Sida Evaluation 2008:07

Sida's Support to Information and Communications Technologies (ICT) for Development

Alan Greenberg

Department for Infrastructure
and Economic Cooperation

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Author: Alan Greenberg.

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SWEDISH INTERNATIONAL DEVELOPMENT COOPERATION AGENCY
Address: SE-105 25 Stockholm, Sweden. Office: Valhallavägen 199, Stockholm
Telephone: +46 (0)8-698 50 00. Telefax: +46 (0)8-20 88 64
E-mail: sida@sida.se. Homepage: http://www.sida.se

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Executive Summary

Background: Sida began selectively supporting Information and Communications Technologies (ICTs) in the mid-1990s. In 1999, following a report on the wider application of ICTs in development cooperation, Sida adopted a strategy for the use of ICTs in Development Cooperation (ICT for Development, or ICT4D). In 2002, an ICT4D Secretariat was created within the Department of Infrastructure and Economic Cooperation (INEC). The Secretariat's mandate was to support all of Sida and Swedish Embassies regarding the use of ICT4D, and to effectively "mainstream" the concept. The present study was commissioned to evaluate how successful the Secretariat has been, to review what other donors and international organizations are doing with respect to ICT4D, and to recommend what path Sida should follow in the future. Options were to include a range of ambition levels.

ICTs: ICTs are ubiquitous in the developed world. In the developing world, some technologies such as mobile phones are increasingly common, and large efforts are being put into financial and similar systems. But ICTs are rarely used in support of critical areas such as health, education and trade. If developing countries are to address their needs in these areas, ICTs must be part of the solution. Few Sida or embassy staff and few partner country representatives appreciate such issues.

ICT4D Secretariat: The Secretariat has been successful in supporting embassy personnel and in building relationships with partners within developing countries. It was allocated a discretionary budget to fund international and developing country activities. A large number of projects and activities have been sponsored by the Secretariat, and these have been very well received by the partner community. It has been less successful in building relationships and supporting departments within Sida headquarters. Through the Secretariat, Sida has been very active in international ICT4D forums. The activities within developing countries and in international arenas have given Sida and Sweden a very good reputation among partner countries and other donors interested in ICT4D.

The goal of mainstreaming ICT4D was too optimistic. Sida's other mainstreaming efforts have not been overly successful. For many reasons, assuming that it was possible to make all Sida and embassy staff aware of ICT4D and capable of taking action with respect to them was quite unrealistic. The lack of active support for ICT4D by Sida senior management made the situation worse.

The Secretariat was originally staffed with five people, but it has been without a permanent Head of Unit of half of its life, and due to leaves and reassignments, its staff count was often far below five. The current budgeted count is four. At the time this study started, there were two ICT4D advisors (including the acting Head of Unit).

Since 2003, there has been one ICT4D specialist in Tanzania, originally serving only Tanzania, and now serving East Africa. Although not formally part of the Secretariat, there was and is an informal and operational relationship.

Donors and International Organizations: Few bilateral donors have a focus on ICT4D. There is support from the World Bank, but their focus is on major government systems. There are several international organizations that focus on providing knowledge on how to effectively use ICTs in development applications. Sida has been instrumental in helping to create and support these organizations.

Funding Modalities: With the trend away from project support and toward sectoral plan and general budget support, it is increasingly difficult to support ICT4D applications. Most developing countries do not include such needs in their plans, either from lack of understanding, or the (often accurate) belief that donors have no interest in such plans. This implies that there are even fewer opportunities to try to increase partner awareness related to ICT4D.

SPIDER: Several years ago, Sida created the Swedish Program for ICT in Developing Regions (SPIDER). SPIDER is an academic unit within the Royal Institute of Technology, but funded largely by Sida. It was designed to assist developing countries with the promotion and deployment of ICT4D. An auxiliary function was to support Sida and Swedish Embassies to augment the ICT4D Secretariat.

Directions Forward: The study Terms of Reference called for three ambition levels with the middle one corresponding to today's staff count, as well as a lesser and greater level. The suggested alternatives are:

- A minimal ICT4D staff in a single centralized unit. There would still be some support of international activities and support of Sida/embassy staff that requested help. There would be no outreach.
- A staffing level equal to today's budgeted staff. It would be organized with two people in a central unit, and two within Sida departments that could best use their services. These decentralized people would also be able to service other departments if requested.
- A staffing level higher than today, perhaps 6–8 people. Of these, no more than half would be in the central unit. If overall ICT4D staff increases past 8, the growth would largely go to decentralized people.

Regardless of the option selected, the centralized unit should not be attached to a specific Sida geographic or sector department, but should be report into a "neutral" location. A budget would be required to support international activities and at least some pilot and leading edge projects. Consideration should also be given to increasing embassy personnel to address the specific needs within a country or region.

Recommendation: ICTs are a critical component allowing developing countries to address their challenges. Using ICTs as tools to address specific needs is difficult, and donor agencies should provide support in increasing partner country understanding of the issues and if required, project/program support. Sida has been one of the few leaders in this area, it has been successful, and it should not abandon this position now.

Sida should continue to support ICT4D at no less than the current level. Staff within embassies should be maintained and augmented for countries or regions where there is strong potential for the successful use of ICT4D.

1. Introduction

1.1 ICT4D at Sida

Sida has a long history of supporting the use of technology in developing countries. In particular, support of telecommunications infrastructure was a key focal point prior to the growth of a competitive private sector market. In the mid-1990s, the Department of Research Cooperation (SAREC) began funding projects to develop and enhance the use of Information and Communications Technologies (ICT) within SAREC-supported universities. Although the initial focus was on providing services to researchers, the projects also benefited the entire university community. In order to support this activity, an ICT support group was formed within SAREC. In 1999, Sida adopted a *Strategy of IT in Development Cooperation*. As an outgrowth of this strategy, in 2002, the ICT unit within SAREC was transformed into the ICT for Development (ICT4D) Secretariat as a unit within the Department of Infrastructure and Economic Cooperation (INEC). The ICT4D Secretariat had a mandate to serve the entire Sida organization on issues related to ICT for development; to support increased development and utilization of ICT in Sida partner countries; and to ensure ICT support was integrated in all of Sida's areas of activities.

1.2 Study Mandate

The mandate of the present study was to:

- Present a brief assessment of the role and achievements of Sida's ICT4D Secretariat;
- Present a brief summary of how other donors approach ICT4D;
- Present conclusions and recommendations based upon this data;
- Present different levels of ambition and direction of Sida's future ICT4D work and project their consequences;
- Propose how Sida should design and organise its future ICT4D work to achieve the desired results.

The issue of ambition and staffing levels was a key aspect of the study. The current ICT4D Secretariat is allocated four people (including the head of unit). During interviews with Sida senior management, it was clarified that the "lower" ambition level considered should be less then four, but non-zero. The study does nevertheless address the "zero-level" situation.

The full Terms of Reference for the study can be found in Appendix 6.

1.3 Study Methodology

The study was conducted over the period from February 2007 to May 2007.

A number of documents were reviewed and the prime ones are listed in Appendix 4.

Three site visits were made to Stockholm to interview Sida staff members at both the executive and operational levels, former Sida staff, and a number of people outside of Sida but with insights into Sida and ICT4D. On site interviews were also conducted in Switzerland, the U.S.A. and Canada. In cases where in-person interviews were impossible or impractical, telephone interviews were conducted. E-mail discussions supplemented these interviews. In total over fifty people were interviewed. The full list of interview subjects is given in Appendix 2.

In addition, the consultant has worked with Sida-related projects for the last six years, including extensive discussions with embassy staff and developing country partners in five countries[1] supported by Sida and numerous interactions with other Sida countries. The consultant has over forty years of experience with all aspects of ICTs, and twelve years of experience working with developing countries. In 2005, the consultant performed a study on the effective use of ICTs in development cooperation to address poverty.

All of these inputs have been duly incorporated into this study.

1.4 Overview of ICT

1.4.1 ICT Omnipresence

In the industrialized world, Information and Communications Technologies are everywhere. Regardless of the domain considered – banking, transportation, healthcare, education, trade, energy, tourism or government – technology plays a major role. Technologies are so embedded in our lives that often we do not even realize that they are being used. In many developing countries, that is not the case. Although technology is beginning to have a significant presence, there are many aspects of daily life that are still carried out as they were fifty or more years ago. This often results in less effective services as well as higher transaction times and costs.

1.4.2 ICT Characteristics

In order to properly understand the benefits, and potential pitfalls related to the use of technology in developing countries, one must first understand the basic characteristics of these technologies. A useful working definition of ICT is "electronic means of capturing, processing, storing and disseminating information". Although today, many ICTs are based on digital technology, some older non-digital technologies such as broadcast radio are included.

Despite the wide availability and use of technology in the developed world and despite falling unit costs in many areas, good technology implementations are often difficult and costly. Although the outcomes are rarely announced as such, many projects fail and many that are successful far exceed their original budgets and implementation timelines.

To further increase the challenge, ICTs tend to evolve and change very quickly. It is a challenge to keep up with changes in any particular area, and virtually impossible to be aware of changes covering the entire ICT spectrum. Best practices can be useful, but are often not available or difficult to adapt to local needs if they are.

Given these general characteristics, in developing countries where funds and skills are often in short supply, it is unlikely that the overall track record will be significantly better. Moreover, as technology is pushed out to those with few ICT skills, one must overcome the normal fear of the unknown and timidity that goes along with first-time users.

Nevertheless, technologies are an integral, unavoidable and beneficial part of life in the industrialized world. ICTs are the enablers that allow modern health care, banking, trade and communications to exist. If developing countries are to play a role in the global economy, they too must have access to modern technologies.

1.4.3 Characterization of ICTs

In the context of development cooperation, a number of words are used to characterize ICTs. They include *tool*, *enabler*, *sector* and *issue*. The term *Digital Divide i*s also used to describe the relative absence of ICTs in developing countries. All are reasonable ICT descriptors but the selection of the term can alter the outcome of the discussion.

[1] Sri Lanka, Uganda, Mozambique, Tanzania and Rwanda

When the term *tool* or *enabler* is used, the implication is that ICTs are being used to accomplish some other end. They may be optional or mandatory to accomplish that end, but ICTs are not the reason for taking on the project.

