

USAID POLICY DETERMINATION: 22

TELECOMMUNICATIONS, INFORMATION, AND THE GLOBAL INFORMATION INFRASTRUCTURE

215.1 OBJECTIVES

This Policy Determination provides the principles and the conditions for USAID funding of telecommunication and information applications and technologies to promote sustainable development. These guidelines are to ensure that the uses of the bilateral assistance funds satisfy sound programmatic, budgetary, and financial practices and that the initiatives are consistent with USAID's sustainable development objectives and U.S. government policies supporting economic growth, promoting trade, and accessing the "Global Information Infrastructure (GII)". The GII, in general, includes the components to gather, transmit, access, and disseminate information over a global system of networks.

The Policy Determination has four sections. The first provides a general overview of the roles and opportunities for telecommunications and computer information activities in sustainable development and humanitarian assistance. The second contains the "Policies" that influence the design and funding decisions (e.g., grants, credits, procurement, tied aid, and capital projects) for telecommunications and computer-mediated project activities. The third provides the "Essential Procedures" that determine how each of the policies will be implemented. The fourth, "Supplemental Materials," has additional information on the policy environment for telecommunications, the rationale for some of the policy principles, and more detailed information on the "Essential Procedures."

215.2 POLICY OVERVIEW

Developing countries and transition economies will need access to the GII if they are to become active members of the global economy of the 21st century and benefit from more efficient channels for international trade and worldwide communications. There is a general consensus that GII activities should be based on five principles: (1) encourage private investment, (2) promote competition, (3) create a flexible regulatory framework, (4) provide open access, and (5) ensure universal access. Countries will, therefore, require the appropriate institutional and regulatory infrastructure, the human capacity, as well as the technological tools (the physical infrastructure).

The Administration and the Congress see two potential benefits of using GII activities to achieve sustainable development objectives. These activities can help

promote economic growth in developing countries and, in turn, lead to export opportunities for U.S. private enterprise to enter new and expanding markets. USAID bilateral assistance programs are vital to the overall strategy and complement U.S. economic and trade policies.

USAID can advance the goals of sustainable development by working with host countries to become active partners in the GII as it is evolving. The challenge to USAID is to identify ways in which telecommunication and information activities can promote sustainable development objectives and accelerate the integration of developing and transition countries into the world economy. The result of USAID's programs will not only bring measurable economic and social benefits to the recipient country, but also provide indirectly trade and investment opportunities to U.S. businesses through the opening of new markets and technology transfer.

There are two interrelated aspects of telecommunications and computer networking which are legitimate interests of USAID. One supports the use of new telecommunications and networking tools to achieve specific sustainable development goals -- encouraging broad-based economic growth, stabilizing world population growth and protecting human health, protecting the environment, and building democracy, and achieving humanitarian assistance goals. The other helps create the enabling environment (institutional, intellectual, and physical infrastructure) for sustainable development. This includes training and financial assistance (grants and loans (e.g., the Enhanced Credit Facility)) to enable local providers and system users to design, select, operate, manage, purchase, and regulate telecommunications and information systems. Both aspects may include investments in new technologies and additions and upgrades to existing networks and systems.

215.3 POLICY

The following policy principles will guide USAID's activities in using telecommunications as a tool to achieve the strategies for sustainable development .

1. USAID's focus, in this context, is to use the GII to: build and strengthen the enabling environment (laws, regulations, and other rules), broaden access and participation, and encourage institutions to adapt to economic and social changes (E215.1.1 and E215.1.8).
 - a. USAID will support the efforts of developing countries and transition economies to create and share new information resources and to take advantage of existing and planned international information networks (E215.1.1).

- b. USAID will ensure that GII activities are demand-driven. This means that users and stakeholders should be involved in the planning, regulation, operation, and financing of the activity.
 - c. The GII is a cross-cutting theme in the "Strategies for Sustainable Development." USAID will not invest in the development of the GII as an end in itself. GII activities should be tailored to specific country needs, which may vary widely (E215.1.1 (a-e) and (SM215.1.3)).
2. USAID should ensure that GII activities complement and reinforce U.S. trade promotion and intellectual property rights policies (E215.1.4 and E215.1.5).
 - a. USAID will not provide grants or credit for activities, which circumvent competitive markets, create trade distortions, or crowd out (replace) private sector financing (E215.1.4 and E215.1.5).
 - b. USAID will design the financial terms of capital projects with a telecommunications component in accordance with the OECD "Arrangement on Guidelines for Officially Supported Export Credits" (E215.1.4).
 - c. USAID will require that all telecommunications equipment and services be of U.S. source, origin, and nationality, unless a waiver is executed (E215.1.5).
3. USAID will, as necessary, assume the appropriate leadership and/or coordination roles in assessing the GII needs of developing countries and determining the most efficient way of delivering bilateral assistance by the respective USG agencies (E215.1.7).
4. USAID may provide funding for developmentally sound telecommunications market assessments and physical infrastructure projects on occasion; however, the primary program emphasis will be the other dimensions of the GII (E215.1.3).
5. USAID, in accordance with current statutory provisions, will not use Development Assistance Funds or the Development Fund for Africa as part of a mixed credit financing package; however, these restrictions do not apply to Economic Support Funds (E215.1.9).
6. USAID will participate with other USG agencies in building and applying the tools of the GII to promote sustainable development and open up opportunities for U.S. businesses (E215.1.7).

