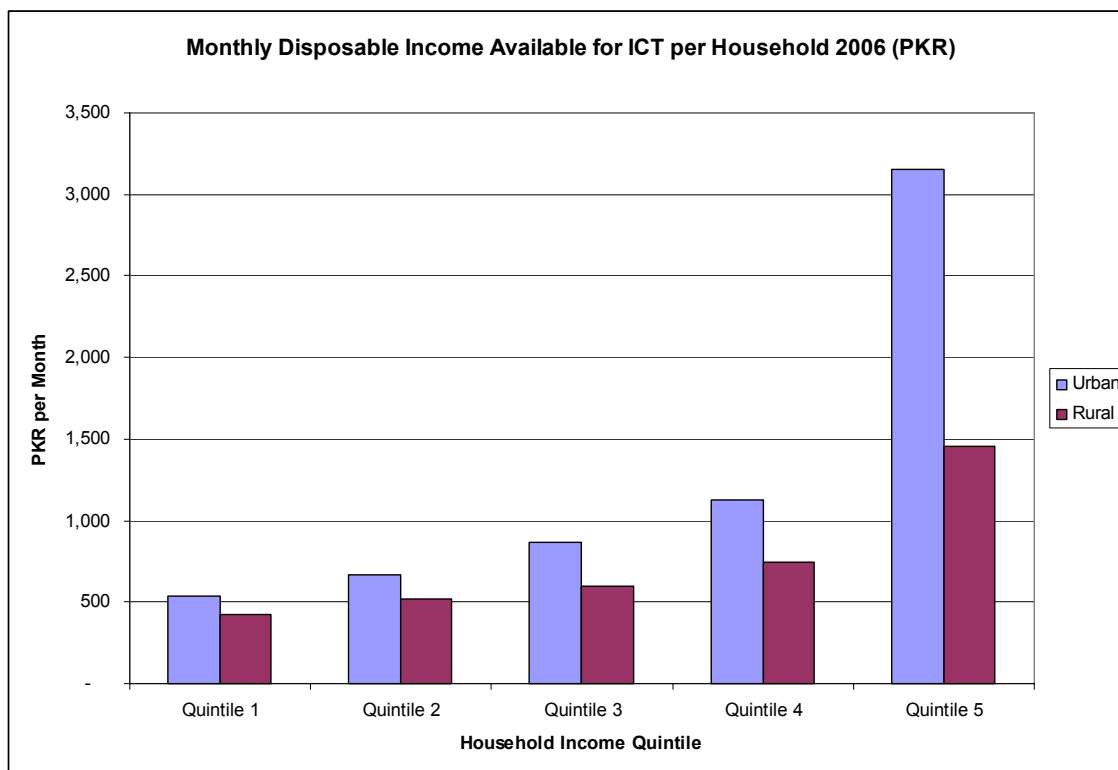
USF is expected to shift the focus of the telecom operators from urban towards rural population coverage. Through effective utilization of USF, Government of Pakistan will increase the level of telecom penetration significantly in the rural areas, and hereby sets a target teledensity of 5% in rural areas by 2010.

Exhibit 1 demonstrates that at the household level the majority of both urban and rural households can afford at least a basic level of telecom services offered under the prevailing

² Rural areas are defined to include villages and communities of 10,000 persons or less.



retail tariffs, which have reduced a lot under the competitive regime now in place. This fact supports and explains the phenomenal growth witnessed by the cellular operators. Often, the operators run out of capacity a few months after launch in the semi-urban and rural areas which they cover to-day. Thus, as a result of low tariffs and overall competitive market, there is not a major problem of affordability at least in those rural areas which are near to urban areas, provided services are offered at the competitive tariffs prevailing in the urban areas.



In the field of broadband communication³, the penetration achieved in Pakistan so far is very low. The broadband market has suffered from high retail prices, domestic and international bandwidth prices, and issues of local loop availability and poor quality (see MoIT Broadband Policy). Broadband penetration to-day is less than 0.1%. To kick-start the market, the USF Policy includes a 5-year target to reach 1% broadband penetration nation-wide.