When the term *sector* is used, the implication is that the development cooperation is in support of building or strengthening the business aspects related to ICTs. This may include helping to build physical ICT infrastructure, capacity building, facilitating development of an ICT private sector (such as supporting business incubators) or strengthening government oversight (regulation). Some aspects of ICT sector support can also be viewed from different perspectives: capacity building could be viewed as education sector support, and strengthening regulation could be viewed as government support. A viable and even vibrant ICT sector may be a prerequisite for using ICTs as tools.

The term *issue* is often used to describe cross-cutting *problems* that need to be addressed. Examples are gender inequality, HIV/AIDS, and the protection of the environment. There are certainly *issues* related to ICTs, such as availability, affordability and access, but to describe ICTs themselves as an issue forces a negative view on them. It is unclear what the origin of this usage is, but most likely it appeared when the concept of mainstreaming ICTs was developed, following the mainstreaming of other topics such as gender, HIV/AIDS and the environment. Although technology may not be a problem that needs to be solved, but rather an *opportunity* to increase effectiveness, ICTs are most definitely cross-cutting.

The Digital Divide, the wide gap in access to new technologies between the developed and developing world, has become a symbol and prime example of the often-wide gulf between developed and developing counties. In fact, the digital divide is just one of many divides, and it can be viewed as one of the symptoms of underlying problems and not a core problem. Nevertheless, in an effort to address it, donors and NGOs have tried to deploy the newest and most sophisticated technologies, often with little long-term benefit. Such experiences have hurt the more rational use of ICTs in developing countries. There is, however, a "divide" that is important. In deploying technologies, there is a danger that they be made available to only to the rich, thereby widening the socioeconomic divides within the country.

1.5 Development Cooperation Modalities

In line with the *Paris Declaration on Aid Effectiveness,* and in cooperation with the Nordic Plus Group of donors[2], Sida and Swedish missions abroad are reducing the number of sectors covered and reducing purely bilateral projects. In place of such projects, we are seeing:

- increased general budget support;
- greatly increased sectoral plan support;
- increased harmonization with other donors.

Sweden, like many countries, is also looking for ways to make their development cooperation processes more efficient. A common solution, and one that Sweden is focusing on, is to reduce the number of sectors that are being addressed in any given country. By focusing on fewer sectors, it is felt that overhead can be reduced. This can have the result of squeezing out a sector that might only use a small percentage of the overall funding, but could be nonetheless very important in its own right.

[2] The *Nordic Plus* Group of donors includes Denmark, Finland, Ireland, The Netherlands, Norway, Sweden and UK.

2. ICT and Developing Countries

Virtually all developing countries are using ICTs to some extent, and such usage will obviously grow. To be viable, effective and efficient, both the public and private sectors will increasingly rely on technology.

Poverty alleviation is a major goal in developing countries, and of particular relevance to Sida. In the least developed countries, and particularly in Africa, the Millennium Development Goals (MDG) progress is behind schedule. ICTs do not directly address poverty issues, but there is increasing research which makes it clear that careful deployment of ICTs will be essential in addressing some aspects of poverty. As a simple example, addressing health care issues in rural areas will require that accurate and timely information about health issues be available to decision makers, and ICTs are essential in effecting such information collection, transfer and analysis.

Although most developing countries view ICTs as a necessary part of their future, few have really focussed on how this will happen. Most governments are building or planning to build technology-based systems for their core businesses such as finance and taxation. However, there was virtually no mention of ICTs in the first round of Poverty Reduction Strategy Papers (PRSP). The second round of PRSPs sometimes mention ICTs in support of poverty reduction, but generally in very non-concrete terms. Few governments have recognized ICTs as a cross-cutting sector which will support the line ministries. Few governments have created an ICT ministry or agency to oversee the rational deployment of ICTs in their public sector. Few sectoral plans incorporate the effective use of ICTs. Few governments have allocated budget resources to ICT projects except in limited circumstances typically related to their own finance systems and to meet commitments associated with earlier donor-funded projects.

The preceding does not imply that there is little ICT activity in developing countries – that is not the case. There is often a robust private sector, and there are large-scale projects (such as those funded by the World Bank) helping to create e-government systems. The telecommunications industry, led by the mobile telephone companies is often vibrant, and there is significant external investment in that sector.

2.1 The ICT Dilemma

Unfortunately, as will be further discussed in section 4.3, very few donor countries have had a focus on using ICTs to address development issues. In the context of project-focused aid modalities, this meant that only a few donor countries were interested in funding ICT-related projects. Even though there were just a few such donors, partner countries *would* benefit from those projects! The new aid modalities create quite a different situation.

Understanding of the benefits of using ICTs as enablers in other sectors is poor and often completely lacking in both donor in-country staff (from the ambassador on down to desk officers and advisors) as well as most donor's headquarters staff. Understanding is similarly weak or lacking in partner country government officials with whom they deal. Even when there is an understanding on the part of the developing country, if they get a strong message that ICT is not of particular interest to donors, it will often play a small role in their plans and requests.

Thus, most donor countries do not make it known that they are "interested" in funding ICT-related work, and the developing countries don't ask. Similarly, ICT-related items often do not show up in the sectoral plans.

In an attempt to harmonize activities among donors working in a specific country, formal contact between the donors and the partner country is increasingly via donor groups. If only one country in the

group is interested in ICT-related support, there may be no ready mechanism for incorporating ICT aspects.

For money that goes into general budget support, even when a country "says" that ICT is critical, there will seemingly always be things that are deemed more important and urgent than a long-term, somewhat risky ICT project, so sufficient budget money is not likely to get allocated[3].

Significant donor funds are still directed at projects, but even there, the desire to work in fewer sectors often makes it difficult for interested donors to fund ICT-related projects even if they are high on the partner-country's priorities.

The end result is that developing countries in general, and specifically the least developed countries in Africa, are likely to be increasingly unable to benefit from the efficiencies and effectiveness of ICT-enabled systems in disciplines where it takes experience and insight to strategically and effectively deploy ICTs. This is a great shame, as it is in just such areas that these countries could greatly benefit.

3. ICT4D Secretariat

3.1 ICT Policy

By the late 1990s, Sida was beginning to integrate ICTs into a number of its projects, most notably within SAREC. Driven by these projects and the radical changes brought about in developed countries fuelled by the ICT and Internet revolution, the Swedish Ministry of Foreign Affairs and Sida commissioned a report entitled *IT in Swedish Development Cooperation – Suggestion for Ways of Including the Low-income Countries*. This was followed by the approval of the 1999 *Strategy for IT in Development Cooperation*[4] which included the following policy statements:

- Sida shall integrate IT as a natural and important part of development cooperation.
- Sida supports the rapid integration of IT in the recipient countries in order to improve communications and the exchange of information.
- Sida shall develop IT for development as a strategic area for Swedish development cooperation.
- Sida shall participate in international cooperation and seek work in partnership with other donors and with institutions/companies in Sweden and partner countries.

The action plan included the following substantive items:

1. Knowledge of IT for development shall be mainstreamed at Sida through training programmes and organizational measures.
2. Special funds shall be allocated to simulate IT for Development.
3. Sector strategies/analyses shall be made in certain sectors, commencing with an IT strategy for research cooperation and an analysis of the possibility of using IT in Sida's support for democracy and human rights.
4. A study shall be made of the possibility of establishing a centre of competence in Sweden.

[3] Necessary ICTs are often not the glamorous projects that capture the imagination.

[4] The term Information Technology (IT) was appropriate in 1999, but has since generally been replaced with ICT in relation to development cooperation. "IT" is used in this document where it occurred in historical documents.

In October 2002, this policy was more fully implemented with a decision that included:

- Sida shall integrate IT as a natural and important part of development cooperation.
- Sida shall develop IT for development as a strategic area for Swedish development cooperation.
- Sida shall create an ICT Secretariat to strengthen Sida's work with ICT in development cooperation.
- The Secretariat shall serve the entire Sida organization on issues related to ICT for development.
- The Secretariat shall support increased development and utilization of ICT in Sida partner countries, and shall work to ensure ICT support is integrated in all Sida's areas of activities.

Physically, the Secretariat consisted of the ICT unit within SAREC, renamed, and moved to INEC.

3.2 Mandate

The 2002 policy identified several tasks for the Secretariat.

- Advice and information. The Secretariat shall assist embassies and Sida departments in their implementation of ICT in Swedish development cooperation, participate in international cooperation concerning ICT4D and provide summary information to the development community.
- Mainstreaming and field support. The Secretariat shall provide support to embassies and Sida regarding questions concerning ICT4D. The Secretariat shall, on request, participate in embassies' and Sida departments' assessment of support for initiatives.
- Responsibility for Sida support to initiatives. The Secretariat shall handle selected Sida-supported initiatives (e.g., national ICT policies and strategies, ICT training and education and the development of ICT infrastructure).

3.3 Staffing

When it was created, the staffing level of the ICT4D Secretariat was a Head of Unit and four ICT Advisors. The current level is a Head of Unit and three ICT Advisors.

However, actual staffing at these levels has been rare. After the Secretariat's creation, it took roughly one year for a permanent unit head to be appointed. The unit head was reassigned to a field post over a year ago, and there has been no permanent Head of Unit in the interim period. Additionally, two Advisors took parental leaves during the period, one person left to form the new Swedish centre of competence mentioned in the original 1999 action plan, and one person left to become the ICT advisor in Eastern Africa. There was only one new hire during the period, and he left in less than one year.

Overall, the full complement of five people was rarely if ever available, and the unit has had just two people (one acting Head of Unit and one advisor) for the last six months. A new full-time advisor was scheduled to start on May 1, 2007, and a fourth person on a six-month contract will be starting soon thereafter (the six-month contract will allow for a permanent Head of Unit to be put in place at the end of the term should that be desired).

Most of the advisors within the unit have had stronger interests in ICT infrastructure or the hard sciences. The person starting May 1st has a background in NGOs and the soft sciences.

For a three-year period from 2003–2006, there was an ICT Advisor attached to the Embassy of Sweden in Tanzania. Starting in 2006, this position was replaced with a new ICT Advisor attached to the Embassy, but now responsible for ICT activities in East Africa. The advisor is not paid from headquarters budgets, but is loosely attached to the Secretariat.

3.4 Activities

The Secretariat staff has been very active working with staff in Embassies in Africa, Asia and Central and South America. In cases where the Embassy staff and partner representatives have been even remotely receptive, ICT issues have been raised and technology included in appropriate places in the country strategies. This description does not do justice to the amount of effort that is often required to convince non-ICT focused people that there are true benefits in considering the use of technology in their solutions, or in helping to build the physical and logical ICT infrastructure in a country. In support of country strategies, the Secretariat has commissioned 11 country ICT surveys.