7. USAID will cooperate with multilateral institutions to ensure that GII activities promoting sustainable development are mutually supportive and effective (E215.1.7).

8. PD# 22 replaces PD# 10 as the agency policy statement on the role of telecommunications in sustainable development and humanitarian assistance (SM215.1.2).

E215.1 ESSENTIAL PROCEDURES

E215.1.1 Applied Applications by Strategic Area

Telecommunication and information applications are important cross-cutting tools in promoting sustainable development. USAID will apply the tools and technologies of the GII to achieve the goals of: (1) encouraging broad-based economic growth, (2) stabilizing world population growth and promoting human health, (3) protecting the environment, (4) building democracy, and (5) providing humanitarian assistance. This involves supporting developing country institutions to adopt the practices, systems, structures, and training methods to take advantage of the new technologies and realize the potential development benefits.

In the area of telecommunications and computer networking, demands on the infrastructure -- physical, institutional, and human -- are growing rapidly. The telecommunications infrastructure must be tailored to specific country needs and circumstances which vary widely. For example, in some countries there may be an emphasis on introducing commercial principles, privatization of government-owned telecommunications entities, and increasing access to networks. In other countries, it may be necessary to help with getting an appropriate physical infrastructure in place, improving procurement and contracting procedures, and introducing competitive market principles into the provision of telecommunications services, especially the privatization of state-owned systems, the design of rate structures, and the allocation of frequency bandwidth.

In addition, new technologies will require changes in the regulatory environment, while supportive conditions can accelerate the introduction and broad availability of new technologies. Both developed and developing countries will need to devise new approaches to a regulatory infrastructure for promoting competition and open access to the GII as satellites and microwave systems augment long-distance cable networks and cellular systems emerge as alternatives to local distribution networks. It also may be useful to assist countries implementing policy reforms and liberalization of services in designing telecommunications services that are compatible with those in the United States, thereby encouraging the sale of U.S. equipment.

The types of program activities in each sustainable development or humanitarian assistance objective may include, but are not limited to, those that are described below. These carry out the policies in Chapter 215.3. Specific examples of ongoing or completed activities are provided in the Supplemental Reference (SM215.1).

a. Economic Growth

To assist countries in the process of liberalizing, deregulating, and privatizing telecommunication services in moving towards free and open markets.

To provide "enhanced credit" to small and medium-sized businesses for private investment when commercial financing is unavailable.

To assist countries in making sound technical and policy decisions as they consider major investments in new communications capacities, promoting the design and development of country specific information superhighways that meet international standards for open systems, and identifying compatible standards and protocols.

To assist in developing and strengthening laws and regulations to protect intellectual property and to develop the infrastructure to enforce such laws and regulations.

To improve the use of information technology and media to increase the flow of market information, e.g. agriculture, financial services, transportation, manufacturing, and trade opportunities.

b. Population and Health

To make available demographic and epidemiological information for improving the delivery of health services to rural communities and the dissemination of health and family planning information to women.

To improve and expand access to diagnostic and prognostic information in the treatment of patients, especially in impoverished and rural areas.

To develop computer-based patient records which are critical to improving the quality and reducing the cost of health care.

To provide "distance education" for health care professionals in areas such as maternal and child health.

c. Environment

To explore the use of remote sensing, Geographic Information Systems, and other global information in environmental planning and management of renewable and non-renewable natural resources.

To facilitate transnational efforts to promote energy efficiency and reduce industrial pollution.

To promote technology transfer partnerships with U.S. companies to facilitate the analysis and monitoring of threats to the environment.

To enhance the capacity for countries to design, develop, and maintain their own environmental information systems.

d. Democracy

To broaden the mechanisms for participatory decision making through easier access to information and communications channels.

To encourage the creation of grass-roots networks, providing citizens with a wide range of information services and the ability to work in local institutions.

To promote a transnational information system to protect human rights, and assist governance and accountability.

e. Humanitarian Assistance\Disaster Relief

To improve donor coordination and to promote wider participation in disaster awareness, training, and preparedness by promoting the development of common standards for information sharing and data exchange.

To coordinate and facilitate international humanitarian assistance efforts and speed the provision of necessary relief supplies during disasters.

To facilitate transnational and national efforts to use economic development information and data to strengthen vulnerability assessments and mitigation and preparedness activities.

E215.1.2 Grants or Credits

There may be circumstances where a GII capital project is the appropriate form of developmental assistance to reinforce USAID's economic growth agenda. Depending upon the particular economic circumstance of the country, the financing of a project through the "Enhanced Credit Facility (ECF)" in lieu of a grant may result in more

economical use of bilateral assistance funds.(Note: USAID expects funds to be appropriated for the ECF in FY 1996).