³ In Pakistan, broadband is defined to include data services with a downstream speed of 128kb/s or more.



4 Goals for Universal Service

MoIT notes that access to telecommunications services from their home location is available to only about 80% of the Pakistan population overall to-day. Whilst most cities and larger towns are covered by both fixed and mobile networks, or will be soon under committed coverage plans, only about 70% of the rural population nation-wide currently has access to one or more networks. Also, Internet and broadband service take-up has been slow, and the broadband market needs a kick-start.

The primary goals for Universal Service are therefore:

- To make available and affordable voice telephony and data services suitable for Internet access, to progressively greater proportions of the Pakistan population at their home locations.
- Hence, to provide conducive/attractive conditions in which teledensity can grow.
- To kick-start the broadband and ICT markets, facilitating e-services.

MoIT hereby sets following nation-wide targets for the end of year 2010:

- 85% of country population to have coverage and therefore access to service if desired
- Teledensity: 5% in rural areas (fixed and/or mobile)
- Broadband: 1% penetration (nation-wide average)
- Telecentres: preferably one for every 5,000 people, but at least one for every 10,000 people in USF contract areas.

And by the end of year 2015:

- 95% of country population to have coverage and therefore access to service if desired

USF will ensure cost-effective optimal coverage, hence USF will not subsidise coverage that will be realised anyway by commercial actions or because of licence conditions, for example the rollout commitments in the cellular licences.

USF contractors will be required to achieve 5% teledensity in their coverage areas within three-four years of contract commencement, depending on the nature of the area. While it is appropriate to expect that the industry will by increasing coverage also increase teledensity, MoIT as a matter of general principle will not directly subsidise customers in order to artificially improve and enhance teledensity, but under special circumstances and eventualities may come out with specific targeted schemes. The competitive market already created in Pakistan is however ensuring that services are offered at attractive prices. MoIT will however pursue so that these attractive prices are offered in rural as well as urban areas. If teledensity in rural areas does not increase as expected, MoIT will review this aspect of USF policy through more innovative approaches.



5 USF Policy

5.1 General Principles and Governance

The USF policy framework will be administered by MoIT through an efficient corporate structure. It shall include collection of the funds, within specified policy framework, from the licensees and its transparent disbursement within approved USF framework. The amounts and usage of the USF will be made public, and shall be subject to independent audit. Disbursement of USF funds to licensed operators shall be made through a transparent, non-discriminatory, and competitive process.

Policy 1: USF will be controlled and monitored by MoIT, and administered by an independent but wholly state-owned company 'Universal Service Fund Guarantee Limited'

To ensure operational independence and neutrality, the Universal Service Fund will be administered by an independent non-profit company with a Board of Directors representing Government, Consumers and Industry. The fund itself will remain under overall Ministry control.

5.2 Technology neutral

Policy 2: USF policy will be technology neutral, unless circumstances require otherwise

USF Contractors will normally be allowed to use any suitable technology to meet the terms of their USF Contracts. However, it may by exception be appropriate to request the use of a particular technology, for example in order to make broadband services available, or to promote the use of that technology in Pakistan.

Bidders for Universal Service funds shall be allowed to use any suitable current or new technology to fulfil the requirements of the Universal Service Contracts into which they enter subject to their licences. It is anticipated that many bidders will use existing network technologies (WLL, copper, cellular, VSAT, GMPCCS, etc.), including required access network, radio systems, backhaul, and switching systems. However, bidders may propose to use new network technologies provided they supply the required services as specified in the USF Contract in a reliable and cost-effective way. Bidders may decide the best mix of technologies to meet contract requirements economically – innovative cost-effective solutions will be permitted.

Where the Universal Service Contract concerns the development of a service, again the Policy is technology neutral, provided the required functionality and inter-working requirements are met.



