



**UNITED NATIONS**

**Task Force on Financial Mechanisms for ICTD**

## **Issues Paper**

*Launch Meeting  
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The World Summit on Information Society (WSIS), the first phase of which was concluded in Geneva in 2003, recommended that “while all existing financial mechanisms should be fully exploited to make available the benefits of information and communication technologies, a thorough review of their adequacy in meeting the challenges of ICT for development should be completed by the end of December 2004. This review shall be conducted by a Task Force under the auspices of the Secretary-General of the United Nations and submitted for consideration to the second phase of this summit.” UNDP has been asked by the Secretary-General to lead the Task Force, in collaboration with key partners.

*The following issues paper does not necessarily reflect the views of UNDP, which should not be held responsible for its contents.*

*The issues paper is being distributed in connection with the first meeting of the Task Force on Financial Mechanisms. Its purpose is to present an initial overview of the main issues to be addressed by the Task Force, to stimulate discussion and debate about the research, analysis, findings, and recommendations to be considered. All of the ideas, perspectives, and issues raised in this paper remain open to full review and revision through the Task Force’s deliberations.*

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## **1. Introduction: Task Force Purpose and Objectives**

Over the past decade or so, the dramatic revolutions in Information and Communication Technologies have deeply transformed the realms of international commerce, social interaction, political relations, and also development. Today, the role of electronic communications as a tool and conduit for promoting human development and opportunity is increasingly indispensable, and the scope and impact of initiatives demonstrating the value of ICT to achieving key global aspirations such as the U.N.'s Millennium Development Goals (MDGs) are multiplying daily.

However, the promise of ICT for development remains far greater than the practice to date. Despite immense progress in expanding the reach of basic and new ICT services and applications in developing countries, the majority of the world's population still does not have access to telephone service, and computers, the Internet, and even broadcasting signals are virtually unknown to billions. The challenges raised by these continuing gaps in access to ICTs and to the opportunities that they can foster, and particularly the overriding questions of *financing* ICT for development, are a key focus of the development community, and is a major concern of the World Summit on the Information Society. In this context, the WSIS-Geneva recommended that a Task Force be setup to study the issues surrounding existing ICT financial mechanisms, and consider whether recommendations for new strategic approaches need to be considered.

### ➤ ***Key Questions & Issues:***

The basic issues to be addressed by the Task Force can be summed up in one overriding question:

- How can financial resources be most effectively mobilized to help harness the potential of ICT to promote human development throughout the world?

For research and analytical purposes, this question can be broken down into these component questions:

- What are the most pressing needs and opportunities for deploying ICT in the developing world, in the context of basic development objectives?
- How effective have existing, traditional financial mechanisms been in meeting ICT development goals, and how can such mechanisms be enhanced?
- What forms of new, innovative ICT development financial mechanisms should be considered, and what should be their role?

The sections follow present background, perspective, ideas, and discussion questions relating to these key topics.

## **2. ICT and Development**

To understand and explore the issues surrounding financial mechanisms and strategies, we must first address the fundamental question of the role of ICT in development. Although the WSIS process in general is embracing this topic from a variety of perspectives, it is important for this study to evaluate the options, priorities, and challenges involved with ICT for development activities as a foundation for examining effective approaches to financing them. This analysis considers two overriding issues, which will be examined in detail in this section of the Report:

➤ ***Key Questions & Issues:***

- What are the most important priorities and strategies for ICT deployment and utilization in support of global development objectives? What is most needed, and what works best?
- How can the development impact of ICT be enhanced and measured? What are the most current trends in the use of ICT for development? How are we doing so far in realizing impact and sustainability?

The discussion sections that follow look into these issues from several related perspectives. The focus is on identifying both the theoretical and empirical basis for ICT development strategies, as well as real-world “promising practices” that can help inform effective choices.

