

UNIVERSAL ACCESS FUNDS

INTRODUCTION – UNIVERSAL ACCESS VERSUS UNIVERSAL SERVICE

Although the terms “universal service” and “universal access” are closely related concepts and are sometimes used interchangeably, they hold different meanings.

Universal service policies are more commonly found in developed countries. Universal service is aimed at increasing the number of individual residences with telecommunications services and providing telecommunications services to *all households within a country*, including those in rural, remote and high cost locations. Universal service policies also focus on ensuring that the cost of telephone services remains affordable to individual users or to targeted groups of users (e.g. low-income families and people living in uneconomic areas).

While universal service is a realistic policy objective in many industrialised countries, universal access is a more practical goal in most developing countries. Universal access policies work to increase access to telecommunications services on a shared basis, such as on a community or village-wide level. Universal access programs typically promote the installation of public payphones or public call offices in rural areas, remote villages or low-income urban areas with the aim of providing a basic and initial connection to the public telecommunications network.

It is also increasingly normal for universal access programs to encompass Internet Points of Presence, including public access to high quality Internet and ICT services by means of telecentres or cybercafés in the key rural population centres, as well as programs for the provision of Internet access to schools.

In this report, Intelcon mainly focuses on examining the funds that are used to promote **universal access** in developing countries and emerging markets.

EMERGENCE OF UNIVERSAL ACCESS FUNDS

Telecommunications services are increasingly considered by governments around the world as a basic necessity of citizens, essential to full participation in the 'new information economy'. In the past, monopoly operators had to assume the costs of meeting universal access objectives. These operators had to finance the delivery of essential telephone services to uneconomic regions mainly through cross-subsidies, which flowed from profitable market segments (e.g. international, long-distance, business users, urban) to less profitable market segments (e.g. domestic, local, residential users, rural).

While cross-subsidies served their purpose in monopoly environments, they create problems in newly competitive environments. In particular, cross-subsidies have been known to distort market signals and place an unfair burden on certain operators. To finance their access objectives in a competitively neutral and transparent manner, an increasing number of countries are now turning to universal access funds.

FUND FEATURES

Universal access funds receive financing from various sources and provide targeted subsidies to encourage the provision of telecommunications services by private operators in otherwise uneconomic regions. These funds can be distinguished based on three key features:

- **Sources for funding** – Universal access funds can be distinguished by their sources for funding. Depending on the country and its particular situation, the sources for funding have included national budgets of governments, charges on interconnecting services, levies on subscribers (e.g. on access lines) and levies on operator revenues. Funding from international development agencies is also an option. Universal access funds today tend to collect their revenues from government sources or operator levies on a widely based range of telecommunications services (as opposed to only from specific, high margin services, like international long-distance). Broad-based revenue collection mechanisms are favoured because they have less of a price distorting effect on the marketplace.
- **Fund management** – Universal access funds can differ in their management. While some funds (e.g. Colombia) are administered by government ministries, other funds are administered by regulators (e.g. Peru, Chile) or special agencies (e.g. South Africa). The common perception is that funds administered by independent regulators and agencies are more likely to be transparent and open to scrutiny, and less likely to be influenced by government or political interest.

- **Type of services** – Universal access funds can also be distinguished by the types of services they support. Developing country funds in the past have placed greater emphasis on ensuring basic public access (i.e. voice-grade fixed access to the public telecommunications network). With the growing importance of the Internet to national economies however, many of today's newer funds also support public access to value-added services, including Internet access. In Chile, the government has redefined its fund – which has been successful in extending basic telecommunications to rural and low-income areas – to support telecentre and backbone projects. The Fund has launched a national telecentres program. With US\$ 17.2 million available for subsidies in 2007, Subtel's focus includes: a plan to provide telecentres in 200 communities, building on the country's existing 730 telecentres; a plan to provide connectivity for microenterprises and SMEs to help improve productivity, and; a fibre optic backbone to connect the city of Puerto Montt to Chiloé Island and Coyhaique.

The table below provides a brief summary of some of the telecommunications funds that are either planned or have been implemented in developing countries and emerging markets.