5.3 Benefits

Policy 3: USF policy will ensure optimal benefits to the operators, people and the economy

This will be achieved by the following combination of features of the policy:

- Technology Neutral – will encourage use of most appropriate and effective technology given the particular local conditions and USF contract requirements
- Shared services
- Individual services in USF coverage areas at prices capped by nationally available retail prices (See Policy 27)
- Subsidy to be given to providers for proven required network elements and PCOs/Telecentres to meet USF contract requirements
- 'Negative auction' to determine USF contract winners and encourage innovation, ensure market discipline and minimise costs. Auction amount to be capped based on estimated project capital costs and expected market conditions. There may also be contracts for specialised ICT public and community services
- Tight USF contracts with ongoing regular reporting of achievement, monitoring, and penalties for non-performance
- Penalties in the form of forfeiture of bank guarantees and additional penalties for non-performance as deemed necessary within framework
- In general, no subsidies shall be paid to individual subscribers until teledensity reaches substantially higher levels. Subsidy of individual subscribers would be too expensive at earlier stages of development. However, in exceptional circumstances, USFCGL may determine that limited subsidy of individual subscribers may be appropriate to kick-start the market in a defined USF Contract area. Areas eligible for subsidised end-user prices, and the allowable structure and level of subsidy, will be included in auction lot details
- Mandated sharing of infrastructure built under USF contracts to support multiple operators in the same area, and thus to maintain competitive pressures.

MoIT notes that there exist obligations on PTCL and on cellular operators. PTCL's obligations include a minimum of 83,000 lines per year in rural/unserved areas up to 2008. Cellular companies operating under new licence regime have to cover 70% of Tehsil headquarters within 4 years of licence period commencement.

Policy 4: External Benefits of Universal Service Fund Policy

The importance of funding telecommunications infrastructure in the rural areas cannot be underestimated for the long-term economic benefit and to avoid a 'digital divide' between rural and urban areas. The establishment of the USF and the allocation of funds to operators is an important factor in accelerating the availability of telecommunications services in rural areas.

Through the provision of telecommunication and ICT services under the USF, the following types of benefits are expected:



- Improved education
- Improved health
- Improved communication and social cohesion
- Access to government services
- Access to information
- Access to commercial services
- Access to markets
- Better employment opportunities
- Hence, significant improvements in local economy and social well-being.

Policy 5: Universal Service Fund is expected to trigger further investment

It is anticipated that relatively small subsidies will mobilize substantial private investment for Universal Access as commercial demand in covered areas is satisfied, for example for telephone and Internet service (network effect).

In some cases, access to the USF will trigger investment in more coverage and services. For example, neighbouring areas will become closer to backhaul facilities, triggering in some cases commercially motivated additional coverage. Also, if coverage has been subsidised, operators will act commercially in covered areas to offer additional services beyond the USF mandatory list as they see fit to meet demand.

The availability of telecom infrastructure is expected to make a major improvement in the investment climate for the areas covered. Many types of business depend on telecoms in their location. Therefore, when an area is covered, investors may consider locating their business activity in that area, thereby pumping in investment to that area.

USF bidders shall be encouraged to use local resources to reduce capital costs where possible.

5.4 Radio Spectrum**Policy 6: Spectrum for Universal Service will normally be found from existing telecommunications allocations and assignments.**

Crucial to the development of the Universal Service is the availability of spectrum and its most optimal and efficient use for which a basic framework was defined in the Telecom Deregulation policy as below:

MoIT expects that radio spectrum for Universal Services may require:

- Cellular bands
- WLL bands
- WiFi, WiMax, and WLAN bands
- Fixed links for backhaul according to ITU recommendations (e.g. 7, 11, 13, 21, and 28 GHz and possibly 5 GHz for long-haul links).



USF Contractors requiring any new or additional frequencies will have to pay spectrum licence fees according to established criteria or rates by PTA/FAB.

Most of these bands are already allocated to telecommunications use, and largely assigned to telecommunications operators. Restrictions on radio use in border areas will of course continue to apply.

In future, other spectrum allocations to telecommunications may be made, and these could equally be used in urban, rural, and remote areas.