### ***2.1 Analytical Framework: Enhancing Network-Driven Development***

The objectives of deploying ICT in the service of economic and social development can be pursued from a variety of strategic directions. One of the key challenges to defining the most effective strategies is to consider the fundamental *needs* and *opportunities* of the target country or communities, and especially to identify *gaps* in the range of resources available. As a general analytical framework, we can specify the following key components of any overall ICT for development strategy, whether at the local, regional, or national level:

- Policy: Overall government policy, strategy, regulation, enabling environment;
- Backbone infrastructure: National transmission network capacity and interconnectivity;
- Access: Local network connections to backbone capacity and related facilities, equipment;
- Applications, content: Software interfaces, services, information programs, needed to utilize ICTs effectively;
- Capacity building: Skills, training, organizational and human resources to support both delivery and utilization of ICT capabilities throughout society

The role assigned to ICT varies as does its integration not only in development programmes and initiatives but also in the larger vision for economic and social development and transformation. Many approaches to deploying ICT for development concentrate on utilizing

technology to deliver specific anticipated results to target communities or beneficiaries. These may include national and international aid projects that are primarily focused upon addressing development objectives – hunger, poverty reduction, health care, rehabilitation, etc. – for which ICT resources represent an input *component* but not necessarily the main tool.

There are other examples, however, in which the development goals are more directly linked to an ICT-based strategy. These can include, for example, Distance Learning projects, electronic commerce incubator initiatives, “e-health” programs, and others. Throughout the developing world, there is a growing recognition that opportunities for growth hinge greatly on shifting a substantial segment of economic activity toward “information economy” oriented businesses and entrepreneurship and ensuring that governments also embrace the opportunities provided by ICT for cost effective delivery of their services.

A broader philosophy of ICTs’ role in development looks beyond specific technology *applications* toward a generalized embrace of what might be called “*Network-Driven Development*”. The key premise of this philosophy is that communication and networking, in all forms, inherently and inevitably catalyze change and promote development, in a wealth of localized, complementary, and often unpredictable ways. Further, it assumes that the most effective and sustainable initiatives will ultimately be those that are primarily conceived and implemented within communities and with the ownership of organizations and countries themselves, based on their inherent understanding of the environment, constraints, and resources confronting them. Thus, the driving motivations for promoting ICT access need not necessarily be tied to specific, predetermined end products or information content that ICT can deliver to populations in need, but are more concerned with enabling diversified and unhindered communication for its own sake. Under this approach, end users are seen as both the recipients and *originators* of the knowledge that is most valuable to them.

Many development oriented strategies and initiatives have implicitly embraced the principles of *network-driven development*, in that they focus mainly on promoting general access to technologies and services, without tying that access to specific, quantifiable outcomes, beyond the network expansion itself. That is, projects may set a goal of increasing telephone or computer penetration in certain locations, and their success may be measured in terms of target numbers of facilities that are installed, but it is far more difficult to evaluate the immediate impacts of such ICT growth on the more fundamental development goals of poverty reduction, education, social equity, health, etc. Such effects are indirect and long term in nature, and they must combine with activities in other areas – activities which make use of ICTs, and of the knowledge that they facilitate – to achieve concrete, measurable results. Yet there is reason to believe that a strategic focus on providing broad-based information and communication resources, while reinforcing the skills, organizational capacity, and supporting policies needed to employ those resources effectively and the local and national levels, may yield the greatest sustained benefits in the long run. To the extent this view is validated, it argues for highlighting ICT focused inputs throughout the development strategies of countries, donors, and international institutions.

Many questions remain, of course, including which technologies and services are most valuable to local communities, under what conditions. And despite the indirect nature of many ICT

benefits, there are important reasons to refine and expand the methods for attempting to measure access to and impacts of ICTs in the development context.

➤ ***Key Questions & Issues:***

- Which ICT-based development programs and projects have been most successful or promising in terms of yielding tangible, sustainable development benefits for communities?
- How should the development impacts of ICT programs, or ICT components of broader programs, be measured and compared? What are some criteria and benchmarks?
- What are the barriers or challenges to “mainstreaming” ICT for development within the poverty reduction and other strategies of governments and international support institutions? How can ICT resources be integrated with other infrastructure and assistance objectives?

## ***2.2 Infrastructure vs. Access***

Whatever approach is taken to promoting the role of ICT in development, there are fundamental resource requirements for these technologies to be available and useful. Much of the discussion of ICT investment projects has focused on the central need for “infrastructure” deployment. However, the concept of ICT infrastructure must be more clearly defined in the context of the changing technological and market landscape.

