

**Towards Digital Inclusiveness:
Can Universal Service Policy Go Global?**

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In an attempt to respond to the report's invitation to explore new paradigms for building access in the South, this memo pleads for taking the concept of universal service across national borders and to elevate it to a global level. With the digital divide looming ever larger both within and between countries, the enormous inequity in the distribution of global telecommunications and information resources is likely to prevent all potential users including Civil Society Organizations in the South from having the necessary tools to hook up to the information age and engage in ICT enabled networking.

Drawing upon a range of case studies and success stories issuing from domestic settings, this contribution proposes to engage in a vertical upward legal transplantation exercise and defends the proposal for a global universal service policy. My contention is that the ICT gap could be narrowed if the international community embraced a global universal service and access regime (GUSA) as a global policy objective. A global universal service and access regime would constitute a global public good funded by the international community to ensure that all the world's inhabitants are reasonably connected to the tools shaping today's information economy. Reaching this global policy goal requires an international regime-building exercise fostering cooperation between different stakeholders to tap different sources of financing for the development cause. It

also calls for institutional reform and reconfiguration to accommodate the proposed regime. The proposed regime would seek not only to bridge the current digital divide but also to overcome the global governance gap in the current institutional framework for ICT development.

My contribution shares the conviction outlined in the report that while the challenge of the digital inclusion is a “generic problem” for all potential users of ICT in the disadvantaged areas, integrating the paradigm shift within an ongoing civil society approach to global access should speed the process of acceptance. (p. 40).

Drawing the contours of the GUSA regime requires a combination of normative and pragmatic arguments in responding to the following four crucial questions:

- First, what is the rationale for exploring a new paradigm, why is a GUSA regime needed and what does it amount to?
- Second, how can one argue that a GUSA proposal is both legally defensible and economically justifiable?
- Third, how to make the concept operational in terms of securing adequate funding to support global access beyond economically attractive areas?
- And finally, what institutional mechanisms are needed to promote the goal of global access from a political aspiration to a workable solution at the international level?

This present memo highlights the various building blocs of the proposal by providing a cursory answer to the above questions awaiting a systematic treatment of each question in a separate memo.

1/ What is global universal service and why is it needed?

Defining the concept of global universal service (GUSA) is a tricky exercise because the concept is based on a notion that is controversial, is rapidly evolving and eludes definitions. This reality begs two questions, the answers to which could assist us in

drawing out the contours of the GUSA concept. First, what is the precise version of universal service that must be elevated to a global level? Is it the Occidental version of universal household penetration? Or is it the developing countries' more realistic and less ambitious version of telephone access within reasonable time or distance? Second, should the GUSA concept follow in the footsteps of the domestic universal service concept and begin by focusing on traditional telephony or should it entertain a more ambitious goal?

This contribution defends the need to define global universal service as involving access to both traditional telecommunications services and newer information services. In an era of convergence of networks and services, the international approach to improving developing countries' connectivity cannot afford to focus on the universal service approach of the past.

The call for a global universal service is mainly motivated by the inadequacy of the current trade paradigm, ushered under the GATS agreement, to respond to the enormous telecommunications needs of developing countries. As mentioned in the report "the dominant paradigm for network access and affordability, is approaching its limit and the digital divide is unlikely to decrease under its reign". Indeed statistics seem to bear out the fact that the benefits of liberalization in telecommunications targets only the largest markets in developing countries and the most lucrative sectors of the telecom industry. For example, there is an immense foreign presence in the mobile and Internet sectors. Indeed, one can argue that the explosion in investment in dot.coms widened the digital divide because it drained resources away from investment in the core infrastructure of developing countries. In the wake of the 2001 tech crash, there has been a lack of investor confidence in the ICT sector and an increase in competition to attract limited foreign investment. These factors taken together indicate that one must look beyond the market to bridge the digital divide.

Liberalization and market mechanisms are only one dimension of the ICT development equation. A blind reliance on the invisible hand risks to deepen and widen the digital divide for those unable to come under the liberalization paradigm. In domestic setting,

market failures call for regulatory mechanisms to ensure that benefits of liberalization are spread out to those whom the market is unwilling to serve. For decades, this concern has been -and continues to be- tackled by the development of universal service policies. As mentioned in the report the essence of a universal service policy is to “exert ongoing pressure to extend telecommunications access beyond what would be accepted as commercially viable from the narrow perspective of return on investment”.

A similar mechanism to tackle similar problems at the global level is justified. A GUSA regime would then amount to "a global public policy goal that implies an international support mechanism to ensure universality of access to information and communication resources. International support mechanisms target countries and areas not able on their own and under normal market conditions to reach these goals". In this case, the rationale for universal service policy, as a mechanism to correct market failures, is the same whether operating at a domestic or a global level. The modalities and mechanisms for universal service need however to be adapted to the significantly different institutional framework at the international level.