To illustrate the implications of using the ECF, a \$10 million project financed by a grant requires a \$10 million budget appropriation. Under the Federal Credit Reform Act of 1990, the same \$10 million project financed at market rates may require a lesser amount in new appropriations, the actual amount depending on, among other things, the credit rating of the borrower.

In considering whether to fund a project with a credit or a loan, it is necessary to take into account the "Arrangement Guidelines" of the Organization for Economic Cooperation and Development (SM215.1.4) and Global Bureau guidelines on the ECF.

E215.1.3 Telecommunications and Related Capital Projects

There is every expectation that developing countries and transition economies will achieve dramatic gains for individuals, households, and businesses in rural and urban areas through investment and expansion of the physical telecommunications infrastructure. *However, it is also clear that increasing the quantity of physical infrastructure stocks also needs to be accompanied by improving the quality of institutional and regulatory infrastructure and the capacity to operate and maintain the systems.* This can lead to the privatization of telecommunications networks and systems, thereby inducing increased private investment flows and new public-private partnerships.

There is a legitimate role for USAID involvement in physical infrastructure activities in overcoming developmental constraints. In the current budget climate, however, USAID's bilateral foreign assistance resources for such activities are in general, very limited. The funding decisions for such projects should be reviewed to ensure that they are the best uses of the funds and are likely to generate the expected level of benefits relative to other uses of the funds. In addition, USAID funded capital projects must also consider the ability of the recipient to generate the financial resources to operate and maintain them. The failure to do so undermines the efficiency of the capital investment.

The recent and expected advances in telecommunications-related technology will lower significantly the costs of accessing and using the GII. This could open up new opportunities for financing developmentally sound capital projects that were prohibitive on the basis of older technology. Depending on the efficiency gains in technology, it may be possible for USAID to fund certain types of small-scale demonstration activities in education, health, the environment, or economic growth (especially in financial or trade sectors) or possibly additions to existing infrastructure for new technology, assuming the costs are within the existing budgetary resources of the Bureau or Mission. However, the caveat still holds that the reason for the use of the funds must be

to overcome a developmental constraint -- economic or social -- and the activity furthers USAID's sustainable development goals and humanitarian assistance.

USAID supported telecommunications activities should be consistent with sustainable development objectives and sector strategies. The design of the telecommunications activity including training or technology also should reflect the economic and social capacity of the recipient, and the state of the enabling environment.

Technical assistance for infrastructure activities may include: market studies to assess the technology needs for specific sectors, functions, or for entire communications systems; plans for infrastructure expansion; and training for operational and maintenance skills for existing as well as new infrastructure. Activities also may be funded through the proposed "Enhanced Credit Facility."

E215.1.4 Tied Aid and Concessionary Financing

a. The Arrangement. In designing the financial package for the funding of a telecommunications-related capital project, it is necessary to consult the Organization for Economic and Cooperation's "Arrangement on Guidelines for Officially Supported Export Credits (The Arrangement)." This covers the conditions for the use of tied aid and concessional financing for capital projects in areas such as power, telecommunications, oil and gas, and manufacturing. The details of the Arrangement and the scope of coverage for bilateral assistance programs are described in SM215.1.4.

In general, projects that are funded by grants (i.e., the concessionality level is 100 percent) or with highly concessional financing (the concessionality level is 80 percent or more) are not subject to the Arrangement. However, if the concessionality level is less than 80 percent, with the possibility of mixing commercial financing or export credits with bilateral assistance funds, then the rules of the Arrangement will apply to the project.

For USAID Bureaus and Missions contemplating or planning telecommunications-related capital activities with grant funds or credit through the Enhanced Credit Facility, the following questions need to be addressed:

1. Is the concessionality level 80 percent or more?
2. Is the recipient country a least developed country and is the level of concessionality 50 percent or more?

If the answer to either of these questions is "no," then the project may trigger some of the rules of the Arrangement, i.e., the combination of grant funding,

commercial financing, or export credits may not be sufficient to meet the high concessionality requirements to exempt the activity from the rules of the "Arrangement". Under these circumstances, the Bureau or Mission should consult with PPC in the interpretation of the Arrangement's rules and the impact on the project.

b. USAID/W Consultations. In the activity planning stage, Bureaus and Missions should consult with PPC, and the Office of the General Counsel (GC) to determine consistency with the "Arrangement" rules procedures on tied aid and the statutory provisions in the foreign assistance-related laws that govern the use of bilateral assistance in a mixed credit. *This is a subject area where there can be many interpretations.* Rules and procedures are under continuous review by the OECD, so it is important to consult with PPC and GC early in the design process.

E215.1.5 Procurement

The telecommunications industry in the United States is a world leader in providing both equipment and services. USAID believes that for most telecommunications procurements which USAID intends to finance, U.S. companies can provide most telecommunications equipment and services of the highest technical standards and at prices that are competitive worldwide. As a result of this highly competitive posture, and because of the sensitivity of procurements in this industry, USAID is requiring that all telecommunications equipment and services financed by USAID be of U.S. origin or nationality and be procured from U.S. suppliers unless a waiver is executed, regardless of the geographic code that would normally be applicable. The bases for waiver, and the authority to waive, are those set forth in the standard USAID procurement rules.