Country	Fund Status	Funding Source	Fund Administrator	Disbursement of Funds
Afghanistan	Operational	2.5% of net revenues of all licensed service providers	ATRA, regulatory agency	The Telecom Development Fund (TDF) is intended to increase penetration in rural and un-served areas. The regulator, ATRA, is in the process of developing procedures and policies to use the funds effectively. The Ministry of Communications is working on a plan to provide subsidized telecom services to the public education sector and other social services and for disabled and poor people.
Argentina	Operational	1% of all operators' gross revenues – Argentine operators can contribute either by paying 1% of revenues to the fund or by proving that they are installing service in under-served areas.	The Reglamento General del Servicio Universal (RGSU) states that the Fund is to be administered by a council made up of 10 people selected by various levels of government, operators and consumers.	Government to determine based on its teledensity goals. The 2000 market liberalisation law established this fund but it was not implemented for years because there was no public organisation to administer it. Resolution 80/2007 required operators to start contributing to the fund in July 2007. However, in July 2007, the country's Ombudsman announced he is suing the government over Resolution 80/2007.
Brazil	Operational	1% of service providers' gross operational revenues earned from the provision of telecom services	Anatel, regulatory agency	Brazil's National Telecommunications Fund (FUST) has accumulated US\$ 3.27 billion (October 2007) but it is still unclear how the money will be used. Due to conflicting legal interpretations regarding the use of the fund's resources, no funds were disbursed until 2007.
Bulgaria	Operational	0.8% of voice revenues minus certain interconnection and special access costs	CRC, regulatory agency	Operators may apply annually for compensation for losses on the provision of universal service.

Country	Fund Status	Funding Source	Fund Administrator	Disbursement of Funds
Burkina Faso	Operational	2% of service providers' revenues	Autorité Nationale de Régulation des Télécommunications – regulatory agency	
Chile	Operational	Government's budget	Subtel, regulatory agency	Subsidies distributed through competitive bidding (lowest bid wins)
China	Planned			
Colombia	Operational	5% of national and long distance operators' revenues plus funds from license fees	Ministry of Communications	Subsidies distributed through competitive bidding (lowest bid wins)
Cote d'Ivoire	Operational	2% of revenue from mobile license fees	National Telecommunications Fund (NFT)	
Czech Republic	Facing legal delays	Not more than 1% of all revenues. The % of the contribution depends on the operator's market share	Czech Telecommunication Office, regulatory agency	Major contributors to the fund have appealed before the courts against contributions set for 2001-2003. Based on the decision of the Supreme Administrative Court, ČTÚ is now revisiting the contributions. Due to legal proceedings and pending decisions by ČTÚ, none of the major contributors had paid its contribution as of mid-2007.
Dominican Republic	Operational	2% levy on users' telephone and cable TV bills	Indotel, regulatory agency	Indotel launched a tender in September 2007 designed to bring connectivity to 500 municipalities in 16 provinces over the next two years. Indotel is due to finance 80% of the cost of the project, or US\$ 7.0 million. 16 of the country's 32 provinces are considered to have serious communications problems. Indotel has vowed to resolve those problems by the end of 2008.

Country	Fund Status	Funding Source	Fund Administrator	Disbursement of Funds
Ecuador	Operational	1% operator levy on fixed line operators	CONATEL, regulatory agency	No funds have been disbursed
Estonia	Operational	0.04% of operators' revenue (for 2008)	Estonian Communications Board, regulatory agency	Funds will only be disbursed if a designated US provider requests financial assistance to meet its obligations.
Ghana	Operational	1% of fixed operators' net revenues	Ghana Investment Fund for Telecommunications (GIFTEL) Board of Trustees	Funds are disbursed to aid in the provision of rural telecentres will mainly take the form of competitive grants. Fund disbursement for public telephony and internet POP projects is by open tender.
Guatemala	Operational	Transfers from government and 70% of the amount collected through spectrum auctions until 2003	Ministry of Communications	Funds to finance telephony projects are awarded through auction. The winning bidder must ensure a maximum of 500 inhabitants per line.
Hungary	Operational	Not more than 0.5% of net annual sales revenues	National Communications Authority, regulatory agency	Universal service providers (USPs) need to prove that they suffer an unfair burden and that they incur net avoidable costs related to the provision of universal services before they can receive compensation. For 2004 and 2005, USPs applied for compensation but their requests were refused, as net avoidable costs were not substantiated.
India	Operational	5% of all operators' revenues	Department of Telecommunications (DoT)	Funds are awarded by auction. The USO Fund was originally used to set up village community phones. In 2005, it expanded to include support for individual lines in rural areas. In 2007, fund support further expanded to include both mobile service and fibre optic backbone network in rural areas.

Country	Fund Status	Funding Source	Fund Administrator	Disbursement of Funds
Indonesia	Operational	0.75% of all operators' revenues	Directorate General of Posts and Telecommunications – regulatory agency	The USO tender held in late 2007 was cancelled because the participants were not able to meet the government's requirements. The government plans to re-run the tender in 2008. The winner will get a regional fixed-line and a VoIP license. The winner will also get 2.3 GHz frequency to provide WiMAX service.
Jamaica	Operational	US\$ 0.03 levy on all incoming international traffic terminating on the fixed network and a US\$ 0.02 levy on all incoming international traffic terminating on mobile networks	The Universal Service Fund Company, owned jointly by the Spectrum Management Authority and the Ministry of Energy, Mining and Telecommunications	The fund is intended to fund primarily e-learning projects.
Kenya	Planned	Government transfers and operator levies		
Madagascar	Operational	2.0% of all operators' revenues	Office Malagasy d'Etudes et de Régulation des Télécommunications, regulatory agency	
Malaysia	Operational	Fixed and mobile network operators contribute 6% of their weighted revenue from designated services to the Fund (approximately 2% of total revenue)	Malaysian Communications and Multimedia Commission (CMC), regulatory agency	From 1999 to 2002, Telekom Malaysia was the only operator with access to the fund. Starting in July 2002, other operators were invited to submit proposals for financing through a competitive process.
Mauritania	Operational	A percentage of all operators' revenues	Agence d'accès aux services universels	