Telecom De-Regulation Policy

With regard to radio spectrum, the 13 July 2003 Telecom Deregulation Policy states at Section 4.4:

- “4.4.1 Radio spectrum is a valuable public resource belonging to the State and must be used in the public interest. The Frequency Allocation Board (FAB) is responsible for properly managing radio spectrum.
- 4.4.2 Wherever possible and consistent with good spectrum management practices, licensees shall be required to share spectrum with other licensees.
- 4.4.3 Licensees shall relinquish rights to spectrum that is no longer needed for their operations, and allow sharing of the bands they currently occupy where such sharing is technically feasible, and subject to management by FAB of frequency re-use in the band in accordance with best international practices. Un-used spectrum allocated for operations of Local Loop (LL) & Long Distant International (LDI) licensees may be withdrawn if the licensees fail to begin operations within eighteen months of award of radio spectrum. The Licensees may not assign, lease, or sell the rights of use of spectrum allocated to them in the first place.
- 4.4.4 All entities using spectrum shall be charged a fee for spectrum. The fee will be approved by the Government of Pakistan and recovered by Frequency Allocation Board from users of frequency spectrum. The factors to be considered in setting fees shall include but not limited to coverage, scarcity and value of the spectrum. The spectrum will be allocated for a definite time.
- 4.4.5 Where demand exceeds available frequency spectrum, it shall be allocated by auction or other transparent, non-discriminatory, open and competitive process.
- 4.4.6 Pakistan plans to follow ITU-R specified radio frequency bands⁴ specific for the purpose of operations of Wireless in the Local Loop (WLL), point-to-point microwave and backbone / transmission services.
- 4.4.7 Information about available radio spectrum for telecommunication services would be placed in the public domain for the prospective users to apply for allocation on nation-wide or regional basis.
- 4.4.8 The FAB shall deal with the requests for radio spectrum, within the framework of Telecom Act 1996 and Rules thereunder, and process applications within a target of 30 days. FAB will streamline and proactively coordinate the process of site clearance for licensees who have been allocated frequency spectrum to expedite rollout of wireless based networks.
- 4.4.9 LDI licensees will be entitled to radio spectrum (where available) for point-to-point / and backbone links, within the parameters of their licenses, on payment of spectrum charges.
- 4.4.10 LL licensees will be entitled to radio spectrum for WLL systems, and also spectrum for point-to-point links, where available, and on payment of spectrum charges.
- 4.4.11 LL and LDI licensees that receive spectrum shall meet defined usage milestones, failing which they must relinquish their rights to use the assigned spectrum.”

⁴ The ITU defines Wireless Access as "end user radio connection(s) to core networks". Bands used for FWA include 3.4-3.6 GHz, 3.6-3.8 GHz, 10.15-10.3 and 10.5-10.65 GHz. Bands between 24.5 and 29.5 GHz are also used. In addition, there are the licence exempt bands where Radio Local Area Networks (RLANs) have been implemented using IEEE802.11 or HIPERLAN technology; the former and its derivatives in the 2.5 GHz and 5.8 GHz ISM bands and HIPERLAN in the range 5.0-5.7 GHz. DECT 1880-1900 MHz and cdmaOne frequency bands e.g. 850 and 1900 MHz may also be used.



5.5 Sources of Funds

Policy 7: Funds for the USF will be collected from a percentage of licensed operators' revenues, the Access Promotion Charge (APC) for calls terminating on mobile networks, Spectrum Auction proceeds / charges, and grants from Government or other agencies

Sources and collection of revenues as envisaged in the fixed line Deregulation and Mobile Sector Policy documents and elaborated through well-defined collection mechanism for USF. The USF will be predominantly financed by revenues collected from telecommunication licensees. The USF may also receive contributions from the Government, and also funding from international or bilateral development agencies or donors.

All licensees shall pay a USF charge up to 1.5% of gross revenues minus inter-operator payments and related Authority/FAB mandated payments, as determined by the Government by issuing Rules. The need for Universal Service is great, so the USF contribution will be set at the maximum 1.5% initially. The chosen percentage shall apply to all operators having such obligation in their licences.