(Note: The first question can also tackle the issues of Internet interconnection and how the current governance regime is supporting, or at least not opposing, a the system of cross subsidy paid by customers in the South to customers in the North under the regime of international Internet interconnection. This idea can however be treated in a separate memo).

II/ A Concept in Search of a Foundation

It is possible lay the foundation for a global universal service concept by deploying the doctrine of global public goods and by looking at various elements in the current legal order.

A: Treating Global Access as a Global Public Good

In the last few years the notion of global public goods has developed as a global policy concern in response to contemporary global challenges, and has been used more expansively to cover goods that have global reach and global dimensions. This expansion is possible because many public goods provide benefits (or costs, in the case of public bads) that are non-rivalrous and non-excludable on a global level. In addition, global public goods provide externalities that are global in scope rather than nationally confined. Examples of global public goods include financial stability, international peace and environmental sustainability. It is possible to argue that ensuring global access to ICT is a global public good.

From an economic perspective, ensuring network development in developing countries is bestowed not exclusively for the sake of recipient countries but also (and most importantly) for the sake of the information society as a whole. Given the information-based nature of the modern economy, the globalization of the telecommunications industry, and the interdependent global environment, the value of the global network grows as more national networks and users are interlinked. In addition access to ICT generates important positive externalities that reach into education, health, democratic participation and economic productivity, which are all important elements of development.

The concept of global public goods provides a vital tool for bridging the telecommunication and information gap between developed and developing countries. The global public goods concept provides a regenerated rationale for international cooperation and solidarity and provides a new insight into the old issue of telecommunications development. To treat telecommunications access as a global public good would result in far-reaching policy implications for network growth in developing countries. The most evident benefit of this approach is that it elevates the issue of telecommunications development to a global level.

B. A Possible Legal Foundation for the GUSA Regime

The GUSA concept would not represent a revolutionary departure from the current legal order. Although the current legal order does not comprise an obligation, either treaty based or customary, to boost telecommunications access in developing countries, a number of features of international law converge to provide the groundwork upon which we can construct the GUSA edifice. One can defend a human rights based approach to the notion of GUSA focusing mainly on the right to development. In an increasingly global, information based, knowledge-driven economy, access to telecommunications is both a prerequisite for and an integral part of development. Thus, if one takes account the relationship between telecommunications and development, then focusing on telecommunications access as means of achieving the right to development becomes well justified. In addition, access to telecommunications is increasingly facilitating access to education, health care and improving political participation and democracy, which are all crucial in achieving various human rights.

The principle of preferential treatment under trade law can also be called upon to play a crucial role underpinning global universal service. Given the specificity of the telecommunications sector and the structural weaknesses of developing countries, preferential treatment for developing countries can be operationalized and rendered concrete by ensuring that the liberalization of international trade in telecommunications services helps to enhance the telecommunications infrastructure of developing countries. The principle of preferential treatment can provide a solid foundation for defending a preferential, asymmetric and above cost settlement rates for calls terminating in developing countries.

The principle of availability of telecommunications services, embodied in ITU instruments, and the common global patrimony principle – the “province of mankind” provision enshrined in the Outer Space Treaty, could also provide important grounds that can be invoked to serve as a foundation for universal service at the international level.

Finally, it is also possible to revive the debate over the new order approaches as a complimentary basis for a GUSA. If the call for a more equitable economic order of the 70's remains relevant, a new dimension should be added to enhance its relevance. A more equitable order does not consist only of more equitable terms of trade and sovereignty over natural resources; it extends also to the opportunities to have equitable access to information and communication technologies in the contemporary information-based economy.

III/ Funding Global Universal Service

There are many aspects to the development challenge faced in the ICT sector. However, the thrust of the challenge is to fill the enormous gap between the needs of developing countries on the one hand, and their scarcity of resources on the other hand. A greater mobilization of resources, both in terms of leveraging existent resources and defending new ones is needed to help bridge the digital divide. This contribution highlights four funding possibilities:

I. Recasting International Accounting Rates: Towards a Preferential Treatment Approach to Accounting Rates with Developing Countries

The proposal calls for the resurrection of an idea articulated in 1984 by the Maitland Commission in the missing link. In its report, the commission proposed that a portion of revenues from calls between developed and developing countries could be used to boost telecommunications infrastructure development. The portion in this context is the amount that exceeds the cost of providing the service. The essence of the proposal is that revenues from the accounting rate regime should continue to subsidize network growth in a number of developing countries satisfying certain criteria. Preferential treatment would be composed of two elements. The first element consists of keeping accounting rates for relations involving beneficiary developing countries above cost for a

certain period of time. The second element involves opting for a more favorable formula for the apportionment of revenues derived from accounting rates.