E215.1.6 Activity Design Considerations

The primary purpose of the telecommunications or GII activity should be developmental, with an indirect benefit of furthering the U.S. government trade promotion objectives. Bilateral assistance funds should not be used for activities where commercial financing is usually available. While telecommunications activities will often have secondary purposes including entertainment and the dissemination of general information (e.g., newspapers and radio/TV broadcasting), they must be justified on the "developmental merits", independent of any secondary benefits.

The activity design process should include both qualitative and quantitative performance measures to determine the success in overcoming the "developmental or humanitarian relief problems" that warranted the activity.

The planning process should ensure that users and other stakeholders are represented in the planning and regulation of infrastructure services and also in the design, operation, and financing. It is particularly important to ensure participation of

and feedback from the intended audience(s) in the design of systems and in the ongoing development of programming and services.

The components of the activity should be made as widely accessible as is technically feasible and cost-effective. The activity should contribute to a net increase in the quantity, diversity, and quality of information to the primary participants.

The activity should ensure that the private sector (both in the U.S. and in the assisted country) has opportunity to compete to provide activity-related training, technical assistance, and telecommunications and computer-mediated goods and services.

The planning of specific activities should be consistent with the overall telecommunications and information infrastructure development policy in the host country.

E215.1.7 Activity Selection Considerations

USAID will consider using telecommunications and computer-mediated activities as a cross-cutting tool, rather than a distinct program sector, in all sustainable development strategies, and humanitarian assistance and disaster mitigation.

a. Global Projects. Central Bureau and Mission funds can be used for telecommunications and GII activities. For example, globally-managed programs may (1) provide technical support and training to missions and host country counterparts in the assessment, design, coordination, implementation, and evaluation of telecommunications and information exchange components of their activities, (2) broker arrangements with host countries and other donors to enhance or design telecommunications and information systems capacity building and expand development telecommunications applications, (3) train host country participants and USAID personnel in the use and management of the technologies and information resources to sustain their development, (4) facilitate international information exchange, storage, retrieval, and dissemination of lessons learned about telecommunications capacity building and development telecommunications applications, and (5) support research, development, and experimentation of state-of-the-art, information and communication technologies.

b. Bilateral Assistance. USAID assistance for telecommunications and the GII will be primarily on a bilateral activity basis. This means that:

1. USAID assistance should be limited to activities requiring investments or expenditures in or by the USAID-assisted countries, and should exclude any USAID financing of host country participation fees or membership contributions

in international organizations or regional/international communications infrastructure.

2. USAID assistance for regional telecommunications activities (e.g., regional telecommunications networks or regional satellites) normally should be implemented through national institutions and should support activities in USAID-assisted member countries. However, in working with national institutions, USAID also may consider processes and structures linking national institutions with frameworks serving regional functions.

3. USAID activities will be coordinated with those of other USG departments and agencies (e.g., NASA, NSF, DOE, DOS, USTR, FEMA, EPA, USDA and DOC\NIST) involved in the support of computer networking development and expansion.

4. USAID will maintain close liaison with regional, multilateral, and international communications programs. USAID assistance also can be provided to establish or enhance regional telecommunication capability to share and exchange information on natural and man-made hazards, and other disaster-related information of common value to the region.

5. USAID will coordinate with the telecommunications and infrastructure institutions in the host country and with relevant donor organizations (e.g., ITU, World Bank, or other multilateral institutions) to assure that USAID GII activities are consistent with host-country sector policy.

6. USAID will support research and development on applying information and communications technologies, and research on appropriate institutional processes for their effective utilization in developing countries.

E215.1.8 Project Evaluation

The activity design process should include both qualitative and quantitative performance measures to determine the success in overcoming the "developmental and humanitarian relief problems" that warranted the activity.

E215.1.9 Development Assistance, Development Funds for Africa, and Mixed Credits

Since FY 1991, USAID appropriation's acts have prohibited the use of Development Assistance (DA) and Development Fund for Africa (DFA) funds for "tied aid credits", i.e., project financing packages which involve any combination of official development assistance, official export credits, and private commercial credits. (Economic Support Fund appropriations are not subject to this prohibition.) Individual

projects for which DA or DFA funds are proposed will need to be reviewed to determine whether the total financing package presents an issue under this statutory prohibition. PPC and GC should be consulted in the design of the financial package to ensure compliance with the OECD Arrangement governing "mixed credits" and the statutory requirements, respectively.

SM215.1 SUPPLEMENTAL MATERIALS - OPERATIONAL GUIDANCE

SM215.1.1 Sustainable Development and the GII

The GII is shaped by a combination of factors such as information technology, access and transmission technology, switching and networking technology, and the institutional environment governing the ownership, regulation, and access. In today's world, the state-of-the-art technology includes faxes, telephones, computers, switches, compact discs, video and audio tape, coaxial cable, wire, satellites, optical transmission lines, microwave networks, and televisions. In the future, there will be technologies and applications that are on the drawing board or not yet envisioned.