APC for calls terminating on mobile networks shall also be paid to the Universal Service Fund. Premium of APC on current cellular termination rates shall be mopped up and diverted to USF in accordance with Access Promotion Rules 2004.

Sale proceeds of frequency spectrum including any instalment due shall also be paid to the USF.

USF may also receive grants or endowments made available from other agencies. The Federal Government has made some arrangements with international agencies.

All profits earned through investment of unspent or undisbursed USF funds shall be deposited in the USF fund.

MoIT estimates that in total the funds available from all the above sources should be sufficient to meet the goals for Universal Service outlined in section four of this document.

5.6 Fund Applicants

Policy 8: All licensed operators which contribute to USF shall be eligible to apply for all Universal Service Fund contracts, including Special Projects⁵.

All licensed operators which have contributed and continue to contribute to USF shall be eligible to apply for Universal Service Fund contracts, including Special Projects. Companies or entities not falling in this category shall not be eligible to bid, though such companies may participate as suppliers or sub-contractors to USF contractors.

⁵ "Special Projects" means any plan prepared before grant of contract, independent of a Lot, before its grant and prepared in a suitable manner mentioning adequate detail of the telecommunication services, telecommunication systems or electronic services required to be provided to large public in the unserved and underserved areas with a reserve price.



MoIT anticipates that eligible bidders, once they have started to contribute to USF, would include:

- PTCL
- Mobile Cellular Licensees
- LL Licensees
- LDI Licensees
- Infrastructure licensees⁶
- Others (e.g. ISPs and Data operators) if they are, or opt to become prior to auction date, licensed operators with an obligation to contribute to the USF.

MoIT notes that data service providers may apply to PTA to amend their licences in order to become obliged to contribute to the USF, and having done so they would become eligible bidders. Those who prefer not to do so may avail option to participate through a consortium arrangement (see Policy 9 below).

In addition, a non-licensee registered with the PSEB shall be eligible to bid for provision of e-services under a Special Project, and public sector entities shall be eligible to provide telecommunications services or systems under a Special Project if such services or systems do not require licence from the Authority.

Policy 9: Consortia are allowed to bid for USF contracts, provided the requirements specified below are met

Consortia are allowed to bid for the Projects and Lots provided there is a lead operator executing USF Contract and accepting responsibility on behalf of all members of Consortium. Consortium members other than the leader do not have to be either licensees or contributors to the USF. However, the Consortium cannot consist of more than one Licensee having similar type of license.

The leader of the Consortium shall be a qualified bidder under Policy 7 above.

The leader of the Consortium shall be considered as bidder with an obligation to disclose that it is taking part in the auction as individual Licensee or representing a Consortium while giving details of the Consortium members before the auction date as required by the Auction Committee. Remaining members of the Consortium may enter into contractual arrangements with their leader before or after auction but the leader of the Consortium, if successful in auction, shall not be allowed to change the composition of the Consortium during the validity of the contract without prior approval of the Universal Service Fund Guarantee Company (USFCGL).

Provided that a non-contributing Licensee having a licence to provide voice is not allowed to become part of a Consortium but a non-contributing non-voice licensee or even a non-licensee can be part of Consortium.

The Consortium arrangement shall not absolve its leader as Contractor from its obligations under the Contract.

⁶ PTA has prepared a class of licences for Infrastructure Operators



Policy 10: USF policy will allow innovative organisational approaches

The USF policy will permit and encourage participation by local community and voluntary bodies where relevant. For example, a community may choose to make space available for a Telecentre either free of charge or at a low price. Similarly, a Telecentre may be co-located with a post office, or another community facility to ensure access and security. Innovative collaborative approaches will be encouraged.

Operators with innovative and cost effective solutions will be encouraged.

5.7 Services to be Supplied

Policy 11: Defined Services shall be provided under Universal Service contracts

The USF Company Guarantee Limited shall require some or all of the eligible services to be provided under Universal Service contracts, depending on local requirements. Eligible services shall include:

- Public access points including payphones / Public Call Offices and Telecentres
- Basic telephone services to local, national, mobile, freephone, premium rate, and international numbers, including facilities for incoming calls from all sources, accessed from public access points as well as private lines
- Access to emergency services (as required under voice licences)
- Internet access service for individual subscribers, at adequate speed for individual use
- Internet access service to adequately support multiple terminals at Telecentres at suitable speeds for the services to be accessed
- E-mail and other related services.