Country	Fund Status	Funding Source	Fund Administrator	Disbursement of Funds
Mongolia	Operational	2% of net taxable income from all operators	Communications Regulatory Commission, regulatory agency	Assets of the Universal Service Obligation Fund are disbursed to finance the delivery of essential communications services to un-served inhabitants and remote areas, and to construct, expand and renovate communications networks.
Morocco	Operational	2% levy on all operators	Comité de Gestion du Service Universel	The fund has three priority areas: <ul style="list-style-type: none"> • Rural public telephony; • Installation of community centers; and • Expansion of broadband capacity.
Mozambique	Operational	1% levy on all operators	Instituto Nacional das Comunicações de Moçambique, regulatory agency	Pilot project bids are currently being examined for telephony and internet projects (November 2007).
Nepal	Operational	2% levy on the revenues of the incumbent operator, ISPs and mobile operators	Nepal Telecom Authority, regulatory agency	Subsidies distributed through competitive bidding.
Nicaragua	Operational	2% operator levy	TELCOR, regulatory agency	Funds awarded through public tender. In May 2007, Nicaragua committed to investing US\$ 10 million in a project for the expansion of fixed telephony and Internet services to 103 municipalities in rural areas. The plan is to install 367 public phones and Internet connections in unserved areas. A total US\$ 7.0 million is funded by the World Bank and the remaining US\$ 3.0 million is from the TELCOR fund.

Country	Fund Status	Funding Source	Fund Administrator	Disbursement of Funds
Nigeria	Operational	50% of annual operator levy	Universal Service Provision Fund Board / Universal Service Agency	Subsidy through competitive bidding. The fund's initial focus is on community communications centres and mobile network expansion.
Pakistan	Operational	1.5% levy on the revenues of all operators	Universal Service Fund Company Limited	The Fund awarded a pilot project to Telenor in October 2007 that aims to provide telecom-related services in Malakand Division.
Paraguay	Operational	20% of operators' corporate taxes	Comision Nacional de Telecomunicaciones – regulatory agency	Subsidy is awarded to the lowest bidder. Projects supported include payphones, Internet access for schools and a nation-wide 911 emergency calling system.
Peru	Operational	1% of all telecom and CATV operators' gross revenues	OSIPTEL, regulatory agency	Subsidy goes to lowest bidder.
Philippines	Planned		Government, Department of Transportation & Communications	
Poland	Operational	Levy not greater than 1% of operator's net revenues for operators earning over EUR 2 million	URTiP, regulatory agency	Funds are paid to operators who are required to meet universal service requirements within their operating territory. Subsidy is paid based on the net cost of service provision.
Romania	Operational	0.5% of revenue from all providers of public electronic communications networks with revenue of at least EUR 3 million	ANRCTI, regulatory agency	Subsidy is awarded through least cost tender. From December 2004 to December 2006, the regulator held tenders for the installation of telecentres in 331 localities. The telecentres in 124 of these localities were functioning by the end of 2006; the rest were to be commissioned by mid-2007.

Country	Fund Status	Funding Source	Fund Administrator	Disbursement of Funds
Russia	Operational	1.2% of revenue from all fixed and mobile operators	Federal Communication Agency	Funds distributed through competitive tender process. Initially, payphones in unserved regions are the fund's focus. As of August 2007, 42,000 payphones and 12,000 public Internet access points have been installed across Russia as part of the universal service program.
Rwanda	Operational	2% levy on revenue of all operators	Rwanda Utilities Regulatory Agency, regulatory agency	
South Africa	Operational	0.2% of all operators' revenues	Universal Service and Access Agency of South Africa, specially created unit to manage fund	Originally, subsidies were mainly awarded to telecentre projects and areas of greatest need. The Fund now finances a range of ICT projects in under-served areas. The types of ICT projects funded are: telecentres, E-school Cyberlabs, ICT Telecontainers and Community Digital Hubs.
Sri Lanka	Planned	Levy on outgoing and incoming international calls	Fund administrator to be set up by the Ministry of Finance	
Swaziland	Operational	0.1% levy on all operators' revenues	Swaziland Posts & Telecommunications Corporation, regulatory agency	
Tanzania	Planned	Annual contributions by any electronic communications or postal licensee to the Universal Access / Service Fund not to exceed 4.5% of revenue		