Every network, especially telecommunications, is built around a core backbone and distribution Infrastructure, and links to end users via Access connections. The economics of such networks – regardless of the technologies utilized – dictate that the bulk capacity backbone facilities are substantially more complex and costly to install at the outset, but exhibit very high economies of scale, and hence rapidly decreasing per-unit costs as the network expands. Conversely it becomes increasingly *more* costly to expand the reach of access connections to a backbone network, as those access links extend farther away from population and traffic concentration centers.

Thus, the pattern of telecommunications network growth in virtually every country has seen core networks first built in major urban areas, including both the basic backbone switching and transport components, and relatively short-haul, high density local access lines. Subsequent stages involve extending the backbone transport network along major inter-urban routes, providing access connections within secondary cities and to certain strategically located intermediate destinations, while .199m

generally did not fundamentally alter the basic economic challenge of providing network access to non-core locations, particularly rural areas, where large proportions of the population in developing countries live, and where the need for development resources is the greatest. In the lowest income countries in particular, telephone penetration outside of the largest cities typically remains around 1-2% or below, while it may reach 5-10% in urban areas.

The explosive arrival of mobile telephone services in the developing world in recent years has had a dramatic impact upon levels of investment, subscribership, and also infrastructure. There are now over 400-million mobile telephone subscribers in the 100 or so low and lower-middle income countries, compared with barely 8-million in 1995 and 70-million as recently as 1999. In many of these countries, the total numbers of mobile phone users already exceed the total number of fixed telephone lines, after only a few years in service. This is especially true in lower income countries, where slow moving fixed-line penetration was quickly surpassed by the dynamic new mobile market. By 2003, African countries averaged some 6.0 mobile lines per 100 inhabitants, as compared with only 2.9 fixed lines. Moreover, the mobility and wireless signal coverage of mobile technology allows users to access the service in many more remote locations than are reached by the wireline networks; indeed, in numerous mid-level developing countries, such as in Eastern Europe and parts of Asia and the Middle East, mobile telephone signals blanket nearly all entire populated territory. Nevertheless, these favorable developments have not necessarily overcome the basic problem of rural telephone access. Signal coverage in rural areas is not sufficient to ensure that citizens with minimal incomes can afford to purchase mobile phones and pay for usage. More important, "access" to mobile telephone service in remote regions depends upon a variety of supporting conditions beyond the wireless backbone transmission network: electrical power for one, as well as commercial and technical support services, and appropriate financial systems, among other factors. In the absence of these components, access to mobile telephony remains largely dominated by the same base of urban, higher income user groups as traditional telephone service.

Meanwhile, as computers and the Internet have revolutionized worldwide communication, information, and commerce, increasing attention has been focused on the newest dimensions of the digital divide: the gap between those who are on-line and those who have virtually no foothold in cyberspace. This gap is far wider even than the telephone access gap: there were approximately 5-million Internet subscribers in the least developed countries as of 2002, compared with over 215-million in the most advanced economies. There are widespread concerns that the Internet may actually be deepening the disparities between information "haves" and "have-nots". Providing Internet access in remote areas is significantly more challenging than establishing telephone service, not only due to the technical demands of data transmission networks, but because of the need for computers, software, Internet Service Provider services, and a host of support and training resources. New wireless data technologies may begin to cut into these disadvantages, but there remain serious impediments to achieving widespread rural access to Internet and other data and information services in developing countries.

In response to these conditions there has been a flood of access related programs and pilot projects throughout the developing world in recent years. Governments, donor agencies, NGOs, and others have experimented with village payphones, rural cellular service, public

phone shops, and multipurpose telecenters or community multimedia centers, as vehicles to deliver communications capabilities to un-served populations. The key research and analytical questions to consider must focus on which models may be most effective and sustainable in different environments.

➤ ***Key Questions & Issues:***

- Among the many pilot projects and/or access initiatives, what approaches have proven most promising, and what are the key challenges?
- What are the prospects for new access technologies to help reduce the gaps and more rapidly expand local network facilities, including data and broadband access?
- Which types of services and applications are most important for development goals (telephone, Internet, multimedia, etc.)? What should be the priorities for local access networks?