They have similarly been very active with organizations within the supported countries and regions. They have sponsored, fostered or supported:

- ICT-related workshops in developing countries;
- Activities in support of Internet connectivity in Africa;
- Internet Exchanges (to keep Internet traffic local and reduce international bandwidth) in 9 countries;
- Exploration of the benefits of Open Source to reduce partner country's reliance on expensive commercial software;
- ICT as a tool in fighting Malaria and HIV/AIDS initiatives.

Major projects identified/prepared/assessed by the Secretariat but generally handled through the local Embassies include:

- E-learning Centre, ICT Policy and Population Registry in Sri Lanka;
- Schoolnet Namibia;
- Rwanda Information Technology Agency (RITA) and ICT Capacity Development;
- Tanzania ICT for Teachers Colleges, many small projects for Tanzania, including the conversion of software packages to Swahili.

Other sponsored projects include:

- Stockholm Challenge award for ICT4D projects co-funded with the Royal Institute of Technology (KTH), The City of Stockholm and Ericsson.
- Two projects in conjunction with DESO/HÄLSO (Department of Democracy and Social Development/Health Division)

International activities include:

- The United Nations World Summit on the Information Society (WSIS) 2003 in Geneva, WSIS 2005 in Tunis, and WSIS preparatory meetings;
- WSIS Gender Caucus – Co-funded with Norway, Denmark and Finland;
- The World Bank infoDev program (Information for Development) – co-funded with the World Bank, European Union, UK, Canada, Denmark, Switzerland, Germany and Finland;
- Bellanet – Collaboration tools for development – co-funded with Denmark, Switzerland and Canada;
- Eldis Gateway – Access to development information) – co-funded with Denmark, UK, Switzerland and Norway;
- Global Knowledge Partnership (GKP) – co-funded with the World Bank, Switzerland and Canada;
- United Nations ICT Task Force.

Projects/activities with other units within Sida or in support of Sida ICT:

- Support and evaluation of SAREC's ICT projects in twelve countries
- ICTs and Poverty Alleviation White Paper
- Sida Strategy and Action Plan for ICT4D
- Minor participation in DESO ICT4D strategy
- Evaluations of Sida ICT projects in conjunctions with INEC and the Secretariat of Evaluation and Internal Audit (UTV)
- ICT training and support of Sida headquarters departments and staff including many efforts to work with groups responsible for education, health and soft infrastructure in the public sector.

The last bulleted item notwithstanding, the Secretariat has been quite unsuccessful at "mainstreaming" ICTs throughout the rest of Sida headquarters. This will be discussed in further detail in section 3.8.

The support of SAREC ICT projects was the group's main responsibility before it was moved from SAREC, and this work continued after the Secretariat was created. In most years, it took 1–2 full time people, significantly impacting the work that could be done in other areas. SPIDER (see following section) has now taken over some, but not all, of these responsibilities.

A more detailed list of Secretariat statistics and activities is included as Appendix 5.

3.5 SPIDER

The *IT in Swedish Development Cooperation* report called for the establishment of a centre of competence for development-related IT issues to be established in Sweden and the 1999 Strategy for IT in Development Cooperation called for a study into the possibility of establishing such a centre.

The Swedish Program for ICT in Developing Regions – SPIDER is the end product of these recommendations. SPIDER's mission is to assist developing countries with promotion and deployment of ICTs for combating the digital divide and reducing poverty, in line with the UN Millennium Development Goals. Formally, SPIDER is an academic centre within KTH in Kista, Sweden, just outside of Stockholm. SPIDER is largely funded by Sida, with the KTH contributing a sum roughly equal to the overhead it charges SPIDER (thus operationally SPIDER get its facilities from KTH at no cost, and Sida funds all of its actual operations). A portion of the funding is used to provide a non-charged "help desk" function for Sida and Swedish Embassies, and part is used to fund ICT-related projects and activities which are deemed to be in support of Sida's poverty reduction mission.

SPIDER is a Swedish network of ICT expertise with partners from both universities and the private sector. For any given project, it can draw upon specialized resources from its partners. SPIDER also acts as the Swedish counterpart or coordinator in various Sida-funded projects with developing countries. The actual work may be done by SPIDER staff, or may be outsourced to one of its partners. This counterpart function is not covered by the basic Sida grant, but is paid for out of project funds.

3.6 Results

With one very significant exception, the Secretariat has followed the action plan given to it, and has met most of the objectives. When called upon by units within Sida or by Embassies, it has responded. It has pro-actively pushed the integration of ICT into country strategies, despite the sometimes disinterest of the Sida and Embassy people involved. It has sponsored a large number of projects and activities, both small and large, which have significantly aided developing countries. As a small example, the strong advocacy for and funding of Internet Exchange points has greatly enhanced Internet communications

in the supported countries, probably years earlier than would have been the case if it had been left to private enterprise or governments in those countries.

The Secretariat has also participated in several large-scale projects. The Rwanda IT Agency and the associated capacity development will hopefully allow Rwanda to start to use ICTs to address its many problems. The upgrading of Tanzania's teacher colleges to integrate ICTs into their programs is a first step to ensuring that all secondary schools have teachers who are aware of and comfortable with computers and the Internet. Both are long-term projects and it will be several years before it is clear how successful they will be. Regardless of the *level* of success, it is clear that the two environments will be well served by the projects existence. Both are relatively revolutionary solutions to their respective problems and the experience will support other development cooperation efforts world-wide.

The Secretariat's involvement with and support of international development organizations involved in the spread of ICT4D has been instrumental in helping them to come into existence and to develop. These organizations have contributed significantly to the global use of ICTs to address the problems of the least developed countries.

It would take a study far more detailed than this one to formally evaluate the return from the project-related discretionary funds that were provided to the Secretariat. In two of the countries where many of these projects were carried out, developing country personnel spoke very highly of the benefits received from the projects in their countries. Given that all development cooperation is a somewhat risky business, it would appear that the return in this case is more than satisfactory. Thanks to the resident ICT Advisor in Tanzania, that country has been the beneficiary of a number of ICT-related projects. An evaluation of these projects is being discussed for later this year.

3.7 Perceptions of the Secretariat and Sida's ICT Efforts

3.7.1 Within Sida

Perceptions of how well the ICT4D Secretariat has served Sida vary widely as do perceptions of how effectively Sida has encouraged the use of ICTs in developing countries. They include:

- The Secretariat has been very effective.
- The Secretariat has done nothing.
- The Secretariat may have been busy, but they were unsuccessful in mainstreaming ICT.
- Sida does not do much with ICTs, but the Secretariat has been useful when it was needed.
- When the Secretariat was asked for help, they did not respond in a timely manner.
- Any ICT skills that are required can be obtained on the open market, either from SPIDER or consultants.
- If we are going to have any involvement with ICTs, there must be at least some in-house expertise.
- Until very recently, I did not know the Secretariat existed.

The positive attitudes tend to come from people who have actually worked with the ICT4D staff, either on projects where they have collaborated, or people who have experience with the work done with embassies and partner country personnel. The negative responses were often from people who had not worked with them (often because they had no need) and occasionally from people that had not received what they thought was adequate response from the Secretariat. Given the regular under-staffing of the Secretariat, such occasional inability to respond quickly is not surprising.

3.7.2 Outside Sida

Outside of Sida, the distinction between the Secretariat and other units of Sida is somewhat blurred. However, the impressions are quite uniform among other donors, international agencies and developing country personnel. Sida has been one of the shining lights in pushing forward the use of ICTs in developing countries. Virtually all expressed surprise that this view is not widely held within Sida.

The reason for this attitude is clear. Despite the low profile within Sida headquarters, Sida has been quite active in international activities. Sida has had a very notable presence on all of the United Nations activities related to ICT as well as a G8 taskforce. Sida and Sweden played a strong role in the recent World Summits on the Information Society. And Sida has played a major and visible role in a number of global ICT4D organizations. Further details are provided in section 4.4. Moreover, in countries where Sida and particularly SAREC have been active in ICT, the effects have at times been very significant and very beneficial to the countries.

There were virtually no negative comments about the Secretariat or its staff from people outside of Sida, other than those related to the perennial unfilled positions and those related to individual personalities.

3.8 Analysis

The ICT4D Secretariat was charged with a number of tasks, with a leading one being to mainstream ICTs within Sida. The term "mainstream" is not well defined, but the general feeling is that if the process had been successful, it would mean that all operational people within Sida would be aware of the benefits of using ICTs in their domain, would have an idea of how to go about it. That this was not successful is not surprising for a number of reasons:

- All mainstreaming efforts are difficult. Reviews of Sida's mainstreaming efforts in gender, the environment and HIV/AIDS also reported significant problems.
- Unlike mainstreaming efforts such as HIV/AIDS or Gender issues, ICTs as applicable in development tend to be less familiar to most people. The fact that most people in Sida are moderately personal-computer literate is almost a disadvantage, because it tends to oversimplify the ICT development issues.
- Unlike the other mainstreaming efforts, the ICT effort was not regularly focused on by Sida leadership, and there was little incentive for departments and embassies to comply with the effort. At the time of this study, few embassies and virtually no headquarters departments had ICT focal points as was common for the other mainstreaming efforts[5].
- Mainstreaming is particularly difficult for ICTs, since its applicability varies widely. There are situations where ICTs simply have no bearing; where ICTs could be applicable, but the partner country environment is not ready for them; and where the proper integration of ICTs can be a major enabler of change and progress in specific areas.
- Many people in Sida have pre-conceived ideas about whether ICTs apply in their own area of expertise, and a short seminar or workshop will not do much to alter these ideas. It will often take a strong interest and years of experience to develop the needed skills and knowledge.
- The Secretariat came from SAREC and was part of INEC, making it somewhat "foreign" territory to some other groups in Sida. This was particularly noticeable with the few areas in Sida that did have some prior ICT4D experience and expertise.

[5] The other mainstreaming studies clearly stated that local focal points were not always particularly effective, but their presence at least implies that the mainstreaming effort is being taken seriously.

Regarding overall perceptions of the Secretariat within Sida, a few points are evident.