Country	Fund Status	Funding Source	Fund Administrator	Disbursement of Funds
Thailand	Operational	4.0% levy on operators' revenues	National Telecommunications Commission, regulatory agency	Competitive bidding
Uganda	Operational	1% levy on all sector participants including telecom operators, the postal service, couriers, ISPs	Uganda Communications Commission, regulatory agency	Smart subsidies distributed through competitive bidding (lowest bid wins)
Ukraine	Planned	2% levy on all operators' revenues		
Venezuela	Operational	1% levy on all operators' revenues	A board consisting of the head of the telecom regulator, representatives from three ministries and a representative of contributing operators	Funds are awarded through minimum subsidy auctions. The fund awarded two projects in 2005 and three in 2006. The projects were for the installation of telecentres, and connecting agricultural estates and government offices.
Vietnam	Operational	3% of fixed line operators' revenues and 5% of mobile operators' revenues	Ministry of Post and Telematics	The Vietnam Public Utility Telecommunications Service Fund (VTF) will collect around US\$ 101.2 million in 2007 from six local telecom operators. Of this, US\$ 68.7 million will subsidize end-user charges and installation costs for 110,000 new fixed lines and 5,000 Internet accounts. VTF also intends to develop 3,000 new public telecom service sites. 90% of communes in beneficiary areas are to have public telephones and 30% of communes are to have internet access. VTF also gave soft loans of US\$ 20 million to operators to execute public telecom projects in 2007.

OVERVIEW OF SELECTED UNIVERSAL ACCESS FUNDS

Country:		PERU
Name of fund / program:	Fondo de Inversión en Telecomunicaciones (FITEL)	
Web address:	http://www.fitel.gob.pe/	
Year established:	1993	
Fund description:	<p>FITEL was established in 1993 to finance new public access telephones (pay phones) in rural areas.</p> <p>To realise its universal access policy, the government issued the FITEL Regulation in September 1998, which sets out the administrative procedures for FITEL's operations. The regulation also establishes the criteria for selecting the localities that will receive funding for service expansion. Priority localities include:</p> <ul style="list-style-type: none"> • rural towns (with a population of more than 400 inhabitants and less than 3,000 inhabitants); • district capitals; and • towns in high social interest areas (as determined by the government). <p>Under the regulation, FITEL is required to create a list of projects that are eligible for subsidies, by determining which projects have the greatest social benefit. FITEL cannot allocate funds to areas that already have access to telecommunications services. Funds are allocated through a competitive bidding process for the projects.</p>	
Fund administration:	OSIPTEL, the regulatory agency	
Source of funds:	OSIPTEL collects 1% of gross revenues from the telecommunications sector to finance FITEL. Although collection began in 1994, the first project was not funded until 1998. In November 2006, the fund reportedly had US\$ 143 million in resources, but had allocated only 32% because of bureaucratic inefficiency.	
Projects / services supported:	<p>Public access centres (pay phones): access centres may now include internet access. Peru has defined universal access as access to a set of essential services that includes voice telephony, fax and data, and free emergency calls.</p> <p>By January 2005, over 6,500 rural villages had at least one public telephone financed through FITEL. In addition to telephony, FITEL also funds internet and information system projects. In 2007 FITEL funded connectivity services in 3,010 communities, providing internet service in 2,840 locations and telephony in 1,535. Of the US\$ 18.6 million available subsidy, US\$ 15.1 was awarded to the winning operators.</p>	

Country:		CHILE
Name of fund / program:	Fondo de Desarrollo de las Telecomunicaciones (FDT)	
Web address:	http://www.subtel.cl/prontus_subtel/site/artic/20061229/pags/20061229173735.html	
Year established:	1994	
Fund description:	<p>Fondo de Desarrollo de Telecomunicaciones (FDT) was established by a 1994 amendment to the telecommunications law of 1982. All operators were eligible to receive funds, which subsidise the installation of public telephones in the marginal, low-income rural and urban areas.</p> <p>The original goal for the Fund was to provide public telephone service to about 6,000 unserved localities – a target that was met during the period from 1995-1999.</p> <p>Once a year, the regulator SUBTEL collected requests for payphones from regional and local authorities, neighbourhood associations, telecom operators and the general public. The requests were then grouped into projects, each typically consisting of 20-50 localities. Projects considered desirable (as determined by a detailed cost-benefit analysis) for the general economy, but unlikely to be commercially viable on their own, were added to the pool of eligible projects. Subsidies were then distributed through competitive bidding. The bid evaluation emphasised the lowest proposed subsidy for a particular project combined with a commitment to short delivery time.</p> <p>For an evaluation of FDT, refer to Bjorn Wellenius' paper, "Closing the Rural Communications Access Gap: Chile 1995-2002" available on the Internet at the World Bank's website here.</p>	
Fund administration:	SUBTEL, the regulatory agency	
Source of funds:	The Fund is financed from the Chilean national government budget.	
Projects / services supported:	<p>After the Fund achieved Chile's social telephony objectives, the government initially redefined the Fund to support telecentre projects. Projects and programs financed by the fund since 2002 include:</p> <ul style="list-style-type: none"> • In 2002, the telecentre program aimed to establish telecentres in all 341 municipalities by the end of 2006; • In 2004, 667 rural schools were selected to receive subsidized Internet access; another 1,000 rural localities are being considered in 2007; • In December 2006, Subtel announced plans to invest US\$ 6.63 million in the implementation of internet centres in 200 neighbourhoods selected by the local housing ministry. Subtel plans to launch a tender to select an internet service provider; • In 2007, the fund is financing a fibre optic backbone extension project, which includes funding for a WiMAX installation; and • In 2007, the fund is supporting the extension of mobile service into unserved areas in Torres del Paine National Park. 	