The idea that we are advocating here mirrors a practice very well established in national jurisdictions. A survey of universal service policies of many developed countries reveals that in many jurisdictions interconnection charges include a sum that should be deployed for universal service. There is a wide body of economic literature that treats international accounting rates as a specific form of interconnection. Applying the same rationale, foreign carriers interconnecting to the national network might be required to pay a subsidy for network growth of developing countries in addition to the interconnection charge on analogy to domestic universal service funds. To be acceptable, the system should identify the portion of accounting rates that represents a subsidy in a transparent fashion.

2. The Need for a More Targeted Official Development Assistance

Revitalizing official development assistance is a topic of growing importance both in the development literature and on the current agenda of international organizations. A high level forum on financing for development was convened by the UN GA in Monterrey, Mexico in March 2002 with the participation of the WTO, the World Bank, the IMF as well as developed and developing countries and members of civil society. Among all strategies for development financing, strengthening the role of official development assistance stood out as a major item on the conference's agenda.

The concept of global public goods as a renewed rationale for development assistance seems to have attracted the attention of many development specialists. It proved particularly seducing to the environmentalists as deduced from numerous contributions for the 2002 World Summit for sustainable development. If we look at universal service from a global public good standpoint, the focus on improving connectivity goes beyond the direct benefits to specific recipient countries to benefits that would be felt on a global level. A globally accessible telecommunications network provides a non-excludable, non-rivalrous benefit to all of mankind. Funding for the universal service component of such a

network should not be conceived simply as funding for those who are gaining access in developing countries but also as funding for those who are gaining access to developing countries. Embracing a global public goods approach promises an enhancement of traditional modes of assistance both by legitimizing additional flows to the telecommunications sector, which should not be conceived as trading off against other purely local development priorities, and by ensuring improved aid effectiveness by giving developed countries a stake in spending outcomes.

This contribution strongly endorses a proposal defended by advocates of the global public goods doctrine for a differentiation between country specific allocations of aid (ODA-C) and issue specific global allocations (ODA-G). This approach could prove particularly useful for a global universal service. It could facilitate the role that ODA is being called upon to play as a substitute and a complement for other sources of telecommunications development financing, particularly in countries that have difficulty in attracting foreign private capital. In addition, even when FDI and private flows are available, ODA remains important in providing financing for activities that are not especially attractive for private investors. The role of ODA is particularly important for the development of low profit rural networks.

3: Exploring the Possibility of Tax-based financing

In addition to cross-subsidization and access charges, taxation is increasingly being used in many national jurisdictions as a funding mechanism for universal service. At a global level, it is possible to defend the theoretical merit of a global universal service tax along the lines of the Tobin Tax and the Carbon Tax. The merits of such a proposal could however trigger once again the hostility of key players to any global taxation proposal. In 1999, a UNDP human development report proposed a bit tax or e-mail tax in order to raise revenues that could be used to offer free or low-cost Internet access to the poor. The proposal was mainly motivated by the importance of Internet access for economic and social development. The report proposed a tax of one cent on every hundred e-mails over 10 kilobytes in size. The report argued that such an amount would

not be heavily felt on Internet users, but help to accelerate the exponential growth of e-mail, since it could yield over US \$ 70 billion annually. To abate US dissatisfaction with the proposal, the UNDP Administrator was obliged officially and publicly to indicate that the UNDP does not endorse an e-mail tax.

The proposal for a global universal service tax is very similar in kind to the e-mail tax proposal and has the same rationale of using taxation revenues to bridge the gap between those with access to network resources and those without it.

4: *International User Fees For Orbital Slots and Radio Frequency Spectrum*

Another possible option for funding global universal service is the use of international user fees for resources that belong to all of mankind. The economic justification for such a proposal is based on the user pays principle. In this case users of orbital slots and radio frequencies could be asked to pay a price for using these limited resources.

The proposal for an international user fee is attractive for at least in two reasons. First, given the increasing use of these limited resources for telecommunications services, the proposed fee could generate a growing revenue stream to bridge the digital divide. The use of satellite technology to provide fixed, mobile and Internet services will increase the use of these resources. Next generation mobile service and the increased use of radio spectrum for WLL will also increase demand for frequency and hence increase the volume of revenues that could derive from a proposed fee for their use. Second, based on equity considerations, the proposal can play a pivotal role in insuring that these resources are used in for the benefit of all countries, without prejudice to the principles of freedom of use and non-appropriation, both of which constitute the pillars of the legal regime for *res communis*.