USF contractors shall also facilitate and provide access to services and applications such as:

- E-Govt
- E-Commerce
- E-Health
- E-Learning
- Other ICT services (based on GoP ICT Policy).

Broadband services shall be offered at suitable speeds to support access to the services specified, taking into account the number of connected terminals at each location. Thus, higher speeds will be required at Telecentres with multiple terminals, than for access services for individual terminals. Internet access speeds shall be adequate for the Telecentre planned peak load.

Special services and equipment for persons with disabilities including required infrastructure and terminal equipment may also be required.



At Telecentres, appropriate training in computer and Internet use etc. shall be provided, to include at least training in basic computer, Internet, and e-mail use.

Each Universal Service contract shall require that provision is made at or above defined targets for numbers of terminals and phone sets per community or per 1000 people.

In addition, to meet the goals of universal service, there may also be special projects for development or provision of telecommunication services, telecommunication systems or electronic services required to be provided to large public in the unserved and underserved areas.

Policy 12: USF will fund access, required transmission and switching, and shared access points

The USF will support defined access networks and defined shared access services and access points. As required to provide service, transmission and switching equipment can also be funded.

The defined levels will be included in each USF contract. This will enable households, businesses and individuals to avail of services on commercial terms, as well as shared access for others who cannot afford individual service. Telecentres shall be appropriately manned to ensure security and to offer training as well as user support, and to collect fees for usage. Payphones / PCOs shall also be manned to ensure security and to collect usage fees. It may be desirable that Payphones / PCOs are in locations which are normally manned for other reasons, again to ensure security. USF contractors shall include the cost of manning in their business plans.

Policy 13: Access points provided under the Universal Service Policy shall be in adequate facilities at locations convenient to the communities served

Shared access points shall be in any suitable location such as:

- Payphones/PCOs in publicly accessible premises, or where safe by the roadside.
- Telecentres in schools, health centres, civic centres, post offices, or other suitable accessible premises.

It is expected that the communities benefiting from coverage and service availability will wish to partner with the USF contractor in their area, and that the community will make available premises in which payphones/PCOs and Telecentres can be located. The capital cost of constructing buildings will not be covered from USF funds.

Policy 14: Teledensity Target

MoIT has set an overall target to reach a teledensity of 5% in rural areas by year-end 2010.

While MoIT expects this target can be met without recourse to below normal pricing, it will keep this matter under review and may consider allowing bidders in selective areas to include various forms of retail price incentive in their plans, such as:



- reductions in activation, connection and terminal/customer premise equipment charges
- reductions in monthly bills to individual consumers of up to PKR 500 per month compared with national tariffs.
- Vouchers or promotions to encourage customers to commence productive use of Internet-based services etc.

Policy 15: Broadband Target

MoIT has set a Target of 1% broadband penetration nationwide by year-end 2010.

To achieve this target, MoIT believes that first the Regulator should ensure that operators offering broadband services should be required to charge only reasonable cost-based prices for service, at both wholesale and retail levels.

If this alone is not successful in boosting demand for broadband service, MoIT will consider whether to issue contracts for broadband investment to increase the number of locations at which broadband service is offered, to which qualified bidders can apply to ensure that this target is met.

5.8 Funding of Special Projects**Policy 16: If required and desirable for unserved or underserved areas, the USF shall also be used to fund the development and delivery of services, infrastructure or other related items, through the Special Projects mechanism**

For example, it may be found desirable to fund the development and delivery of selected e-services beneficial to people in unserved or underserved areas, to assist in reaping the benefits of ICT. From time-to-time USFCGL will review with Ministry whether it is appropriate to issue terms of reference for such developments, through the Special Projects mechanism, and will hold an auction process and issue a development contract accordingly.