- Partly due to explicit direction, and partly due to inclination, the Secretariat has spent much of their time working with Embassy staff and partners in developing countries. When this was mentioned in interviews, the general reaction from senior Sida staff was "That is exactly what a Secretariat should be doing!" But at the same time, such a focus on field operations has served to make the Secretariat virtually invisible within headquarters.
- Not having a permanent Head of Unit for half of its existence reduced the opportunity for the Secretariat to be more visible in headquarters and in Sida management groups.
- Being staffed below the authorized headcount for much of its existence significantly impacted the amount of work that could be done.
- The combination of no strong ICT4D leadership (either within the unit or in Sida senior management) for much of the Secretariat's existence, a mandate to support the ongoing SAREC ICT projects, and incomplete staffing has made it difficult to effect outreach and outreach follow-up.
- Given the way that bureaucracies work, having no head-of-unit and leaving vacant positions unfilled gave subtle messages about how important the unit was (or more aptly, how unimportant the unit was).
- Most of the Secretariat's staff were engineers, scientists or economists, with a strong interest in infrastructure and far less interest in issues such as democracy, culture, human rights and health – just the areas which were in need of ICT interventions.
- In the one part of Sida that had the most natural need for ICTs, DESO, initial attempts to work together were not productive. This seems to have been a situation driven by individual personalities in both units as much as any real problems. A DESO ICT policy and plan was created shortly after the Secretariat was founded. Although there was a deliberate effort to make this an internal DESO effort to give both awareness and ownership to DESO staff, the process should have included the Secretariat to a larger extent to ensure that they would be involved in the ongoing implementations.
- Optimally, projects and programs which need an ICT component should be a team effort including representatives of the country or regional unit, the sector, and the Secretariat. This often did not happen for projects started outside of the Secretariat. Although there is no shortage of meetings at Sida, true team efforts seem to be difficult to orchestrate.

Overall, it is clear that the "mainstreaming" task given to the Secretariat was a difficult one under optimal circumstances, and in this case, conditions were far from optimal. As will be noted in section 4.3 similar tasks in other agencies have also not been effectively carried out.

The Secretariat has certainly been busy, and based on discussions with people in the countries served, there have been considerable benefits reaped. Similarly, Sida's involvement in international ICT4D organizations has been a key part of those organizations' creation, and ongoing productivity. Whether the benefits have been commensurate with the costs incurred is difficult to say – it will likely take several years before the impact can be fully assessed. Certainly there are different ways of organizing ICT efforts which might have been even more productive – some of these will be discussed in section 5.3.

4. ICT in Development Cooperation

4.1 Focus

There are two relatively different aspects to supporting ICT in Development Cooperation.

1. Support of ICT Infrastructure: This includes the physical infrastructure such a telecommunications systems, the ICT private sector, ICT competition and competitiveness, and ICT capacity building
2. Public sector and para-public sector use of ICTs to support their "businesses". This use of ICT has three modalities:
   a) Large projects supporting major government activities such as finance, audit and taxation;
   b) Ancillary ICT projects that are needed to effectively deliver other services. Ancillary systems are ones that are added on to some core business – ones that may not be viewed as needed by some people, but that can significantly increase effectiveness. Examples are medical informatics systems used to collect and analyze health care data, geographic information systems used as decision-support tools, various application of technology used in both the management of education and for pedagogical application.
   c) Capacity building in specialized areas such as telecommunications regulation, computer-based auditing and ICT-related planning.

4.2 Sida

Sida does not maintain any central database identifying what it is doing in relation to ICTs, so it was impossible to definitively catalogue all such endeavours and no doubt some substantive ones were missed in this brief survey summarized by Sida department.

4.2.1 SAREC

SAREC's support of ICT in universities is probably the single largest class of ICT-related support. Although initially targeted to support research activities in the supported universities, it was quickly widened to include all activities in the universities including undergraduate teaching, general Internet access for staff and students, and administration. Ultimately, the projects had far more impact than was original intended. In a number of countries the ICT capacity, methodology and tools generated in the university have had wide-ranging influence over the use of ICTs in the government, public sector and private sector. These projects have been individually and collectively documented in a number of formal evaluations listed in Appendix 3. Of particular note is that in the supported universities, a short-to-medium term outcome is that all graduating students have some knowledge of and comfort with computers and the Internet. That will have an immense impact on the country as these people enter the workforce – both private and public sector.

ICT expertise came from SAREC's internal ICT group and then from the Secretariat once the ICT group was spun off.

4.2.2 DESO

DESO has successfully used ICTs in a number of projects within its domain. There have been very significant projects in its Division for Democratic Governance (DESA). Examples include support of statistic and census projects as well as taxation projects. In earlier years, DESA had an expert in statistics and census, but in recent years, all ICT expertise was provided by outside consultants, sometimes provided by Swedish government departments. There have also been some small ICT-based projects within the Division of Culture and Media.

In 2003, DESO created a strategy and set of guidelines for ICT in development in support of their sectors and a number of the ideas were implemented at least once. According to the author of the strategy documents, a number of concepts discussed in the plan were implemented in Tanzania, greatly facilitated by a Sida ICT Advisor resident in the Swedish Embassy. Secretariat discretionary budgets funded some of these projects.

The Gapminder/Trendalyzer tool recently purchased by Google was largely funded by DESO (with some bridge funding by the ICT4D Secretariat). It is a marvellous example of how ICTs can be used as a tool in development.

4.2.3 INEC

Until the late 1990s, INEC was heavily involved with telecommunications infrastructure, but a formal Sida decision halted new support in this area.

The major direct ICT investments in recent years have been in those done through the ICT4D Secretariat. INEC does fund projects and programs with integral ICT components, but most do not requires in-house ICT expertise.

4.2.4 NATUR

Within the Department of Natural Resources and the Environment (NATUR), there have been a number of ICT-related projects. Generally they occur at the explicit request of a partner country. The former head of Unit of the ICT4D Secretariat has recently moved to the Swedish Environmental Secretariat for Asia (SENSA) as Senior Regional Environment Advisor. His background and presence has allowed a number of ICT4D opportunities to be recognized and acted upon.

4.3 Other National Donors

As mentioned earlier in this report, there has not been a lot of interest among bilateral donors in ICT4D projects and programs.

Switzerland is probably the country that has been the strongest recent supporter of ICT4D. There is clear and unambiguous support from the Director General of the Swiss Agency for Development and Cooperation (SDC) within the Federal Department of Foreign Affairs, and there has been similarly strong support from the State Secretariat for Economic Affairs (SECO). The philosophy has been to use technology as an enabler, not as an end-product. The Swiss have also been very strong supporters of international organizations such as *info*Dev and the Global Knowledge Partnership (GKP). SDC is organized primarily in geographic units, with some centres of competence for each sector. Each major unit has an ICT specialist (focal point) who works with the group to identify any ICT opportunities and helps carry them out. There is also a central ICT4D support group which is responsible for international matters (shared with SECO), ICT policy matters within SDC, and facilitates networking among the focal points – ensuring that they are current on both ICT and ICT4D issues. In addition to the general ICT4D focus, they have a strong interest in C4D – Communications for Development.

The United States Agency for International Development (USAID) has a major focus on ICT4D. Although much of their efforts focus on ensuring a viable private sector, they are present in most sectors. There are ICT4D specialists throughout the organization.

Germany is also very active in ICT4D. Their support is split over a number of different government bodies and there is no single ICT4D structure.

Canada has traditionally been a strong supporter of ICT4D through three organizations, the Canadian International Development Agency (CIDA), The International Development Research Agency (IDRC) and Industry Canada. CIDA used to have a very strong ICT4D focus, but it lessened significantly after

their ICT4D champion suddenly passed away in 2003. CIDA still has several ICT specialists and a group responsible for ICT policy within the agency and for relations with international organizations. Although the number of specialists is small, they have been particularly effective in working with the rest of the organization to ensure that ICT issues are addressed, and are addressed early enough in project design so as to be effective. This reduced ICT focus also recognizes that IDRC has a significant orientation on ICT4D and the two agencies cooperate where appropriate.

The United Kingdom, Department for International Development (DFID) used to have a very strong department supporting ICT4D. It has now effectively been eliminated. It is unclear whether ICT4D responsibility has been deemed to have been mainstreamed, or if the focus is simply gone. DFID watchers are not optimistic that an ICT4D focus will continue.

The Norwegian Agency for Development Cooperation (Norad) used to have one person investigating ICT4D issues, but the position was recently eliminated in recognition of increasing general budget and sectoral plan support.

Although not confirmed by interview, Ireland and Finland are reported to still have a strong ICT4D focus.

4.4 International Organizations

4.4.1 Knowledge-based Organizations

There are a small number of international organizations that are working to help developing countries, donor countries, and private enterprise use ICTs effectively to address poverty and related issues. Education has been a prime, but not sole focus.

Several are of particular interest, as they have been actively supported by Sida.

*info*Dev is hosted by the World Bank, but its operational funds come from donors. Originally, a major aspect of *info*Dev was as a granting agency for ICT4D projects. It has been transformed into an agency that develops and disseminates information on the effective uses of ICT in developing countries. The program currently has three themes: Enabling Access For All – helping to make intelligent choices and develop effective partnerships for enabling access to information infrastructure, applications and services in ways that are sustainable and maximize private investment and leverage public resources where necessary; Mainstreaming ICT As Tools Of Development And Poverty Reduction – helping to make smart choices about when and how to deploy ICT as tools of their core development goals in health, education, livelihoods, public sector reform and other areas; and Innovation, Entrepreneurship and Growth – helping to maximize the contribution and impact of the private sector through direct support for ICT-enabled innovation, new business and partnership models and toolkits, and networking among entrepreneurs, private sector investors and the donor community.

The *Global e-Schools and Communities Initiative* (GeSCI). GeSCI was established in 2003 to address an old problem in a new way – that is, raising global standards of education for communities in the developing world and making the U.N. Millennium Development Goals a reality. Together with its partners, GeSCI works at the local, national, and international level to support, to create, and to implement strategies to harness ICTs for education and community growth. Using a multi-stakeholder approach, GeSCI focuses on delivery, offering project development and management, strategic support, facilities and resource mobilisation, and implementation.

The *Global Knowledge Partnership* (GKP) is a multi-stakeholder network promoting innovation and advancement in Knowledge for Development (K4D) and ICT4D. GKP brings together Public Sector, Private Sector and Civil Society organisations with the goal of Sharing Knowledge and Building Partnerships in K4D and ICT4D. GKP activities and programmes foster the innovative application of

knowledge and technology to address and solve development issues in four strategic themes – Access to Knowledge, Education, Poverty Reduction and Resource Mobilisation.