***Capacity vs. Knowledge***

The ultimate benefits attainable through ICT both depend upon and reinforce the degree of personal and societal Capacity and Knowledge that are developed together with the technologies themselves. We can define Capacity, in this context, as the technical resources and skills, institutional arrangements, and individual opportunities required to utilize available technologies for productive and beneficial purposes. Knowledge, on the other hand, represents internalized and applied information, awareness, abilities, and accumulated wisdom (individual and collective). We may state that a citizen or a community cannot benefit from ICT unless it has both access to the technologies and the capacity to take advantage of them, but that knowledge is ultimately the resource such access and capacity are seeking to harness.

***Capacity Building***

Capacity is often identified as a critical element in determining the success of ICTD initiatives, but development of capacities – particularly those that go beyond more ICT skills and sector development – are often under-emphasized in national strategies and financing of programmes. These sets of capacities are critical from the point of view of *scale and pace of implementation*. Ideally, ICT-based development initiatives should focus on a full range of both capacity and knowledge building objectives. But in general, there is a distinct hierarchy implied, which suggests that basic capacity-building measures are often a pre-requisite, especially in the case of establishing sustainable citizen focused and/or consumer-driven ICT initiatives. These include a combination of both basic technical resources and skills which end users need to take advantage of the technologies, as well as organizational and government level programs to enhance society-wide options for integrating ICT with national economic progress. At the national level, capacity building efforts needs focus on issues of policy and regulation, better implementation of ICTs within public and private management systems and development sectors, and creation of e-commerce, financial and security/privacy systems that are supportive of information economy and society initiatives.

***Knowledge Diffusion***

Many ICT-based development programs emphasize the use of technology to provide underprivileged populations with vital information “content” to help them overcome problems

resulting from isolation, lack of education, harmful misinformation and myths, etc. These knowledge transfer programs utilize a combination of traditional and advanced methods, such as in-person teaching or training combined with audio-video presentations, broadcasting, computer or Web-based interactive media, and other techniques. Often the information being provided is of a vital, even life-saving nature, such as HIV/AIDS awareness, emergency alerts, refugee assistance, and the like. Other high value content addresses political participation and other Government related services, basic and advanced education, vocational training, women's support programs, and a host of other development-oriented materials.

However, different kinds of knowledge are absorbed and retained by different peoples in different ways. The great opportunity of the ICT revolution is that it vastly expands the means by which individuals, organizations, and communities can share their knowledge, moving beyond the limitations of top-down, paternalistic teaching and organizational learning patterns, toward a more robust environment of *non-hierarchical knowledge diffusion*. This concept invokes the traditional modes of human cultural, technological, and social evolution, based on collaboration and organization across communities, firms, Government, and societies at all levels. This philosophy also mirrors the patterns of public collaborative research and information sharing that spawned the Internet itself, and follows other key decentralized ICT and knowledge networking initiatives such as Open Content, Open Source software development and peer-to-peer networking initiatives. In the environment of rural, indigenous societies, such approaches can reinforce the general need for culturally sensitive, demographically appropriate communications media, and ultimately help ensure that the users (and providers) of information can learn and share the knowledge that is most valuable to them.

➤ ***Key Questions & Issues:***

- What types of capacity and knowledge building initiatives are most urgently needed to maximize the value of ICT development strategies and programs?
- What are the most effective means for promoting community-based knowledge sharing through ICT?
- What innovative and effective ICT applications, training, and content are being implemented around the world, which should be considered as models to expand in other locations?

The following section considers the mechanisms and options for bringing needed financial resources into the ICT sector and in support of ICT-based development initiatives.

### **3. Financial Mechanisms: Approaches and Experience**

This paper does not attempt to determine a precise cost for the resources needed to support the vast efforts required to narrow the gaps in access to and use of ICTs. Needs vary as do the types of ICT that could be most usefully introduced at a particular place and time based on the priorities that are decided upon. Such calculations are also best carried out on the basis of priorities at the regional, national or local levels.

The objective instead is to assess in some depth the role and effectiveness of the financial mechanisms that have been the main drivers of ICT development to date, and to consider what



changes, improvements, and new ideas might help to accelerate current developments. This section identifies the major categories of financial mechanisms, and discusses recent initiatives and experience for each, while presenting the key questions that must be resolved in the evaluation of strategies for the future.