Country:		COLOMBIA
Name of fund / program:	Compartel Program	
Web address:	www.compartel.gov.co	
Year established:	1999	
Fund description:	<p>The Compartel Program aims to afford coverage to every municipality in Colombia through the provision of community use telephones and Internet community access centres.</p> <p>Compartel auctions social telephony projects across various regions of the country. The Program guarantees the operation and maintenance of the telephones for 10 years. Winning bidders are selected based on meeting technical requirements with the smallest subsidy requested.</p>	
Fund administration:	Ministry of Communications	
Source of funds:	<p>The Fondo de Comunicaciones (FCM) is required to invest in social telephone programs in low income rural and urban areas. Funds from the FCM are used to finance the Compartel program. The FCM is financed by all fixed and mobile operators contributing 5% of gross revenues of national and international long distance and mobile services, and a percentage of net revenues from fixed telephone, VAS and trunking.</p>	
Projects / services supported:	<p>Compartel supports community telephones, community Internet access centres and Internet access at government facilities (schools, hospitals, city halls, military).</p> <p>For Phase 1 in 1999, Gilat subsidiary Global Village Telecom won a contract and has since finished installing 6,745 telephones and 670 Internet access points.</p> <p>The Communications Ministry held auctions for the next stage of the Compartel rural telephony program in 2002. This latest program was a modified version of the Compartel Phase 2 social telephony project that the government tried to auction in December 2000. The 2002 Compartel program provided for the installation and operation of 3,000 rural telephones in all departments over a 6-year period, as well as 500 Internet, long-distance and fax centres in the town halls of communities with less than 2,000 inhabitants. Gilat won the contracts for both the rural telephone and the telecentre components.</p> <p>In 2004-2005, the government awarded US\$ 102.7 million for an updated, re-tender of the phase two Compartel program. The program involved providing broadband connectivity for public institutions, including 3,000 public schools, 624 city halls, 120 public hospitals and 30 military facilities.</p> <p>In August 2007 Compartel allocated US\$ 17.6 million to projects designed to expand broadband access and US\$ 6.0 million to replace older networks in rural and underserved urban areas. Compartel received over 500 project proposals. Operators awarded subsidy for broadband projects are: Colombia Telecommunications, Internet via Colombia and Regional Telecommunications Company of Valle del Cauca. Operators responsible for upgrading telephone networks are: Colombia Telecommunications, Regional Telecommunications Company of Valle del Cauca and Edatel.</p>	

Country: SOUTH AFRICA	
Name of fund / program:	Universal Service Fund
Web address:	www.usa.org.za (site under construction, December 2007)
Year established:	1997
Fund description:	<p>The Universal Service Fund was established by the Telecommunications Act of 1996. Under the Act, the Fund is authorised to:</p> <ul style="list-style-type: none"> • provide direct subsidies to needy people to defray the higher cost of telecommunications services due to rate rebalancing; and • subsidise the cost of network expansion to underserved areas by operators, incumbent included, whose licenses impose such obligations.
Fund administration:	The Fund is jointly administered by the Department of Communications, and the Universal Service and Access Agency of South Africa (USAASA). The USAASA is a statutory body established (originally named the Universal Service Agency) by the Telecommunications Act of 1996 to promote universal telephone access for all.
Source of funds:	All telecommunications licensees must pay annual contributions to the Fund. In the most recent financial year, operators licensed to provide public switched telephone services (including access, local and long distance services) and mobile cellular services were required to contribute 0.2% of their annual revenue from the provision of the corresponding telecommunications services. Value-added network services and private network licensees were also required to contribute to the Fund. The 2001 Telecommunications Amendment Bill limits annual contributions to the fund to 0.5% of revenue. At current levels, annual contributions are in the US\$ 18.4 – 22.1 million range.
Projects / services supported:	<p>The development of telecentres was initially given high priority by the Fund. The USAASA worked with communities and donors to establish telecentres. The Agency especially encouraged NGO's, entrepreneurs, women and disabled people in rural areas to operate telecentres. The Fund provided financing to set-up 133 telecentres. However, the majority operated extremely sub-optimally, as shown by a sample of 47 telecentres done in 2002 where only 23% actually offered telephone service.</p> <p>After telecentres, the fund's focus shifted to assisting the recipients of Under-served Area Licenses (USALs). As the name implies, these operators are organisations licensed to provide voice and data services in under-served rural districts. Each licensee for the 27 identified areas was to receive a US\$ 735,000 subsidy from the Universal Service Fund spread over 3 years. Seven companies have been awarded USALs. The findings of a 2006 report commissioned by the USAASA into the sustainability of the USALs has confirmed that the current operating environment makes it extremely difficult for USALs to survive. In May 2007, the government directed ICASA to merge the USALs and issue one Provincial Under-Served Area Network Operator (PUSANO) license where there is more than one license in a province.</p> <p>The fund also subsidizes E-school Cyberlabs, ICT Telecontainers and Community Digital Hubs.</p>