These organizations are good representatives of the current international ICT4D cooperative efforts. Rather than managing a project-funding process, such groups are focusing on the creation, sharing and dissemination of knowledge and on fostering partnerships which can support ICT4D developments. They are useful only to the extent that they can help both donors and developing countries effectively use ICTs.

They complement donor activities, and address a reality that spans all donors – ICTs are often difficult to integrate effectively in emerging countries. There is insufficient capacity with the partner countries, and no donor organization can have sufficient expertise to address all issues. These international organizations build upon the concept of "best practices" providing guidance in how to best solve the difficult problems in developing country environments. In the long term, guidelines and toolkits will reduce the need for ICT expertise within donors, but they will not completely replace the need for expertise to tailor the solution to specific needs.

Most make their solutions freely available. For donors who explicitly provide financial support, they can also provide personal support tailored to the specific problem. It is not uncommon that they can provide solutions based on their wide experience that a partner country would otherwise try to implement from scratch (and perhaps do it in ways that would be unsuccessful). In short, these organizations will be an increasingly important resource to use (and perhaps participate in) to ensure that ICT4D funds are used effectively in partner countries. Donors who finance these organizations also have a significant say in their future direction. Specifically, funders can help ensure that the organization moves in directions needed by the donor. Of course, even without active participation, Sida's funding of such organizations can further ICT4D efforts, but it is important that Sida exercise critical judgement regarding the selection of such international organizations to be funded.

4.4.2 International Development Cooperation Organizations

There are a number of organizations that Sida works with that have an ICT4D focus. These include The World Bank which in involved in major ICT projects such as e-government initiatives, the EU European Development Fund with its New Technologies component and UNESCO with a number of ICT4D programs. Although there is the potential for Sida programs and support overlapping with such efforts, they tend to be more complementary or mutually exclusive. Sweden also acts as a funder of such organizations, and thus plays an (very) indirect role in their ICT4D activities.

4.4.3 Private Foundations

Private foundations such as the Carnegie Corporation and the Rockefeller Foundation have always played a role in development, and have at times focused on ICT4D. In recent years, a number of foundations associated with ICT entrepreneurs have become quite active in supporting developing countries. Although their orientation is not necessarily one of ICT4D, there have been very significant ICT aspects of their focus. Perhaps the leading example of such foundations is the Bill & Melinda Gates Foundation.

4.4.4 Prior International Activities

Although not a current component of international ICT cooperation, it should be noted that Sweden and Sida were major participants in the United Nations ICT Task Force, the G8 Digital Opportunity Task Force (DOT Force), the United Nations World Summit on the Information Society (WSIS) in 2003 in Geneva, and WSIS II in 2005 in Tunis.

Sida was also a founding and ongoing member of *info*Dev, GeSCI, GKP and Bellanet (a group housed at IDRC in Canada which develops network-based collaboration tools for cooperation development applications).

5. Directions Forward

In November 2005, Sweden addressed the United Nations World Summit on the Information Society. The summit's very existence was a measure of the perceived importance of ICTs to the developed and developing world. In part, the statement read:

> *We see the use of ICT as a major dynamic force in our society and in the economy. We believe that information and communications technology (ICT) has the potential to be an effective instrument for democratization and poverty reduction in all societies, regardless of cultural diversity and level of development. We must therefore invest in education, research and infrastructure. Today, sophisticated ICT solutions are deeply integrated into Sweden's traditional industrial, public and service sectors. Our long tradition of engineering and innovation has given us both an excellent telecommunications system and a cutting-edge ICT industry.*
>
> *ICTs are unique in that they cut across all economic and social sectors. ICT can catalyze new types of development, promote a more effective use of development resources and foster accountability, transparency and interaction with citizens.*
>
> *Developing countries should be able to utilize the potential of ICT to achieve the Millennium Development Goals. ICT can empower people and ultimately strengthen human rights, not least by promoting freedom of expression and a free flow of information. Both old and new ICT services can address traditional development challenges. Governments should invest in physical infrastructure of the public administration not only to improve service delivery but also to reduce opportunities for mismanagement of public resources. Such investments will improve the speed, reliability, accountability and transparency of public sector transactions.*
>
> *Sweden, as one of the leading countries in the field of ICT for development, has the ambition to develop ICT as a strategic area for our development cooperation. Support for ICT in development is included in bilateral development programs with partner countries.*

This statement was valid in late 2005, and is no less valid 18 months later.

It is clear that development cooperation modalities are changing, and will no doubt change again in the future. Sweden will surely be a partner in such changes. The long-term goal must be to make efficient use of Swedish development funds, while at the same time serving the best interests of their partner countries.

It is vitally important that Sweden work with developing countries to ensure that they can and do make strategic use of ICTs to address their pressing problems. This may involve both ICT specialists at Sida in Stockholm, and those stationed in embassies.

- Where project-oriented support is appropriate, Sweden should make available the expertise to help countries identify places where strategic use of ICTs can help, and then to help draft the project specifications so that they neither miss critical issues nor are so ambitious as to be un-implementable.
- Where support of sectoral plans is appropriate, Sweden should engage in constructive dialogues early in the planning process, to ensure that ICTs are appropriately cited in the plan.
- Where general budget support is appropriate, Sweden should engage in constructive dialogues at the highest levels to ensure that ICTs that will be critical to the success of major endeavours are appropriately budgeted.

All of these will ultimately require ICT4D expertise within Sida and in Swedish Embassies.

5.1 Why Sida and Sweden?

One of the questions that has been raised during the course of this study is "Why should Sweden take a lead in support of ICTs?"

In light of the fact that few other countries have been interested in supporting ICT4D in the past, and that some of those now appear to be pulling out, one can re-phrase the question in two parts: "What makes Sweden and Sida uniquely able to support ICT4D?" and "Even if Sweden is capable, why should Sida do this when so few others seem willing to?"

5.1.1 What makes Sweden and Sida uniquely able to support ICT4D?

Sweden may not be *uniquely* able to do this, but it is surely very capable to do it. There are a number of reasons:

> Sweden is the world's most ICT sophisticated country.
>
> *International Benchmarking Study 2004, Booz Allen Hamilton*

> Ericsson, Sweden's largest company, is a respected, world-leader in technology whose name is recognized virtually everywhere.

> In addition to Ericsson, Swedish companies such as Volvo, Saab and TetraPak are known for technical innovation and quality.

> In Sweden, ICT is prevalent "everyday, everyway." Swedes are among the top users of Internet, mobile phones, the most versatile users of online banking services, etc.

> "Sweden is one of the two or three leading countries in the world when it comes to new technologies. If you're curious about new trends, just come and take a look at Sweden."
>
> *Steve Ballmer, CEO, Microsoft*

> Sweden is known for its technical universities.

> Several of Sida/SAREC university ICT projects have had an indelible effect on partner countries. Sida has been actively involved in all of the major international efforts to use ICTs effectively in development cooperation.

In short, Sweden and Sida have *credibility* in ICT and ICT4D.

5.1.2 Even if Sweden is capable, why should Sida do this when so few others seem willing to?

This question is more difficult and obviously quite subjective. If Sida decides to lower its ICT4D profile, or even abandon it altogether, it will certainly be in good company – many other countries have little presence in ICT4D. At some level, this is certainly the safe and easy path – one that will result in little criticism outside of the ICT and ICT4D community.

Although dropping an ICT4D focus may be an easy decision, one must consider whether it is the right decision. Within Sweden, technology plays an inescapably major role. Sweden has invested heavily in technology, both in the private and public sectors. It would be difficult to imagine doing without this technology.

Sida can decide that the technologies that have served Sweden so well should be shared with developing countries. There is no doubt that if developing countries are ever to rise above that status, they must embrace ICTs not only for their banks and financial systems, but in aid of health, education, transparent government and human rights. Today, the use of ICTs in aid of these goals is rarely a top priority within developing countries. Sweden and Sida can help change that.

If Sweden like some other countries, decides that ICTs are not a priority for developing countries, it is effectively helping to deny these countries access to key methodologies that can help them solve their problems.

Note that "a focus on ICT4D" does not mean that Sweden needs to fund it all. In many cases, there will be donors who will fund projects[6] *if* the partner country requests them, and if they are designed intelligently.

5.1.3 The Solution to the ICT Dilemma

Section 2.1 describes the ICT Dilemma where the lack of ICT4D knowledge on the part of both donors and partners results in ICTs not being strategically used as tools and enablers to address critical problems.

Sweden can play a major role in helping to educate key decision makers of the need to use ICTs, and in helping to build the capacity to use them effectively. This should not be viewed as a paternalistic attempt to impose solutions on partner countries. Modern development cooperation rightfully puts much responsibility on developing countries to choose their own path. However, Sweden can provide innumerable illustrations of how ICTs help provide its social services and open government. By helping partner countries to understand the benefits, build critical capacity and of course by providing funds where appropriate, Sweden can help move these countries into the 21st century.

5.2 What Types of Support?

Section 4.1 identifies the different types of ICT4D support. Given Sweden's overall goals in development cooperation, its relatively limited resources – both people and money, and the other players in the ICT4D world, it is possible to recommend where ICT4D support should be focused.

Type 1 – Infrastructure: With few exceptions, this is probably not a field that Sida should pursue. There are some exceptions where there is a particular expertise, or fit with other projects/interests. An example might be to fund telecommunications infrastructure where it is an integral part of a project in another sector – such as funding fibre optic cables that are being included in electrical transmission facilities which Sida is supporting. Another example is support of inter-universities networks, as it is a natural outgrowth of the work that SAREC has been doing for over a decade.

Type 2a – Major Government ICT Implementations: This is certainly within Sida's scope, but generally only when participating in donor groups. Smaller projects utilizing specific skills that Sida either has or has access to would also be appropriate – examples might include census or audit support systems.

Type 2b – Ancillary Systems: This is the area where Sida can have the most effect at a reasonable cost. One particular focus area could be to use SAREC's experience in introducing ICTs into universities, and replicate it in universities and countries not currently supported by SAREC. In education or health care, examples are information and decision support systems – a successful deployment in one country can likely be replicated in other countries. Trade is another of Sida's prime focus areas which can greatly benefit from the strategic use of ICTs by reducing transaction costs and time. As proven good investments, they could also be "sold" to other donors who otherwise would not fund ICT4D programs.

Type 2c – Specialized capacity building: Worthy of support if partner country needs fit Sweden's expertise. Helping to develop telecom regulation capabilities and providing advisors to ministries responsible for ICTs are good examples.