➤ ***Key Questions & Issues:***

- How effective have past and current financial mechanisms been in promoting investment in the ICT sector, particularly for services to rural and currently disadvantaged populations?
- With changing trends in the market, technology, and public policies, what will be the most appropriate combinations of mechanisms and resources to accelerate ICT development, and how can those various resources be coordinated most effectively?

***3.1 Private Sector Finance and Foreign Direct Investment:  
Successes, Limitations, and Prospects***

Without question the dominant trend in ICT finance for the past two decades has been the ascendancy of the private sector, market-driven model. There have been waves of privatizations of national PTTs and other telecommunications assets, and nearly every country has now licensed one or more private cellular mobile operators, data and Internet service providers, and other specialized operators. In the vast majority of these cases, the private investors have been foreign telecommunications companies, which sometimes enter into joint ventures with domestic investors, continued Government equity participation, and occasionally employee or public shareholder groups. Similarly, most computer hardware and software is also provided through the private sector, most often via imports from a handful of multinational corporate giants.

These market patterns have been driven by a variety of developments, most notably the establishment of the World Trade Organization's Basic Telecommunications Agreement, to which most countries of the world have now made binding commitments to open their telecommunications sectors to private investment and competition. The major international finance institutions have also aggressively promoted ICT sector privatization and restructuring throughout the developing world, often as a precondition of financial assistance in other areas. As a result, most countries of the world have now opened their telecommunications industries to at least some degree of competitive entry, and have embarked upon policy and regulatory "reforms" to promote market-based competition in the sector.

The results so far have been dramatic, to say the least, as the total amount of private capital that has been invested in developing country ICT markets over the past 15 to 20 years is in the scores of billions of U.S. dollars.

Notwithstanding the magnitude of private capital that has flowed into the ICT sector and the types of dynamic entrepreneurship that has been visible, however, it is important to ask, from a development perspective, whether the pure market model has been, or is likely to be, effective in extending ICT access to populations most in need, especially low income groups and rural areas. There are also strong signs that the pace of private investment, especially FDI, may be

slowing down significantly, as the more profitable and less risky market segments may be approaching saturation.

Looking toward the next decade or so, the issue of the ongoing role and magnitude of private sector finance in ICT development is a very open question. The uncertainties involve both policy and economic dimensions. At the policy level, there are numerous remaining bottlenecks to private market competition, which undoubtedly constrain further development in many countries. However, policy reforms are not a guarantee of market growth, especially where perceived profit margins are unappealing, particularly from the perspective of major international commercial interests.

One increasingly important aspect of the private sector's role involves the prospects for smaller, locally owned and operated businesses to emerge as key players in the ICT sector in developing countries and rural areas. There is a critical need for policy, logistical, and financial support for such entrepreneurship initiatives, including the use of targeted microfinance programs which can be financed by public and international assistance. ICTs are especially adaptable and scalable to the requirements of small, medium, and micro-enterprises, which can both fill gaps in service provision and become a source of local income and employment at the same time.

➤ ***Key Questions & Issues:***

- What are the expectations on the future role and magnitude of private sector investment in ICT in the developing world? What factors appear to most influence market prospects, especially in LDCs?
- What are the key remaining bottlenecks or barriers to competitive market development, particularly in the area of public policies, licensing, and regulation, as well as financing sources and mechanisms?
- As another generation of new technologies comes on line (3G, WiMax, etc.), how are the major international players likely to respond in developing markets?
- Which models and opportunities for microfinance-supported initiatives, SMMEs, and entrepreneurship are most appealing, and how should they be encouraged?

***3.2 Public Funding and Public-Private Partnerships: Extending the Market through Enlightened Public Policies***

The expansion of the private sector-based, market-driven ICT development model has arisen in direct response to inadequacies in the traditional approach, in which public ownership and finance controlled the telecommunications sector in most developing countries. For a variety of reasons – bureaucratic ineptness, political conflicts, lack of capacity, etc. – the state-owned PTT has been following the path of the dinosaurs in recent years, and it is unlikely to be resurrected in the face of the rapidly evolving global competitive market. However, the role of governments, and of various forms of public finance and other incentives to stimulate private sector growth, remains critical to the ICT industry's success in the developing world.