It may also be found desirable to fund telecoms infrastructure development, to support providers of services in unserved or underserved areas. In this case, USFCGL will hold an auction process and issue a Special Project contract accordingly.

It may also be found desirable to fund networks of telecentres or other suitable access points in the unserved or underserved areas.

It should be noted that only suitably licensed operators may bid for Special Projects to supply licensed systems or services.

In addition, a non-licensee can be eligible for applying or bidding for Special Projects, if the services or systems to be provided under the Special Project do not require licence from the Authority.



5.9 Choice of Areas for funding

Policy 17: Areas in which support will be offered will be selected according to clear and transparent criteria

MoIT will develop the method for prioritising qualifying geographic zones, giving priority for rural, remote, and small town and urban areas, where they are currently un-served or under-served.

Areas falling under existing operators' roll-out obligations shall be excluded from USF lots/projects. Cellular operators shall provide details of Tehsils to be covered under rollout obligations so that the same may be excluded from USF projects.

Specific clear and transparent area selection criteria will be applied:

- High Priority will be given to areas currently with no access to terrestrial phone networks (fixed or mobile), and hence with zero teledensity. The highest priority will go to the areas with the most unserved population. Distance from existing facilities will also be factored in.
- Medium priority will be given to areas with smaller population or with limited access to services, and hence with very low teledensity.
- Lower priority will be given to areas with phone and Internet coverage already, but where teledensity is low.

Communication requirements consistent with achieving economic, regional, or industrial policy may also be applied to vary the priorities established above.

Method for selecting geographic zones to form USF Lots:

- USF Company Guarantee Limited shall control the process
- USF Company Guarantee Limited shall assess the geographic areas to be covered by setting the priorities on rural, remote, and small town and urban areas, where they are currently un-served or under-served, using a clear and transparent procedure.

There should be enough contract areas to avoid anti-competitive market distortion, but not too many contract areas to be impractical: USFCGL will issue one contract per District, unless there are special reasons to do otherwise.

5.10 Interconnection, Essential Facilities, and Infrastructure Sharing

Policy 18: USF Contractors shall have the right to Interconnection and Essential Facilities

Interconnection arrangements are in place and different operators have different commercial agreements. No change to existing interconnection arrangements is required by this policy for the Universal Service Fund. USF contractors may request PTA intervention if they believe that Interconnection or other Essential Facilities are being offered at rates above cost or on discriminatory terms, or if an interconnect operator places unreasonable technical or operational obstacles to efficient interconnection.



Policy 19: Infrastructure and Essential Facilities Sharing shall be Mandatory

USF Contractors shall offer sharing of infrastructure and essential facilities built under USF contracts to other licensed operators, so as to allow at least one other operator through first come first served basis, to offer retail services in the same area. Such infrastructure and essential facilities sharing shall be offered at cost-based rates. USFCGL will monitor the infrastructure and essential facilities sharing mechanism.

5.11 Limitations on Market Power

Policy 20: The Universal Service Fund shall not be used to concentrate market power locally in too few hands

The Universal Service Fund shall not be used to concentrate market power locally in too few hands. There is a need to limit the local market power achieved by any one operator through the USF policy. Any given operator shall not be allowed to win more than a defined level of the total fund in a given telecom region. MoIT will define the levels under Rules.

5.12 Auction Framework

Policy 21: USFCGL shall determine the USF Contractors following a defined auction process as laid down in Rules and Procedural Manual

Universal Service Contracts will be auctioned using a 'negative auction'. The bid for the lowest amount of subsidy for the performance of each pre-defined contract will win that Contract.

Policy 22: USFCGL shall determine and publish the maximum amount per Lot ('Reserve Price'), at a level which will allow the Contractor to make a reasonable return

Contractors shall be allowed to make a reasonable return.

Thus, the auctions shall provide a one-time investment subsidy for operators willing to expand network and provide required service in a specified area, and to enter into the offered contract.