[6] The term "projects" here is quite general. In includes components of sectoral plans as well as high priority items in the government's general budgets.

It is strongly recommended that Sida maintain its involvement in international ICT4D organizations. ICT and ICT4D are both rapidly changing fields. It is essential that Sida be connected with what is happening globally. To the extent that Sida does ICT4D work, it is important that it have access to the latest information, insights and toolkits. If Sida decides to minimize its presence in ICT4D, it is perhaps even more important that it remain alert to what is happening in the field.

Appendix 3 identifies a number of specific areas that Sida might want to consider if it chooses to have a continued focus on ICT4D.

5.3 Organizational Issues

5.3.1 Within Sida

ICT4D expertise can be organized a number of ways:

- A stand-alone unit, such as the ICT4D Secretariat. Preferably, this unit's position in the organization chart should not alienate it from any of its customers. In Sida's current organization chart, it could reside in a position comparable to Policy & Methodology.
- Individual ICT specialists could be placed within operational units, based on demand and size of the unit. If this model were followed exclusively, there would be no central units, and any Sida ICT4D policy issues, or involvement with international organizations would be delegated to the existing specialists wherever they reside. In the extreme, there could be one or more in each of the regional departments, and in each of the sector departments.
- There can be a hybrid organization, with some people in units, and a small central unit. The central unit would oversee international relationships, and provide backup and networking for the people in operational units.

Note that the term "specialist" is being used instead of "advisor". The former term seems to be more conducive to peer-to-peer teamwork than advisor does.

If a stand-alone unit is used, there is a possibility that the specialists will not be called upon. This has certainly proven to be the case for the current Secretariat. For purely inter-personal reasons, people often feel more comfortable with people who "live" in their own department. In a large organization such as Sida, the very existence of the ICT4D unit may not be well known. Certainly the specialist will not be likely to overhear a nearby conversation and realize that there is an opportunity for ICTs if the specialist works in a different part of the building.

On the other hand, if a specialist is part of a larger operational unit, there is the danger that when there is some demanding project or staff shortage (and one or the other is always the rule!), that they may be given non-ICT tasks to perform, and will have not time for their ICT work. Also, if the specialist is on leave or reassigned, there is a high probability that their position will not be refilled with another ICT specialist unless there is VERY strong direction from senior management. Specialists in operational units without the hybrid solution can soon feel very isolated from their peers, and not have access to information and opportunities to allow them to stay current.

There is a solution similar to the hybrid organization where all of the specialists are part of the central unit, but most are seconded to operational units. That is, they live and work in the operational units. This overcomes some of the inter-personal problem of dealing with people at a distance, but still keeps the "community" of the central unit[7].

[7] There are new problems introduced in this case, such as how to evaluate people when they work remote from their official manager, but such problems can be overcome.

Even if specialists are deployed in operational units, there will not likely be enough of them to cover all units. Some will no doubt be "shared" among several units. Typically, they will be resident in the unit that has most demand, but will be a team member in other operational units when necessary.

Regardless of the organization, the specialists are going to have to be integrated into the overall work process. Teamwork is a key component. Access to information early in the process is also important as this will allow the specialist to notice when there is a project that could benefit from ICTs where it was not previously specified, and as important, identify where ICTs are not appropriate. In Sida's current mode of operation, such problems may only be recognized at the quality assurance stage – at the end of the planning stage instead of the beginning.

It must be noted that all ICT4D specialists will not be interchangeable. If a person is to be assigned to work on Democracy and Human Rights issues, it should be someone who has some sympathies and interest in that area, and not someone who is more interested in technical issues.

The question of SPIDER also is relevant here. Currently, SPIDER in theory plays a role as help desk to Sida and embassy staff. This role is possible, but a much better situation would be for internal staff to handle the first level of help requests, and pass them on to SPIDER if and when the need is well defined and will require more resources than the ICT specialist can devote, or needs very specific skills.

5.3.2 Within Embassies

Although not formally part of this study, having people with an understanding of ICT4D within Swedish missions in developing countries is equally important. If Sida is to take ICT4D seriously, consideration should be given to having ICT specialists for regions or countries which are likely ICT4D candidates. Allowance should also be made for having national program officers in such cases.

5.4 Ambition Levels

The terms of reference call for recommendations for three ambition levels – equal to today, less, and more. To a large extent, *ambition levels* map to the number of personnel available to achieve the goals. "Today" is defined as the current budgeted number of people – 4. Less[8] is taken to be 2, and more is 6–8. If there is obvious and clear success, this number could grow, but it would be unreasonable to consider a higher figure now. As mentioned in section 5.3.2, staffing in embassies will also be required for countries or regions where there is a significant ICT4D focus.

In reality, the recommendation is a more contiguous one than requested, without the hard boundaries at 2, 4 and 6–8. Moreover, the issue of no ICT4D focus at all should be reviewed.

5.4.1 Are ICT4D specialists needed at all?

Regardless of whether Sida has an ICT4D focus or not, as long as there is *some* project and sector activity within Sida, it is clear that Sida funds will at times be spend on ICT-related projects. That is the case today and will surely continue. There are ongoing ICT-related projects in DESO and SAREC. They will not cease immediately and the chances are high that new projects will be approved, or current ones extended or renewed. There will also be some ICT components in partner sectoral plans supported by Sida (perhaps through donor groups). If this is done without ICT4D expertise in house, Sida is depending purely on external consultants or the partner country personnel to specify, oversee and review the work. Although some desk officers and embassy personnel may be able to assimilate all they need to oversee ICT-related projects, many cannot. At the very least, Terms of Reference for ICT-related contracts should be reviewed by people who are knowledgeable in the discipline. It is important to note that if work is done largely by external personnel, Sida loses the ability to learn from experience and apply this knowledge to other areas.

[8] During interviews with senior Sida management, it was clarified that "less" meant less and not zero.

It has been suggested that SPIDER take the place of all internal ICT4D specialists. Although some of the current Secretariat and external consultant workload could be outsourced to SPIDER or other bodies, it is neither practical nor wise to do this with all tasks. To do so would: imply that there is no one within Sida to recommend Sida policy related to ICT4D; no one to work with donor groups that are harmonizing multi-donor efforts; and curiously, no one to review and oversee SPIDER and recommend whether Sida continues to fund them or not in future years.

Zero ICT4D specialists would be appropriate only if Sida is convinced that there is no current or future benefit to establishing dialogues with developing countries to help them address their development issues with the aid of technologies used in the west for similar purposes.

For the purposes of the rest of this study, it will be assumed that there will be some ICT4D people, although it is conceivable that they will reside in the units that need them most – just as SAREC originally created its ICT unit.

5.4.2 Staffing levels

With an ICT4D specialist count of 2, it is recommended that they form a stand-alone unit, similar to the current Secretariat, but placed somewhere in the organization so that they are not viewed as having allegiances to any particular sector or region. They would be responsible for international relationships, recommending Sida ICT4D policies, overseeing the discretionary budget assigned to ICT4D, and acting as first-level consultants within the organization. There would be minimal outreach. One of their critical tasks would be to help frame Terms of Reference when external consultants are required, and to participate in the evaluation of their services after the fact. They would also oversee the involvement of SPIDER to ensure quality and cost-effectiveness.

As the head-count increases, staff should be assigned to work in operational units. They could be actually assigned to that unit if there are sufficient guarantees that they will be able to focus 100% of their time to ICT4D issues, or they could be part of the ICT unit and seconded to the operational unit. The latter is preferable in Sida's current context. Regardless, the central unit must take measures to ensure that the remotely assigned specialist is kept "in the loop" regarding trends in ICT4D and international cooperation. For a head count of 4 (the current level), this would map to two people in the central unit and two in operational units.

For roughly every two people assigned to operational units, another person could be added to the central unit, but the central unit should not grow past 4–5 people including the head-of-unit.

Today's structure also has one ICT advisor stationed in Africa, but not included in the ICT4D Secretariat's budget, and not within the scope of this study. Nevertheless, the concept is highly supported and should be expanded if ICT is to have a real presence in Swedish development cooperation.

5.4.3 Discretionary Budget

Not mentioned in the Terms of Reference is the issue of discretionary budget to support international activities, research and short-term but potentially beneficial ICT4D project and activities. Such a budget is highly recommended as it provides a number of important benefits:

- Support of international organizations which are building an important knowledge and skill base to facilitate the use of ICT4D.
- Small, innovative ICT-related projects have few other sources of funding, and people without ICT4D experience are not likely to think that they are important.
- ICT concepts often need to be piloted before full-scale commitments are made.

5.5 Recommendations

Information and Communications Technologies are key tools to address poverty, good government, transparency, democracy, human rights and trade issues. Currently there is insufficient knowledge of how and when to use ICTs both among Sida staff and within developing countries. Sida has been one of the few donor countries to recognize this and to put a strategy in place to address this need. That strategy needs to be re-stated and strengthened.

Sida should continue to support ICT4D, but in a more disciplined and coordinated way.

There needs to be strong direction from senior management that this activity is supported and recommended. The words exist in the current policy, but there has not been sufficient power behind them.

The current staffing level of four people is adequate if not optimal. If properly placed and given strong support from above, they should be able to demonstrate their worth. If so, the staffing level could then be expanded.

Serious consideration should be given to expanding the number of specialist deployed in embassies where there are strong indications that ICT4D strategies will be successful.

Regardless of staffing level, there will never be sufficient ICT specialists to have at least one in every operational unit. ICT specialists regardless of location should be available to work within teams throughout the organization when their expertise is needed.

SPIDER support should be continued, but ICT specialists within Sida should be the first line of support for headquarters and embassy ICT4D requirements, allowing SPIDER to focus on its main mission.

ICTs are critical components of virtually all aspects of industrialized countries. Donors such as Sida should work to ensure that developing countries are given the same opportunities.