A wide variety of activities fall into the classification of Public-Private Partnerships, including the range of basic policy and regulatory initiatives required to foster fair and open competition

and to encourage private investment and enterprise formation. More direct government participation in supporting private sector functions include, among others:

- E-Government programs (and government ICT procurements in general), which aside from their direct benefits can have important stimulative and risk mitigation effects for industry suppliers;
- Education, training, and capacity building programs at all levels, especially in engineering and technical fields, in partnership with network and equipment suppliers;
- Technology Parks and similar industry promotion projects, bringing together training, research and development, incubator, and financial resources in publicly supported multi-tenant environments;
- Joint financing of and participation in local access network investments.

➤ ***Key Issues and Questions:***

- What have been, and are likely to be, the more successful types of models for PPPs in promoting ICT for development? What key examples should be highlighted?
- Are there new ideas, just being introduced or not yet tried, for Government's role in stimulating private investment, which merit closer consideration?
- What is the most appropriate role for outside donors and other international institutions in supporting and fostering various types of PPP projects?

### ***3.3 Universal Access Funding: Embracing the Public Good Model***

Regardless of the gains that have been achieved through private sector initiatives and public-private partnerships, the fact remains that access to basic and advanced ICT resources is still well beyond the reach of the majority of the populations of the developing world, especially in rural areas. In response to this continuing challenge, in the past few years, dozens of countries have begun to adopt the idea of establishing a Universal Service/Access Fund or Telecommunications Development Fund as an explicit subsidy mechanism to support extending access beyond the market's apparent limitations. This approach has been actively promoted by the World Bank, the ITU, and other major institutions as a core element of their ICT policy reform agendas. There are now some 60 such funds active throughout the world, including 22 in Africa, 15 in the Americas, 8 in Asia-Pacific, 14 in Europe, and one in the Middle East, with many more in the planning or early implementation stages.

The principles underlying this form of financial mechanism tend to combine the philosophy of market orientation with the notion that ICT access represents a "public good", which both the Government and private industry have an obligation to promote. The *public good* argument has two dimensions. One is essentially the case for network externalities: that society as a whole gains as communications networks expand. The second is the straight development perspective: that ICTs are vital to eradicating poverty and enhancing opportunity for disadvantaged, rural populations. These imperatives argue for public *and* private subsidization of the costs of access connections for unserved areas. The rationale for establishing a centralized funding mechanism – as opposed to traditional practices of direct operator cross-

subsidies, or state monopoly ownership of the networks – is to situate the subsidy transfer process within the framework of an overall market-based development policy, to capture market efficiencies within the subsidy mechanism.

In its most common form, the UAF collects equitable contributions from a broad range of market players – typically licensed telecommunications operators, among others – and may also receive outside funding from donor institutions or even tax revenues. These funds are then redistributed back to the industry, or to newly formed operations, for targeted access development projects, according to transparent, competitive bidding procedures.

Much of the enthusiasm surrounding UAFs derives from the early successes achieved by such funds in Latin America during the 1990s. The stories of the Chile, Peru, and Colombia UAFs, which promoted the rollout of public payphones and other services to hundreds of previously unconnected villages throughout those countries, have been held up as vital case study examples of rapid access expansion using public and private subsidy funding. What remains to be seen, however, is how readily those models can be adapted to different market and economic conditions in other parts of the world. A further question involves how to apply the UAF model to promote a broader range of ICT development objectives, including Internet access, broadband, information services, capacity building, and ultimately knowledge-based community development.

#### *The Digital Solidarity Fund*

It should be noted that the Digital Solidarity Fund, as initially envisioned can be seen to represent a form of *global UAF mechanism*. In such a case, many of the issues that would need to be resolved in considering the role of such a Fund may be similar to national funds.

Its main advantages could be seen to lie in its mobilization and involvement of new development constituencies and/or “new” sources of financing (e.g. contribution from cities and local governments and from a small “voluntary” percentage of proceeds from ICT based sales) and/or aggregation of contributions, especially from these outside sources, and perhaps the coordination and sharing of research and standards that underlie the operation of access funding and development projects.

Such a global mechanism however also necessitates support for a separate institutional mechanism which has its own costs and implementation issues. There are also questions about the value-added of a new modality when contributions from more traditional types of financing modalities are sought for this and where the alternative is to channel contributions through existing programmes and provide direct support to countries, not to mention potential contributions to supporting other competing global funds or initiatives.