The amount of the bid should be based on the predefined level of capital costs required to fulfil the contract, less any expected operating margins over the contract period. Capital cost can include equipment, installation, right-of-way, civil works, access tracks to towers, etc, but shall not include costs of constructing Telecentre buildings. A maximum Contract price will be calculated by USF Company Guarantee Limited based on a summary business plan including expected revenues and capital and operating costs incurred fulfilling the contract.

**Policy 23: Auction principles shall be transparent, fair and equitable**

Auctions will be competitively neutral. Auctions will use well-defined criteria, with transparent processes. Well-run auctions will reduce the required funding from USF to the minimum level required to assure coverage and service in the specified areas.

USF Company Guarantee Limited will define the basic methodology for calculating the net cost and criteria thereto, and use models and forecasting methodology in calculation of expected net US costs, to check the reasonableness of bids by USF applicants. Winning bids shall be capped at a maximum proportion of capital cost. This limit may be exceeded where there are genuine reasons, e.g. the terrain in the area to be served is difficult, and the population density is low.

If a cartel is suspected, USF Company Guarantee Limited shall have the right to cancel the bid and subsequently re-auction.

If no bid, USF Company Guarantee Limited may discuss with players what the reasons are and review the bidding process and monetary constraints accordingly.

The auction winner shall enter into the relevant USF Contract, shall abide by its terms, and shall receive the amount of money determined by the auction process.

5.13 Contract Terms and Monitoring Performance**Policy 24: Obligations and Rights of USF contractors will be clearly specified in the Contract**

Obligations on funded Universal Service operators will be imposed under their Contracts. Contract terms will include:

- Services offered (telephone, telecentre, etc.)
- Quality of service measures
- Prices charged and tariff conditions
- Share infrastructure at cost plus reasonable return
- Contract period
- Compulsory insurance against fire, theft, and natural disaster
- Provision of specified bank guarantee, with release of winning bid amount per contract on day one against bank guarantees for same amount. Bank guarantee can be reduced on each anniversary by $1/(\text{contract period in years})$
- GoP to have a lien on the equipment used in fulfilling the US contract throughout the contract period. At end of contract period, ownership of equipment passes to operator.



Policy 25: Fulfilment of Contract terms will be monitored and compliance ensured by USF Company (Guarantee) Limited

Universal Service contractors will be required to report their performance under each contract regularly:

- Services offered, and number of services in operation
- Quality of service achieved
- Prices charged and tariff conditions
- Bank guarantee.

USF Company Guarantee Limited shall monitor and inspect performance under US contracts. Inspection can be through site visit or remote means such as annual report, switch traffic records, test calls to payphone/telecentre, etc.

USF Company Guarantee Limited shall ensure compliance with contract terms as appropriate.

If an operator withdraws from a US contract for any reason, the next lowest qualified bidder may take on the contract, or if this bidder is not willing to do so, a new auction shall be held.

5.14 USF Tariff Regulation

Policy 26: Retail Prices

Prices and tariffs will be capped by prevailing industry rates. PTA shall enforce national price caps in USF areas.



6 Review of Policy

Policy 27: The Universal Service Fund policy will be reviewed regularly

The USF Policy shall be reviewed regularly; best solutions today are not necessarily best solutions tomorrow. For example, MoIT may determine that it is appropriate to introduce new types of USF contract, covering a different range of services, or different coverage areas, or different types of provision (e.g. infrastructure sharing).

The programme should run for a period to establish momentum, but should be reviewed for cost-effectiveness regularly. MoIT will report annually progress against objectives. If objectives are not being met, MoIT will commence an immediate review of the reasons for the objectives not being met, and will review procedures, contracts, or policy as appropriate. In any case MoIT will review the Universal Service Policy regularly.

It is expected that basic service availability will eventually reach 100% of the population. As this point approaches, MoIT will review the priorities at that time and may determine that the universal service challenge has shifted to other service areas (e.g. broadband, e-services). MoIT will consult with industry and the public, and may determine to shift the focus at that time, or to wind-up the Universal Service Fund.



FINAL

7 Regulatory Changes

Appropriate changes in the regulatory and legal framework would be made expeditiously to support the policy.