Similar proposals were endorsed by the Maitland commission report on the Missing Link as well the Mac Bride Report adopted in the context of the new information and

communication order. Both documents suggested an international fee that would benefit developing countries. The proposal has attracted limited political support.

Lately, the idea of an international user fee has gained renewed attention in the global public goods literature, with many voices highlighting the possibility of financing global public goods from private pockets in the form of user fees. In the telecommunications context, it is important to note a new development in ITU practice, which can be seen as a step towards acceptance of the idea of an international user fee, albeit not directly used for the improvement of telecommunications infrastructure in developing countries. In 1994, The Kyoto Plenipotentiary Conference recognized the need to implement cost recovery for ITU services in the area of radiocommunication to secure the financial basis of the Union. The proposal was subject to a study by the ITU-2000 group and finally endorsed at the Minneapolis Plenipotentiary conference, which adopted Resolution Plen/4 calling for an international user fee for satellite filing. The cost recovery concept is based on the idea that users should pay for specific services and products delivered by the ITU instead of having the cost of the service born by the entire ITU membership, especially in cases where these services are only enjoyed by a limited number of beneficiaries. The use of ITU satellite filing has increased dramatically given new non-geostationary satellite applications. The ITU has documented that only 10 countries and 5 international satellite organizations account for over 80% of all satellite filing, while the whole ITU membership is obliged to meet the cost.

It may be that cost recovery for satellite filing by ITU offers good precedent to build on. A similar or expanded mechanism could be adopted with proceeds from the fee going to the global universal service fund to improve connectivity for the benefit of the global village. This does not imply that this proposal is without controversies, either.

IV: Accommodating a Global Universal Service Proposal: The Need for Institutional Reform and Reconfiguration

The last section demonstrates that in addition to the need to harness all possible resources to span the digital divide, there is also a need for institutional reform and reconfiguration of international institutions.

Keeping in mind the current structure of the international society and the difficulties of adopting any model in the absence of a single supranational body to oversee the system, this contribution argues that the best institutional arrangement for a universal service regime would be an independently administered and internationally accountable universal service fund.

The proposed Global Universal Service Fund would be a new international funding mechanism to ensure that monies are not diverted to other causes but are used for the goal of improving developing countries' access to information and communications resources. One possible approach would be to use lessons learned from the environmental governance regime. The Global Environment Facility (GEF) is today the single largest facility armed to provide support for international environmental public goods.

This contribution defends an institution that combines political balance, flexibility and constructive cooperation between international organizations to serve the global cause of widespread connectivity. As in the case of the GEF, private sector and global civil society are important stakeholders for the success of the fund. Because of the changing telecom environment and the increasing role of the private sector in tackling telecommunications project, the GUSF should not be relied upon as a substitute for private investment, but rather as a supplement to the market mechanism. The Fund would provide subsidies for interested private investors to help finance projects that would otherwise remain insufficiently attractive. Civil society could also play an important role both at the project level and at the policy design. It can also exert the needed pressure to ensure transparency of the proposed institution.

Calling for a new financing institution is an intellectually challenging task and working out the details of the institutional, financing, disbursement and implementation aspects of the fund requires a multi- disciplinary expertise. This memo will only raise questions:

- On the institutional level: what is the best legal mechanism for the creation of the fund? A possible approach is to have the fund under the aegis of existent international organizations and have it run under a cooperative arrangement between international organizations. An institutional replication of the GEF is highly defensible: (The GEF is created by the World Bank but run under a tripartite agreement by the World Bank the UNEP and the UNDP with active participation of the civil society and scientific organizations). In the case of the universal service fund, the role of ITU as a custodian of the fund is to be emphasized.
- Once in place how to ensure that different sources of funding are channeled through the fund? and is regular replenishment needed and how?
- Who is eligible to apply for funding (governments only or organizations...)
- How to monitor disbursement?
- Is there a need to establish and revise funding priorities: Examples of funding priorities could include: spreading wireless technology for access, making satellite technology work for developing countries, improving IP connectivity to developing countries, focusing on Wi-Fi and on multipurpose telecenters.
- What are the best modalities for the functioning of the fund? Can domestic approaches be replicated? For example the use competitive tendering process through a reverse auction system for each eligible project.

In conclusion, the proposed regime together with the promise of technology already at hand, would constitute a promising combination subsidizing network growth in developing countries and ensuring that globalization delivers on its promises. It must be emphasized, however, as rightly stated in the report, that the emergence of a new telecommunication paradigm requires “major efforts and collaboration of actors from

grass-roots to global governance institutions.” (p.46) Integrating this “politically” challenging proposal within the current civil society approach to global access would be a key strategy for moving the idea forward to the benefit of an inclusive information society.