The role of such a fund as opposed to more national funds would also need to be concretized and synergies with existing mechanisms enhanced. In any event, it would appear that based on past experiences with global funds, implementation responsibilities for access initiatives should almost certainly remain with local authorities and companies, with any global programs and donations serving mainly as conduits for channeling financial resources to national programmes/strategies (e.g. UAFs ) or local initiatives and perhaps providing selected capacity building, certification, and other supporting services.

➤ ***Key Issues and Discussion Questions:***

- Under what conditions and with what approach are Universal Access Funds and similar mechanisms most likely to be effective? What are the key barriers and constraints to their success?
- What are the options for aligning global resources, such as through a DSF type of approach, with national funding programs and implementation efforts?

***3.4 Development Finance and Official Development Assistance: Strategic Cooperation to Bridge the Gaps***

The role of international donors and finance institutions raises opportunities, challenges as well as controversial issues as regards ICT in overseas development assistance and programmes.

In fact, globalization itself is a direct and inevitable consequence of the revolutionary trends in information and communication technologies. With all corners of the world inexorably drawn closer together, one could argue that both the necessity and the opportunity for cooperative approaches to global development challenges have increased dramatically.

As the global public good argument stresses, in a networked world, all participants benefit from the externalities created when new members are added to the grid – and those benefits are also often quite tangible economically for the advanced industrial countries whose corporate presence currently dominates most of the international ICT supply chain. Helping to span the digital divide, therefore, is not “merely” a moral imperative and a social good for the developed countries: it is also in their own economic self-interest.<sup>1</sup>

The key questions confronting international donors and multilateral finance institutions regarding support for ICT should thus, ideally, not focus so much on the quantitative question of “How much to contribute...” – as the general answer is essentially, “as much as possible, and more” – but instead should concentrate on the qualitative issue of “How best to contribute...”

There are dozens of high profile, innovative ODA and IFI-sponsored ICT development programs supporting hundreds of key projects and initiatives around the world, and many of them have undergone significant policy and philosophical reorientation in recent years. In the area of promoting access, for example, the World Bank and others have recently begun to focus on “Output-Based Aid” (OBA) programs, which often work in connection with Universal Access Funds, tying financial resources to the design and implementation of concrete ICT outputs at the community level.

One of the key challenges that donors face is to reconcile ICT-specific projects and objectives with broader development strategies, such as those embodied in Poverty Reduction Strategies and PRSPs. Given the indirect and long-term nature of ICT benefits to development, and the need for coordination among participants at many levels, it can be difficult to specify a clear cause-and-effect between ICT development assistance and short-term measurable poverty

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<sup>1</sup> This is to say nothing of the social, cultural, artistic, political, and spiritual benefits that the “rich” and the “North” can gain through closer communication and knowledge sharing with the vast diversity of indigenous cultures in the developing world.)

reduction or other indicators. But there is an increasing awareness that ICTs can play a vital, central role in promoting development overall and in catalyzing entrepreneurship and economic and social transformations at different levels; the imperative is to combine innovative programs on the national, regional, and global levels which ensure that the finite resources of international financing sources are deployed where they are most critically needed, and can accelerate and complement the roles of other players throughout the sector.

➤ ***Key Issues & Discussion Questions:***

- What should be the primary focus and objectives of international development assistance in relation to ICTs over the next decade, given market, technical, and economic trends?  
How can ICT be integrated with, and measured against, other priorities for development support?  
How can diverse and independent ICT programs of many separate donors and funding agencies be better coordinated, on national and global levels, to assure maximum impact and resource utilization?

***Emerging and Innovative Financing Mechanisms***

There are in addition a number of interesting innovative financing mechanisms, which are not elaborated upon here. The creative “middle” will be the subject of discussions at the Task Force meeting.

***Next Steps***

All of the ideas, perspectives, and issues raised in this paper remain open to full review and revision through the Task Force’s deliberations. Based on the recommendations of the Task Force a draft report will be produced. The document will be shared and will draw on consultations with stakeholders. The report of the Task Force will be finalized at its next meeting on November 29<sup>th</sup> in New York.