The GII, with a well-functioning policy and regulatory environment, also will offer consumers, business, and the public sector access to information, ideas, goods, and services from a variety of public and private sources. The GII also offers the potential for new applications in education, medicine and health care, environmental management and monitoring, and speeding the flow of information for business and finance. With all of these elements and attributes taken together, the GII will be a vital force spurring the prospects for sustainable economic growth in developing countries, by opening trade linkages, removing social barriers, and strengthening democratic institutions.

The United States is a world leader in designing, building, and using the GII, an information superhighway made possible by modern telecommunications and computer networking technologies. The Vice President has expressed the Administration's vision that building the GII and having access to it is an essential prerequisite for sustainable development:

These highways -- or, more accurately, networks of distributed intelligence -- will allow us to share information, to connect, and to communicate as a global community. From these connections we will derive robust and sustainable economic progress, strong democracies, better solutions to global and local environmental challenges, improved health care, and -- ultimately -- a greater sense of shared stewardship of our small planet.¹

¹ Remarks delivered by Vice President Al Gore to the International Telecommunications Union in Buenos Aires, Argentina on March 21, 1994.

He warned, however, that "the power of the Global Information Infrastructure will be diminished if it cannot reach large segments of the world population."

SM215.1.2 STATUS OF POLICY DETERMINATION #10

In 1984, USAID issued Policy Determination #10 "Development Communications." It described the framework, objectives, and conditions for using bilateral foreign assistance funds for communication-related activities reflecting the foreign assistance objectives and the technology at that time.

Since the early 1980's, the world has undergone an unprecedented economic, political, social, and cultural transformation. This has led to a fundamental change in our nation's foreign policy as well as a new array of bilateral assistance initiatives. In addition, technological advances, the growth of computer-mediated communications networks, and a restructuring of the global telecommunications industry have transformed interactions between those with access to these technologies. They have created new, more efficient means of commercial and financial transactions, inventory and management control, goods production, and services provision including those in education and health. As the transnational availability, ease, and speed of computer-mediated information processing has improved, a truly global society has become technically possible.

As a result, the policies and program applications in PD #10 need to be updated to reflect Administration priorities, the changes in economic and political institutions, the development of new technologies, and the significant cost reductions in designing, building, managing, and providing telecommunications and computer-mediated information services in rural and urban communities worldwide. Therefore, PD# 22 replaces PD# 10 as the agency policy statement on the role of telecommunications in sustainable development and humanitarian assistance.

SM215.1.3 TELECOMMUNICATIONS APPLICATIONS

a. Economic Growth

To introduce and employ new information technology in agriculture. For example, USAID's non-traditional agricultural exports project in Ecuador created a self-financing, computerized trade and investment intermediation service to link exporters with clients. Another activity provides Asian USAID agribusiness projects with regional and global market information, assuring a system to collect and deliver current market prices for high value horticultural products which is widely accessible to anyone in the region.

To improve the use of information technology and media for the flow of market information, e.g. financial services, transportation, manufacturing, and trade opportunities. USAID's Capital Markets Development project in the Philippines was designed to enhance the efficiency of the securities market by automating trading operations, integrating the two stock markets in operation, upgrading regulatory functions, and improving the quality and transparency of information available to capital market participants. Market information services were created to gather investment information and provide it on a fee basis through a data-telecommunications network.

To help small and medium-sized businesses in developing countries and transition economies, as well as micro enterprises operated by both men and women, assess opportunities and technical requirements for global trading through the GII. In Tanzania, interviews with a wide variety of businesses confirmed that the time and cost of marketing, distribution, inventory management, receivables collection, etc., were or could greatly be reduced by better telecommunications because opportunities with limited time horizons -- such as exports of perishable horticultural produce -- could be captured.

To promote the design and development of country and regional computer networks and telecommunications systems which meet international standards for open systems. For example, USAID provided telephone, telegraph and telex services to interconnect Chad, Cameroon, and Nigeria, which permitted wide-ranging communication among the three countries and afforded Chad with access, via facilities in Nigeria and Cameroon, to international circuits.

To assist countries in developing the human capacity to make sound technical and policy decisions as they consider major investments in telecommunications and new computer-mediated communications capacities. Since 1983, USAID has provided tuition-free training to over 800 developing country telecommunications officials through the United States Telecommunications Training Institute. Through cooperative agreements with the Office of Energy and Infrastructure and the Central and Eastern Europe Regional office, short term training is provided to technical experts and policy-makers in the areas of telephone systems, satellite transmissions, data communications, and computers.

To assist in the development of rules for regulating access and other monopoly activities in the provision of telecommunications services and in the enhancement of human capacities to carry out continuing reform. USAID organized Telecommunications Policy Laws Regulators seminar aimed at restructuring the telecommunications sector by engaging in discussions the legislators formulating the new telecommunications laws in the Newly Independent and Central and Eastern European States (NIS/CEE). The U.S.