Country:		MALAYSIA
Name of fund / program:	Universal Service Provision Fund	
Web address:	http://www.mcmc.gov.my/mcmc/what_we_do/usp/usp.asp	
Year established:	1998	
Fund description:	<p>The Universal Service Provision (USP) Fund was established in 1998. When the Fund was created, incumbent Telekom Malaysia was the sole universal service obligation (USO) operator (the only operator with access to the Fund) for an interim period of 2 years with costs recovered from a USO charge on all interconnecting traffic. The interim period was extended to January 1, 2002 to enable the Malaysian Communications and Multimedia Commission (MCMC) to finalize the new policy framework.</p> <p>Contributions by all service providers commenced at the end of 2002. Each fixed and mobile operator is required to contribute to the USO fund in proportion to its share of network revenues, which is weighted by the types of services offered.</p> <p>The Commission's system for universal service provision affords access to both basic telephony services and Internet services. The system also defines objectives for both collective access and individual access to services. The funds can be used to provide infrastructure and services in areas with penetration levels of 20% below national averages.</p>	
Fund administration:	Malaysian Communications and Multimedia Commission (MCMC), the regulatory agency	
Source of funds:	Fixed and mobile licensees annually contribute 6% of their weighted annual revenue from designated services (including local, national long-distance, international long distance, mobile, IP telephony) to the Fund. The 6% weighted revenue is roughly equivalent to 2% of gross revenues. On average, the fund collects in the range of US\$ 178 – 207 million annually. A November 2007 estimate put USP resources at around US\$ 592 million.	
Projects / services supported:	<p>Service supported by the fund include basic telephony, Internet access, public payphones in rural areas and broadband.</p> <p>At a later point, universal service will not be confined only to the telecommunications industry, but extended to broadcasting and information technology. As of April 2007, 40,000 individual phone lines and 2,500 payphones had been installed in under-served areas financed by the fund. The fund has done four rounds of funding, with a fifth round in the planning stages.</p> <p>Phase 1 started in 2002. The fund financed service and maintenance for 5 years at 220 schools – 110 in Sarawak and 110 in Sabah. Phase 2 started in 2003 and provided funding for 50 rural clinics rural clinics and 176 rural libraries. Phase 3 commenced in 2004. Projects to extend service to 309 rural clinics and 187 rural libraries received funding. Phase 4 started in 2005 and funded the connection of 147 rural and district libraries. All four phases incorporated funding for training.</p> <p>The government has given approval for MCMC to use the USP Fund for rolling out broadband services in underserved areas and communities. Work is currently being conducted by MCMC to amend the USP framework to better address the goals laid out in the National Broadband Plan.</p>	

Country: UGANDA	
Name of fund / program:	Rural Communications Development Fund (RCDF)
Web address:	http://www.ucc.co.ug/rcdf/default.php
Year established:	2003
Fund description:	The RCDF supports the development of a commercially viable communications infrastructure in rural Uganda in order to promote social, economic and regional equity in the deployment of telephone, Internet and postal services. To utilise the resources of the Fund efficiently, subsidies are awarded through a competitive process and only available in geographical areas and to services that are in definite need of assistance. Specifically, funds are only available to areas where service provision is not feasible or unlikely to be provided by operators within the next 1-2 years without subsidy.
Fund administration:	The Uganda Communications Commission, the regulatory agency.
Source of funds:	All sector participants (including telecom operators, the postal service, couriers, ISPs) are required to contribute 1% of revenues to the RCDF. In December 2006, MTN Uganda paid the RCDF US\$ 1.18 million, UTL paid US\$ 650,000 and Celtel paid US\$ 215,000. By 2007, the fund had collected over US\$ 12 million, including World Bank funding of US\$ 5.0 million.
Projects / services supported:	<p>The RCDF is financing a selection of the following:</p> <ul style="list-style-type: none"> • Telephony in all 154 sub-counties not served by the major operators; • Special equipment that would extend the reach/coverage of existing telecommunications networks into rural and remote areas; • Internet points of presence and wireless access systems at district centres; • A national Internet exchange point (IXP) to facilitate inter-ISP traffic; • 'Vanguard' Internet access projects for schools, NGOs, small-scale commercial telecentres and Internet cafes at sub-district level; and • Pilot content creation projects in telephony and Internet areas. <p>The 154 underserved sub counties of Uganda have been divided into 3 universal access areas as follows:</p> <ul style="list-style-type: none"> • Universal Access area A comprises 44 underserved sub counties in the East and North-East. Network construction in these sub counties is ongoing and 390 payphones are expected to be installed by the end of 2007; • Universal Access area B includes 50 underserved sub counties in the Central and North-Central regions. 521 public payphones will be deployed; • Universal Access area C consists of 60 underserved sub counties in the West and North-West. Network construction is ongoing and 618 payphones are expected to be completed by the end of 2007. <p>The total project costs for all three regions under the telephony component was estimated at around US\$ 11.7 million and the total subsidy awarded was US\$ 5.2 million. The subsidy had originally been estimated at US\$ 8.6 million. In tendering for 32 internet POPs, MTN was awarded a US\$ 685,000 subsidy for 22 POPs and UTL was awarded 10 POPs, for a subsidy of US\$ 295,000. The two bids combined amounted to about 73% of the maximum subsidy available for Internet POPs.</p>