Appendix 1. Acronyms and Abbreviations

Acronym/Abbreviation	Definition
C4D	Communications for Development
CIDA	Canadian International Development Agency
DESA	Division for Democratic Governance
DESO	Department of Democracy and Social Development
DFID	Department for International Development
GeSCI	Global e-Schools and Communities Initiative
GKP	Global Knowledge Partnership
HÄLSO	DESO Health Division
ICT	Information and Communications Technology(s)
ICT4D	ICT for Development
IDRC	International Development Research Agency (Canada)
INEC	Department of Infrastructure and Economic Cooperation
KTH	Royal Institute of Technology
K4D	Knowledge for Development
NGO	Non-Governmental Organizations
Norad	Norwegian Agency for Development Cooperation
PR	Poverty Reduction Strategy Paper
RITA	Rwanda Information Technology Agency
SAREC	Department of Research Cooperation
SENSA	Swedish Environmental Secretariat for Asia
SDC	Swiss Agency for Development and Cooperation
SECO	State Secretariat for Economic Affairs
UTV	Secretariat of Evaluation and Internal Audit

Appendix 2. Interview Subjects

Name	Position
Johan Åkerblom	Sida, INEC, Office of Head of Department
Seth Ayers	World Bank, *info*Dev, ICT Policy Specialist
Rolf Carlman	Sida, Director General's Office, Advisor; former Head of INEC
Sandra Charles	CIDA, Private Sector Development, Senior Economic Policy Advisor
Michael Clarke	IDRC, Information and Communication Technologies for Development, Director
Valerie D'Costa	World Bank, *info*Dev, Program Manager
Harry De Backer	European Commission, European Development Fund, New Technologies
Jan Bjerninger	Sida, Natural Resources and the Environment, Head of Department
Astrid Dufborg	GeSCI, Executive Director; former Head of INEC; former Ambassador and Special ICT Adviser to the Swedish UN Mission in Geneva (for the World Summit on the Information Society); former member of UN ICT Task Force
Samuel Egerö	Sida, Department for Africa, Head of Division
Bengt Ekman	Sida, Director General's Office, Director of Planning
Maria Gasch	Sida, DESO, Division for Culture and Media, Programme Officer
Anders Granlund	Sida, Swedish Environmental Secretariat for Asia, Counsellor, Senior Regional Environment Advisor
Sara Gräslund	Sida, SAREC, Division for University Support and National Research Development, Country Coordinator – Rwanda
Bo Göransson	Swedish Ministry of Foreign Affairs; former Director General of Sida; former Swedish Ambassador in Kenya
Allan Gustafsson	Mapsec, Consultant to Swedish Ministry of Foreign Affairs
Staffan Herrström	Sida, Department of Policy and methodology, Deputy Director General
Gunilla Hesselmark	Sida, Quality Assurance, Director; Project Committee, Chair
Olof Hesselmark	Swedish ICT4D Consultant
Allison Hewlitt	Bellanet/IDRC, Senior Program Officer
Lena Johansson Blomstrand	Embassy of Sweden, Namibia, Chargé d'Affaires
Tomas Kjellqvist	Sida, SAREC, Advisor; Project Committee, Deputy Chair
Barbara Lee	Sida, INEC, Office of Head of Department, Advisor; former World Bank
Claes Leijon	Sida, INEC, Office of Head of Department, Senior Advisor
Lillemor Lindh	Sida, DESO, Division of Culture and Media, Senior Programme Officer
Magnus Lundsten	NUTEK, Information Services; former Sida, ICT for Development Secretariat, ICT Advisor
Anne-Charlotte Malm	Sida, INEC, Head of Department
Kerry McNamara	World Bank, *info*Dev, Chief Knowledge Officer
Americo Muchanga	Mozambique, Universidade Eduardo Mondlane, Centro de Informática, Director
Ellen Olafsen	World Bank, *info*Dev, Operations Officer
Bengt Oberger	Sida, ICT for Development Secretariat, Senior ICT Advisor, Acting Head of Unit
Berit Olsson	Sida, SAREC, Head of Department
Torbjörn Pettersson	Embassy of Sweden, Tanzania, Counsellor, Deputy Head of Mission, Head of Development Cooperation Division
Michael Roberts	Bellanet/IDRC, Interim Executive Director
Isabelle Roy	CIDA, Natural Resources and Infrastructure, ICTs and Telecom Specialist
Marja Ruohomäki	Sida, DESO, DESA, Programme Coordinator
V.K. Samaranayake	ICT Agency of Sri Lanka, Chairman; University of Colombo, School of Computing, Emeritus Professor

Name	Position
Afzal Sher	SPIDER, Director; formerly Sida, ICT for Development Secretariat, Senior ICT Advisor
Peter L. Smith	World Bank, *info*Dev, Lead Telecommunications Specialist
Petra Smitmanis-Dry	Embassy of Sweden, Tanzania, Regional ICT Advisor; formerly, Sida, ICT for Development Secretariat, ICT Advisor
Maria Stridsman	Sida, DESO, Head of Department
Ingela Svedin	Swedish ICT4D Consultant; former Swedish Youth Delegate to the World Summit on the Information Society
Jakob Thompson	Former Norad, ICT Advisor
Per-Einar Tröften	Sida, ICT for Development Secretariat, ICT Advisor
Michael Trucano	World Bank, *info*Dev, ICT & Social Sector Innovation Specialist
Fredrik Uggla	Embassy of Sweden, Bolivia, Second Secretary, Program Officer – Development Cooperation
Paula Uimonem	Swedish ICT4D Consultant
Tim Unwin	University of London, Royal Holloway, former Director, DFID – Imfundo Partnership for IT in Education
Bengt Wattenstrom	Ericsson, Director of Business Development
Gerolf Weigel	SDC, ICT for Development, Head of Division
Anders Wijkman	Member of the EU Parliament, Chairman of Board of SPIDER

Appendix 3. Suggested Areas of ICT Focus

If Sida decides to continue and even expand its support of ICT for Development, the decision of how to focus this support will require both an assessment of what is possible and practical, and consultation with its developing country partners.

One option is to reiterate and strengthen the current policy whereby Sida should look for ICT4D opportunities within its normal development cooperation activities. As described in the body of the report, this is often difficult due to the lack of understanding on the part of many of the players, but it nevertheless is possible and practical if ICT4D specialists are involved in the early stages of planning.

Another approach is to identify specific areas in which Sida will specialize, either in addition to that above ICT4D type activities, or instead of them. Specifically, the task is to identify a number of areas where there seems to be general need, often poor awareness, and great potential. Areas where Sida already has a proven track record, and extensions of such areas are obvious targets.

Although there are many such areas, a few that are of particular interest are:

Heath care support: Although this is a very wide field, an area of particular interest in the collection, transmission and analysis of demographic and incidence-of-disease data that will allow decision makers to use available funding and resources effectively. Such system can be built on emerging government telecommunications networks and the now-common mobile telephone infrastructure.

ICT infrastructure within universities: SAREC pioneered this type of support, originally in support of researchers, but ultimately in support of all university constituencies. Similar support could be extended to universities not currently supported by SAREC, improving the quality of these universities and helping to ensure a growth in the number of ICT-literate people in the country.

Inter-university networks: In both developed and developing countries, universities often lead the way for the use of technology and particularly high-speed networking. Such networks are now universally supported in developed countries, and their emerging counterparts in developing countries merit support as well. The first SAREC university ICT project was in fact a multi-university network.

Geographic Information Systems (GIS): GIS Systems allow data that is already collected to be displayed visually, allowing ready recognition of patterns and relationships that are not ready apparent from tabular displays. A key part of a well designed GIS system is to ensure access to government data that is collected but under the initial control of different ministries.

Support of Trade: International trade, a focus of Sida support, relies extensively on ICTs. There may be opportunities to advance trade opportunities in developing countries by helping them to build ICT-based trade infrastructure.

Telecommunications Regulatory Support: Most developing countries are struggling to built open, free-market telecommunications systems, but still to ensure that the private companies providing the services serve the common good. This moderately inexpensive support of regulator capacity building can have large pay-offs.

ICT in Primary/Secondary Education: Sida already supports GeSCI, and it may be a natural fit to support the actual education systems. However, this is one of the few areas that other donors are indeed interested in, and perhaps Sida is better off supporting such efforts through sector plan and general budget support, and putting its ICT focused energies on areas that are less popular.

Appendix 4. Primary Documents Consulted

Digital Empowerment – Guidelines to the DESO Strategy for ICT for Development, Sida, SIDA3301en, 2003

*ICT Regulation Toolkit – Introduction, info*Dev, International Telecommunications Union,

ICTs for Poverty Alleviation: Basic Tool and Enabling Sector, Sida, SIDA4937en, ISBN 91-586-8429-8, 2005

ICTs for Poverty Reduction, Swiss Agency for Development and Cooperation, 2003

Integrating the Environment? Environmental Considerations in Sida's Work, Sida, Sida Evaluation 06/42, SIDA32445en, ISBN 91-586-8218-X, 2006

IT in Swedish Development Cooperation, Sida, ISBN: 91-586-7749-6, 1999

Mainstreaming at Sida: A Synthesis Report, Sida, Department for Evaluation and Internal Audit, 2006

Mainstreaming Gender Equality, Sida, Sida Evaluation 02/01, SIDA1456en, ISBN 91-586-8845-9, 2002

Perspectives on Poverty, Sida, 2002

Questions and Answers on a Programme Based Approaches, Sida, SIDA23295en, 2006

Sida at Work, Sida, SIDA2861en, ISBN: 91-586-8639-X, 2003

SPIDER, Phase 2, 2007-2009: In-Depth Assessment Memo, Sida, 2006

Strategy and Action Plan for ICT in Development Cooperation, Sida, 2005

Strategy for IT in Development Cooperation (Approved December 1999), Sida, 1999

Turning Policy into Practice: Sida's implementation of the Swedish HIV/AIDS strategy, Sida, Sida Evaluaion 05/21, SIDA4882en, ISBN 91-586-8681-9, 2005

Up-scaling Pro-Poor ICT-Policies and Practices, Swiss Agency for Development and Cooperation, 2005

Where we are. Where we are going., Sida, 2006

Appendix 5. Secretariat Mandate, Activities and Accomplishments

Document prepared by the ICT4D Secretariat

1. Original mandate

1999. Strategy for ICT in Development Cooperation (General Director Decision 185/99):

- Sida shall integrate ICT as a natural and important part of development cooperation.
- Sida supports the rapid integration of ICT in the recipient countries.
- Sida is a partner in cooperation, with high quality ICT expertise.
- Sida shall develop ICT for development as a strategic area for Swedish development cooperation.

2002. Translation of the decision and memorandum concerning the establishment of a ICT for Development Secretariat (General Director's Decision 91/02 & memorandum 2002-10-24):

- Sida shall integrate IT as a natural and important part of development cooperation.
- Sida shall develop IT for development as a strategic area for Swedish development cooperation.
- Sida shall create an ICT secretariat to strengthen Sida's work with ICT in development cooperation.
- The secretariat shall serve the entire Sida organization on issues related to ICT for development.
- The secretariat shall support increased development and utilization of ICT in Sida partner countries, and shall work to ensure ICT support is integrated in all Sida's areas of activities.