State Department's Communications Information Program (State/CIP) under an Interagency Agreement with USAID offers telecommunications policy reform technical assistance through seminars on basic telecommunications legislation, tariff regime, mobile communications, packet switching, and regulatory issues. In another activity, the Southern Africa Regional Office is implementing an activity to rationalize the telecommunications sectors of the Southern Africa Development Community (SADC) member countries through training in the areas of telecommunications restructuring, commercialization, and privatization.

To assist developing countries in improving trade prospects. On a global basis, the United Nations Conference for Trade and development (UNCTAD) has launched a network of some 70 "trade points", most of which are located in developing countries. These trade points electronically connect key public and private participants in international trade, and facilitate both the exchange of trade information as well as the execution of actual transactions. USAID has provided funding to establish five pilot trade points under this program.

b. Population and Health

To make available demographic and epidemiological information for improving the delivery of health services to rural communities. For example, the Medical School Library, University of Zambia, is making reference materials available to researchers and students at the university as well as to individuals at 100 sites off campus. It distributes regularly information about AIDS, shares information with other African Medical Schools about research that is not published, and links by computer the hospitals in southern Zambia, providing ways for people to mitigate constraints imposed by bureaucracy and clearance processes.

To create new sources of information to improve the delivery of family planning and medical services. In addition to social outreach through mass media, a USAID activity designed to improve family health service delivery in Mali will implement a new MIS system to improve the collection and dissemination of health statistics and commodity distribution data. This system will use computers and two-way radios contributed by the project.

To improve and expand access to diagnostic and prognostic information and personnel in the treatment of patients, especially in impoverished and rural areas. Healthnet, organized by a nonprofit organization makes it possible, by means of inexpensive radio equipment transmitting to low-orbit satellites, for users to query colleagues, hold conferences via electronic mail, order and receive medical literature and request data base searches. As of 1991, demonstration sites had been set up in Kenya, Tanzania, Uganda, Zambia and Zimbabwe.

To improve the dissemination of health and family planning information, especially to women and minorities. USAID is expanding and strengthening the delivery of family planning services in Nicaragua through the private nonprofit organization PROFAMILIA. As part of the activity, PROFAMILIA is creating a Social Communications Unit which will use mass media campaigns to foster better child care, sex education, and community-based distribution of contraceptives. A USAID activity in Morocco, focused on improving the health of children under five years of age and of women of childbearing age, will develop a computer database to target segments of the population that are underserved by health outreach services and will fund radio and television spots to encourage the use of expanded health services and to educate the population about maternal health and family planning issues.

To develop computer-based patient records and health care resources which are critical to improving the quality and reducing the cost of health care. For example, USAID staff and cooperating agencies routinely contribute to the PHNFLASH and QCARE "LISTSERV"s. PHNFLASH is a weekly newsletter and archiving service on PHN issues. QCARE is a discussion group on quality assurance and continuous quality improvement in health in developing countries. The PHNLINK also distributes MotherCare's "Mothers and Children" newsletter to their 45,000 subscribers.

To provide "distance education" for health care professionals in areas such as maternal and child health. In Guyana, for example, rural health workers called "medex" use a two-way radio network to communicate with headquarters in Georgetown to check on the delivery of drugs and supplies and to receive advice on major health problems. They also request emergency evacuations and follow up on patients referred to the hospital. The Georgetown training staff offer refresher sessions and "grand rounds" over the radio. At night, chatting over the radio helps medex reduce their sense of isolation and boosts morale. USAID's SISDIKSAT Distance Education Project in Indonesia exhibits the vast potential for two-way communications in rural education: The project linked ten distant and remote universities with a telephone based "electronic classroom" to provide rarely available academic course to university students, to upgrade faculty knowledge and teaching skills through in-service training programs and seminars, and to facilitate administrative and institutional communication. In the West Indies, a USAID-sponsored Rural Satellite Program linked university campuses on Barbados, Jamaica, Trinidad, Dominica and St. Lucia: each room was equipped with audio conferencing equipment, slowscan television, microcomputers and telewriters. A typical weekly schedule included in-service classes for teachers, meetings of the project's coordinators, class sessions for Challenge Examinations (which allow students to take their first year of university

in their home countries), continuing medical education classes, and medical consultations.

c. Environment

To explore the use of remote sensing, Geographic Information Systems, and other global information in environmental planning and management of renewable and non-renewable natural resources. One USAID activity in Peru used satellite imaging along with aerial photography to provide native communities in the Palcazu Valley with detailed land maps to identify unauthorized land use to help them enforce laws regulating forest use.