Country:		NEPAL
Name of fund / program:	Rural Telecommunications Development Fund (RTDF)	
Web address:	http://www.nta.gov.np/mis_report.html	
Year established:	2000	
Fund description:	<p>The main telecommunications objective of the government of Nepal is to provide at least two telephones in each Village Development Centre (VDC) in the country. A Rural Telecommunications Special (RTS) Program has been initiated to offer subsidies for rural service rollout. This program uses funds provided by the World Bank, and not funds from the RTDF. The regulator, the NTA, intends to fund rural projects using subsidies from the RTDF, but has not yet done so. In the interim, funds from the RTDF are being provided to Nepal Telecom (also known as Nepal Doorsanchar Company Limited or NDCL) to fulfill their universal service obligation. NDCL offers service in 2,813 of Nepal's 3,914 VDCs.</p>	
Fund administration:	Nepal Telecommunications Authority (NTA), the regulatory agency	
Source of funds:	A 2% charge is levied on the revenues of the incumbent operator, ISPs and mobile operators. As of July 2007, the fund had collected US\$ 250,000 for the current fiscal year.	
Projects / services supported:	<p>Until and including 2009, the minimum objective will be to extend coverage of voice telephone service to all Village Development Committees. Not less than 90% of funds are to be used for universal telephone access and not more than 10% for other relevant telecommunications services such as Internet. Funds for subsidising universal access are only to be applied to subsidise the provision of voice telephony in areas where there is no coverage.</p> <p>In 2000, a tender was issued to offer a competitive rural service subsidy for one operator licence in Eastern Nepal. Although a license was awarded and a subsidy agreed in 2001, the procedure was halted due to the political turmoil in the country, which caused the winning bidder to withdraw. The NTA re-tendered this license in 2003 through the World Bank funded RTS program. STM Telecom Sanchar Pvt. Ltd., a VSAT operator, has now installed hub stations at Kathmandu and Biratnagar, and, as of July 2007, had installed 1,793 PCOs using 809 VSAT terminals in 599 VDCs in the Eastern Development Region.</p>	

Country: ROMANIA	
Name of fund / program:	Universal Service Fund
Web address:	http://www.anrcti.ro/DesktopDefault.aspx?tabid=898
Year established:	2004
Fund description:	The resources of the Universal Service Fund will be allocated on the following basis: 45% of the total funds for financing telecentres, 35% of the total funds for subsidizing low income families to enable access to the fixed network and 20% of the total funds for financing public phones and providing accessible directory services.
Fund administration:	Romania National Regulatory Authority for Communications and Information Technology (ANRC), the regulatory agency
Source of funds:	ANRC collects a levy from providers of public electronic communications networks and from the providers of publicly available telephone services, with revenue for the previous year of EUR 3 million or more. For 2004, the levy was 0.8% of revenue minus the revenues obtained from the interconnection and roaming services provided on the wholesale market to mobile operators located outside Romania for their users in Romania. For 2005 – 2006, the levy was reduced to 0.5% of revenue. The annual amount was not to exceed EUR 2 million for 2005 and EUR 3 million for 2006, for each provider. Starting in 2006, contributing operators may request that only revenues obtained exclusively from the provision of electronic communications networks or services should be considered, instead of the gross revenues.
Projects / services supported:	<p>The fund finances the national telecentres programme. Universal service providers designated for each village by a public tender procedure install telecentres with phone, fax and Internet services. Funds are disbursed through public tenders organised for several villages at a time. The minimum duration for the functioning of the telecentres is three years. For each village, the tender starts from a level of subsidy estimated as being sufficient to cover the net cost. Any provider of public electronic communications networks and publicly available telephone services is allowed to bid, irrespective of the technology used. The provider submitting the lowest bid for a subsidy wins the tender and the winning bid determines the value of the net cost of universal service.</p> <p>The resources of the universal service fund for 2004 were EUR 14.3 million. For 2005, the amount collected was EUR 19.5 million, of which EUR 14 million was allotted to the installation of telecentres and the rest was used for granting subsidies to low-income families.</p> <p>Between December 2004 and December 2006, ANRC organised tenders for the installation of telecentres in 331 localities. In February 2007, ANRC initiated a pilot auction to provide public pay phones in 50 rural localities with fewer than 400 inhabitants. No details are available on the results of this auction. In September 2007, three operators won tenders to provide telecentres in 130 rural localities.</p>