To develop global information systems on environmentally sound U.S. technologies in order to promote energy efficiency and reduce industrial pollution. Under an initiative of the United States-Asia Environmental Partnership and the USAID Center for Trade and Investment Services, the Environmental Technology Network for Asia (ETNA) electronically links U.S. environmental technology companies with trade leads in nine Asian countries. Another USAID-supported activity underway is the Efficient Energy Information Communication System (EEICS) based on powerful, low-cost, and easily replicable electronic communication and information technologies of global reach. Expected users include utility officials, regulators, other government officials, non-governmental organizations, public-interest groups, educators, investors, industrialists, specialty publishers, donor agencies, contractors, and the interested public in both the developed and developing worlds.

To facilitate transnational and national efforts to protect important ecological systems. Using satellite imaging augmented onsite surveys and socioeconomic studies, USAID helped design and establish a national park on Madagascar's Masoala Peninsula, home to large areas of undisturbed natural habitats containing a wealth of biodiversity.

To improve the capacity of host countries to analyze their information needs, and design, build, and manage their own information systems in the area of energy and the environment. USAID's "Center for Environment" is underwriting the "Global Energy and Environment Network (GLEEN) activity as part of the information exchange mandates in Agenda 21. GLEEN emphasizes four broad initiatives: building a sound foundation for information systems, designing and building the systems, using the information tools to exchange information, and promoting partnerships between U.S. and host country organizations to maintain information exchange activities.

d. Democracy

To broaden the mechanisms for participatory decision making through easier access to information and communications channels. Within the Newly Independent States (NIS) of the former Soviet Union, USAID is financing the establishment of independent television and radio stations.

To encourage the creation of grass-roots networks, providing citizens with a wide range of global information services and helping them to access local services and institutions. In Peru, for example, teleconferencing activities were developed in cooperation with Peruvian Agriculture, health, and education ministries and incorporated a wide variety of administrative, training, diffusion, and promotional strategies. A total of 658 audio teleconferences were sponsored during 1984 and 1985 involving almost 12,000 participant hours.

To promote a transnational information system to protect human rights and assist governance as well as humanitarian assistance efforts. USAID supported emergency and post-civil conflict rehabilitation of telecommunications systems in El Salvador, Jamaica, the Philippines, and Afghanistan.

To diversify the sources and channels of information available to individuals and groups, thereby increasing the competition of ideas and the free flow of information. For example, USAID funded the "Knowledge Gateway" in India to provide local access through EASYNET to information on agriculture, natural resources, health, population and nutrition programs.

To strengthen institutions with responsibility for promoting and maintaining democracy. In El Salvador, USAID is providing computer support to improve the voter registration and documentation process and encouraging voter registration and participation using television and radio spots. In addition to grassroots broadcast media campaigns to improve civic education, another USAID activity is providing Nicaragua's National Assembly with an electronic voting system as well as training to transform the state-owned Radio Nicaragua into a contemporary public radio station.

e. Humanitarian Assistance

To promote faster, more reliable communication to the ten countries in the Greater Horn of Africa through lower cost communication. USAID is supporting an initiative, AFRINET, that will lower the costs of communication between the headquarters of the World Food Program and its field offices within the Greater Horn of Africa. The activity should result in better WFP tactical management of the food aid pipeline to assure a more timely and efficient delivery of international food aid for development and humanitarian purposes. For example, InterNet message communication time from Rome to field offices in the Greater Horn of Africa will be reduced from 3-4 hours to less than .5 hours.

To facilitate information sharing on the ten countries of the Greater Horn of Africa. USAID has funded the design and development of the Greater Horn of Africa Information Exchange (GHIE). This InterNet-based resource supports the objectives of President Clinton's Greater Horn of Africa initiative by facilitating strategic coordination of policies and programs across the many development and disaster response organizations and agencies involved in the region. The GHIE, a no-fee resource accessible via e-mail, telnet, gopher, and the World Wide Web (WWW), establishes a central site for information on potential crises, humanitarian and relief operations, and food security and long-term growth in the region. The GHIE can be accessed from any computer with a modem. This is a breakthrough in information access for those supporting programs in the Horn region.

To explore the use of remote sensing, Geographic Information Systems, and other global information in anticipating and responding to natural disasters. For example, the PEACESAT satellite network has been used to coordinate emergency assistance after typhoons and earthquakes in the South Pacific. USAID provided a minicomputer and satellite image processing software to the Regional Center for Services in Surveying, Mapping, and Remote Sensing (RCSSMRS), located in Kenya. The project was designed to help strengthen RCSSMRS's ability to monitor seasonal crop conditions in relation to flooding, soil erosion, forest depletion, and pastoralism, thereby improving the Center's capacity for early warning of food shortages.

To facilitate transnational and national efforts to mitigate the human and property losses caused by natural disasters. For example, the PEACESAT satellite network has been used to coordinate emergency assistance after typhoons and earthquakes in the South Pacific. In Bangladesh, the government implemented a cyclone early warning telephone system consisting of single telephone installations in several coastal areas previously without access to telecommunications to help deal with cyclone warnings and other emergencies.

To promote the rapid exchange of disaster information and to support the United Nations Department of Humanitarian Affairs (UN DHA), USAID and the Department of State are cooperating with other USG agencies and other nations to develop Relief.Web, a DHA home page on the Internet. A formal project recently has been approved by UN DHA, which will develop a full system based on an experimental prototype now in use.