Country: MONGOLIA	
Name of fund / program:	Universal Service Obligation Fund (USOF)
Web address:	http://www.crc.gov.mn (website unavailable, December 2007)
Year established:	2006
Fund description:	The USOF's objective is the establishment of communications centres at each soum, providing a range of services including telecommunications and Internet.
Fund administration:	Communications Regulatory Commission (CRC), the regulatory agency
Source of funds:	2.0% levy on the taxable revenues of all operators
Projects / services supported:	<p>The USOF plans to support a range of initiatives aimed at extending access to telephony and Internet services, including:</p> <ul style="list-style-type: none"> • Satellite-based public access telephony service for the herder community – one terminal would be provided for each group of approximately 100-150 herder families, located at or in the vicinity of Bagh headquarters. The project would provide a total of 1,500 terminals at a cost of US\$ 6.0 – 8.0 million. • Competitive voice and data services through wireless access points – the service would be provided to residents and businesses in commercially viable soum centres, average 100 lines per soum. Up to 200 systems would be provided at a cost of US\$ 4.0 – 8.0 million. • Internet public access centers (PAC) – one PAC per soum would be built, located at a school, bank, telecom service provider, small business or other publicly available locale, including initial training and support. The project would finance up to 200 PACs at a cost of US\$ 3.0 million. • Internet in schools – Internet support would be provided for 3 years in vanguard schools in soum centres. The project would finance up to 200 schools at a cost of US\$ 3.0 million. • Public mobile (e.g., GSM or CDMA) service – service would be available to residents within line of sight of one base station located at or in the vicinity of the soum centre. A total of 30 base stations would be installed at a cost of US\$ 2.0 – 3.0. <p>The total cost of the above initiatives is US\$ 18.0 – 25.0 million.</p>

Country: MOZAMBIQUE	
Name of fund / program:	Fundo do Serviço de Acesso Universal (FSAU)
Web address:	http://www.incm.gov.mz/sevicouniversal2.html
Year established:	2004
Fund description:	The fund's objectives are to promote investment in the provision of service in rural areas at a fair and affordable price. The short-term targets for telephony are to enable the establishment of a publicly accessible telephone within all localities with more than 1,000 inhabitants as well as within 5km of every rural inhabitant. The short term targets for Internet services are to extend an Internet point of presence – and public access to the Internet through a telecentre – to all District Centres.
Fund administration:	Instituto Nacional das Comunicações de Moçambique (INCM), the regulatory agency
Source of funds:	1% levy on the gross revenues of all operators
Projects / services supported:	<p>The UA strategy is commencing with two pilot projects:</p> <ul style="list-style-type: none"> • A telephony pilot project to extend transmission, access networks and UA services to one zone of the country, which will cover five districts of the province of Zambézia and three districts of the province of Nampula, and; • An Internet service pilot project to provide an advanced level of service to four District Centres in the provinces of Zambézia and Nampula through the provision of Internet POPs, with a minimum service radius of 5 km from the District Centre. <p>A bidding process for the UA pilot projects was launched in February 2007. The bid process was unsuccessful. Bids failed to satisfy the requirements for qualification. It also had limited participation. Several aspects of the pilots have been modified in order to increase participation in the re-bidding process in late 2007.</p> <p>The winning bidder for the telephony pilot project will be required to provide at least one public telephone for every 2,500 inhabitants. A total of 450 public access telephones must be installed. Private telephony services will be provided to at least 60% of people within the service areas. This can be achieved either by providing access to private telephony service to 60% of the population of each district or by showing that 60% of a district's surface area is covered by a wireless signal.</p> <p>The District Centres for the Internet pilot project have been selected to represent examples of areas where demand for Internet service is believed to be relatively strong, as well as areas where demand is believed to be lower but where the potential should be tested. The pilot project consists of the installation of four Internet points of presence (POPs) in the four District Centres. Delivery of services will include at least one Public Internet Access Centre per District Centre. Private Internet Access Service will also be made available on a fee-for-service basis to interested subscribers living within the Central Business District of each District Centre.</p>