To disseminate disaster information from a wide range of sources quickly. USAID has developed a Humanitarian Response and Resources list in sections of its home page (WWW.INFO.USAIID.GOV). This includes information on current disaster situations and a listing of other "home pages" which contain

emergency management information. For example, the U.S. Federal Emergency Management Agency (FEMA) has a "Global Emergency Management System (GEMS)" on its home page, which lists more than 100 information sources.

SM215.1.4 Tied Aid and Concessionary Financing

This Appendix describes the framework for reviewing USAID telecommunications-related capital projects for tied aid and concessionary financing considerations under the OECD "Arrangement." It describes the nature of the tied aid and concessionary financing problems, and the criteria for determining whether a project with concessionary financing is allowable.

a. Nature of the Problem

Tied aid financing is defined as loans or grants that are in effect tied to procurement of goods and services from the donor country. Tied aid credits (loans or grants) can either stand alone or be mixed with commercial financing or standard official export credits. The combination of a tied aid credit in the latter two instances is called a "mixed" credit. Officially supported export credits, and aid grants and credits, are intended to supplement the working of the market by enabling trade to take place when and where it does not attract commercial financing.

The purpose of non-commercial financing is to increase the flow of real resources to developing countries, allowing them to purchase additional goods and services with direct developmental benefits. If, however, the reason for the non-commercial financing is to help a national exporter win a contract that would otherwise go to a foreign competitor, it is trade-distorting. In this case, government supported funds are only replacing or crowding-out commercial financing.

Trade distortions arise when activities which should normally receive market financing, including official export credits, are financed with aid credits tied to procurements in the donor country. The funding of capital activities in sectors such as telecommunications, power generation and transmission, transportation, manufacturing, and oil and gas is closely monitored by the Organization for Economic Cooperation and Development's (OECD) Development Assistance Committee (DAC) and the Export Credit Group (ECG).

The OECD and the export promotion agencies of the USG and other donor governments have instituted rules and procedures to determine whether a telecommunications activity should receive concessional aid financing (i.e., no access to market financing), market-related financing or official export credits. There is a general presumption by the OECD that telecommunications activities, except in rural areas and some special situations, should be financed on commercial terms. USAID needs to ensure that telecommunications-related capital activities are developmentally

sound and the financing terms are consistent with OECD rules (briefly described below.)

The availability of tied aid credits puts exporters from countries without equivalent access to such concessional financing at a distinct disadvantage in bidding on activities. Once tied aid enters the picture, contract awards are often based not on the price or quality of the goods and service but rather on the availability of subsidized financing. Certain types of telecommunications equipment activities, along with those in manufacturing, power generation and transmission, and transportation, have often been associated with trade-distorting tied aid credits.

b. OECD Rules

In 1992, the Participants of the Organization for Economic Cooperation and Development's Export Credit Group issued a new set of tied aid rules called the "Arrangement on Guidelines for Officially Supported Export Credits." The "Arrangement" distinguishes between tied aid credit offers that are permitted and those that are prohibited. The general principle governing tied aid credits agreed by the OECD Participants, and expressed in the Arrangement, is:

"OECD Members' export credit and tied aid credit policies should be complementary: those for export credits should be based on open competition and the free play of market forces; those for tied aid should provide needed external resources to countries, sectors, or activities with little or no access to market financing, ensure best value for money, minimize trade distortion, and contribute to developmentally effective use of these resources."

The new rules and procedures apply in the following situations:

1. The rules apply to all tied aid credits with a concessionality level below 80 percent and a value of Special Drawing Rights (SDR) 2 million or larger. In general, the rule prohibits tied aid credits for activities that should, with market-oriented pricing, be commercially viable and therefore able to be financed on commercial terms.
2. If the concessionality level is less than 35 percent, no tying is permitted.
3. Tying is prohibited in countries where the per capita GNP makes them ineligible for 17 or 20 year loans for the World Bank, except if the concessionality level is 80 percent or more.
4. Tying in the relatively least developed countries is exempted from the rules if the concessionality level is 50 percent or more.

5. The rules imply that if the concessionality level is 80 percent or more, the activity is exempted from virtually all of the prohibitions. In effect, a donor can fund a commercially viable activity and the activity can be in any country. However, it would be very difficult to justify the use of bilateral assistance funds for a developmentally sound activity in such circumstances since commercial financing or export credits should normally be available.

c. Tied Aid Activity Groupings

The Arrangement has established a consultations process in which OECD members can raise questions concerning the tying status and financial terms of challenged activities. These are activities in which the underlying data do not clearly support the donor decision to proceed with tied aid financing. The discussions of the tied aid eligibility of activities has led to the following tentative groupings:

1. Activities Usually Ineligible for Tied Aid. This includes telephone equipment serving areas of high and medium population density, and telephone equipment serving interurban or long-distance communications.

2. Borderline Activities. This includes telephone equipment serving areas of low population density. These can go forward if there is sufficient information to support a tied aid determination.