The working tasks of the secretariat shall be to:

- Advice and information: The secretariat shall assist embassies and Sida departments in their implementation of ICT in Swedish development cooperation, participate in international cooperation concerning ICT4D and provide summary information to the development community.
- Mainstreaming and field support: The secretariat shall provide support to embassies and Sida regarding questions concerning ICT4D. The secretariat shall, on request, participate in embassies' and Sida departments' assessment of support for initiatives.
- Responsibility for Sida support to initiatives. The secretariat shall handle selected Sida-supported initiatives (e.g., national ICT policies and strategies, ICT training and education and the development of ICT infrastructure).

2. Methodology

- As ICT advisors provide service to all Sida departments and embassies.
- Perform and support activities resulting in development of methodology. This knowledge and experience shall be used to more effectively integrate ICT into development cooperation.
- Handling selected Sida supported projects/activities.

3. Milestones

Chronological history of the secretariat and its influence on Sidas ICT4D work in general:

1997 Sida Telcom survey resulting in winding up telecommunication support as a focus area in Swedish development cooperation (General Director Decission 18/99) (Översyn av Sidas stöd till Telesektorn. Juni, 1997).

1998 A position as an ICT4D adviser is established at INEC and transferred to the Department of Economy and Development of Methodology (EVU).

1998 SAREC launches a program for integration of ICT in the research cooperation. A methodology is designed how SAREC should integrate ICT in its bilateral resreach cooperation programmes.

1999 An ICT4D report by a joint UD (Swedish Ministry for Foreign Affairs) and Sida working party – Chairman Anders Wijkman (IT in Swedish Development Cooperation. October, 1999. ISBN 91-586-7749-6).

1999 Strategy for ICT in Development Cooperation (General Director Decission 185/99).

2000 A Sida focal point for ICT4D is established at SAREC, as the EVU and SAREC advisory functions merged.

2002 (November). The focal point for ICT4D moved to INEC and was reorganized as the Sida ICT4D Secretariat (General Director Decission 91/02).

2003 DESO developing a strategy for ICT for development (ICT4D) for DESO. Digital Empowerment (SIDA3302en + SIDA3301en).

2003 A national ICT4D field pilot project starts in Tanzania. A position as ICT4D Adviser is established at the Swedish Embassy in Dar es Salaam (Nils Jensen).

2004 Sida support the establishment of SPIDER.

2005 Strategy and Action Plan for ICT in Development Cooperation (SIDA4474en).

2005 ICTs for Poverty Alleviation. Basic Tool and Enabling Sector (SIDA4937en).

2006 Regional Sida ICT advisor working at the embassy in Dar es Salaam (Petra Smitmanis Dry).

2007 Sida ICT4D study (in prep). Study for discussion at Sida's management group how integration of ICT in the Swedish development cooperation should be designed and organized.

4. Financial resources and staff

Financial resources

Financial resources from the methodology/global program budget.

1998–2001: Not available, funding from general SAREC, INEC and EVU budget.

2002: 16 MSEK.

2003: 30 MSEK.

2004: 30 MSEK.

2005: 30 MSEK.

2006: 30 MSEK.

2007: 25 MSEK.

Staff

2002 4 ICT Advisors at Sida HQ

2003–2005 1 Head of Division & 4 ICT Advisers at Sida HQ, and 1 Tanzania ICT Adviser at the Embassy in Dar es Salaam.

2005–2006 1 Head of Division & 3 ICT Advisers at Sida HQ, and 1 Tanzania ICT Adviser at the Embassy in Dar es Salaam.

2006 3 ICT Advisers at Sida HQ, & 1 Regional ICT Adviser at the Embassy in Dar es Salaam.

2007 2 ICT Advisers (and 1 new under recruitment) at Sida HQ, & 1 Regional ICT Adviser at the Embassy in Dar es Salaam.

5. Activities

Sida policies and strategies

Developing or being part of the development of Sida's ICT4D policies and strategies:

1998 Assisting SAREC in developing its methodology how to integrate ICT in its bilateral research cooperation programmes.

1999 Strategy for Sida ICT in Development Cooperation (General Director Decission 185/99).

2003 (DESO). Providing minor assistance to DESO in developing "A strategy for ICT for development (ICT4D) for DESO. Digital Empowerment" (SIDA3302en). http://sida.se/shared/jsp/download.jsp?f=SIDA3302en_DigitalEmpowerStrateWEB.pdf&a=2991

2003 (DESO). Providing minor assistance to DESO in developing "Guidelines to the DESO Strategy for the ICT for development (ICT4D). Digital Empowerment" (SIDA3301en). http://sida.se/shared/jsp/download.jsp?f=SIDA3301_DigitalEmpGuidWEB.pdf&a=2990

2005 Sida Strategy and Action Plan for ICT in Development Cooperation (SIDA4474en). http://sida.se/shared/jsp/download.jsp?f=SIDA4474en_Strategy+for+ICT_web.pdf&a=3404

2005 ICTs for Poverty Alleviation. Basic Tool and Enabling Sector (SIDA4937en). http://sida.se/shared/jsp/download.jsp?f=SIDA4937en.pdf&a=3607

2007 (in prep). Sida ICT4D study. Background material for discussion at Sida's management group on how the integration of ICT in the Swedish development cooperation should be designed and organized in the future.

Swedish Country Strategies

Assisting Sida's Regional Departments in integrating ICT into Swedish Country Strategies. Wordcount is relevant because a) it represent real evidence that ICTs exist in strategies, and b) it indicates a ranking or hierarchy of in which countries the Secretariat has succeeded most to get ICT included in the strategies. Rwanda, Tanzania and Sri Lanka are the leaders, which are the countries that the Secretariat has most focused on.

Africa

2002–2006 Mozambique: "IT" and "informationsteknologi" wordcount generate 2 hits. http://www.regeringen.se/content/1/c6/01/15/02/333451fe.pdf

2007–2011 (in prep). Mozambique: "IT" wordcount generate 2 hits.

2003–2007 Zambia: "ICT" wordcount generate 2 hits. http://www.regeringen.se/content/1/c6/02/34/66/add746a9.pdf

2004–2008 Rwanda (in Great Lakes strategy): "IT" wordcount generate 5 hits. http://www.regeringen.se/content/1/c6/04/14/38/aee703f3.pdf

2004–2008 Namibia: "IT" and "ICT" wordcount generate 2 hits. http://www.regeringen.se/content/1/c6/02/96/85/434b3611.pdf

2004–2008 South Africa: "IT" wordcount generate 2 hits. http://www.regeringen.se/content/1/c6/03/24/28/b3eddf03.pdf

2006–2010 Tanzania: "ICT" wordcount generate 5 hits. http://www.regeringen.se/content/1/c6/01/15/58/fccce0ac.pdf

2004–2008 Kenya: "informations- och kommunikationsteknologin" and "informationstekniken" wordcount generate 2 hits. http://www.regeringen.se/content/1/c6/01/14/95/32bf8156.pdf

2002–2006 Swedish Strategy for Support for Regional and Subregional Development Cooperation in Sub-Saharan Africa: "ICT" wordcount generate 4 hits. http://www.regeringen.se/content/1/c6/03/98/06/5038c3b1.pdf

Asia

2002–2005 Bangladesh: "IT" wordcount generate 2 hits.
(2007) http://regeringskansliet.se/content/1/c6/01/14/18/88092a05.pdf

2003–2007 Sri Lanka: "IT" wordcount generate 15 hits.
http://regeringskansliet.se/content/1/c6/01/15/10/fb327247.pdf

2005–2009 India: "IT" and "informations- och kommunikationsteknik" wordcount generate 5 hits.
http://regeringskansliet.se/content/1/c6/04/55/36/1b96427b.pdf

2004–2008 Laos: "Informations- och kommunikationsteknik" wordcount generate 1 hits.
http://regeringskansliet.se/content/1/c6/01/14/99/4db0ddc3.pdf

2004–2008 Vietnam: "Informations- och kommunikationsteknik" wordcount generate 3 hits.
http://regeringskansliet.se/content/1/c6/01/15/67/6cd379f8.pdf

South- and Central America

2001–2005 Regionstrategi Centralamerika och Karibien: "IT" wordcount generate 2 hits.
http://sweden.gov.se/content/1/c6/01/14/22/03ccb58e.pdf

2003–2007 Regionstrategi Sydamerika: "IT" wordcount generate 1 hits.
http://www.ud.se/content/1/c6/01/15/12/1b70963f.pdf

Europe

None.

ICT4D training

Providing ICT4D training to Sida staff:

A number of promotion/training meetings with the Sida's various units and embassies.

2005 Nairobi. Organised ICT4D training course for Sida staff at embassies in East Africa (for Programme Officers & National Programme Offices).

Sida ICT4D webpages

Making information and publications available for the public and Sida staff on the Internet:

http://sida.se/sida/jsp/sida.jsp?d=1298&a=20449&language=en_US

http://sida.se/sida/jsp/sida.jsp?d=1389&language=en_US

SPIDER ICT4D helpdesk http://sida.se/sida/jsp/sida.jsp?d=1389&a=25716&language=en_US

DESOs webpage about ICT for Social Development:
http://www.sida.se/sida/jsp/sida.jsp?d=707&language=en_US

Evaluations, surveys and publications

Evaluations

Facilitating evaluations for Sida:

2002 (SAREC) 02/17 Sida Supported ICT Projects at Universities and Research Organizations in Sri Lanka (SIDA1988en).
http://sida.se/shared/jsp/download.jsp?f=Utv02-17%5B1%5D.pdf&a=2536

2004 (ICT/INEC) Evaluation of Swedish Support to SchoolNet Namibia (SIDA3557en). http://sida.se/shared/jsp/download.jsp?f=SIDA3557en_SchoolNetNamibia_web.pdf&a=3077

2004 (ICT/INEC) 04/18 The Regional Training Programme in Design, Installation, Administration and Maintenance of Network Systems (DIAMN) (SIDA4136en).
http://www.sida.se/shared/jsp/download.jsp?f=Utv04-18_SIDA4136en.pdf&a=3293

2005 (SAREC) 05/17 Sida supported ICT Project at Makerere University in Uganda (SIDA4833en).
http://sida.se/shared/jsp/download.jsp?f=Utv05-17_SIDA4833en.pdf&a=3557

2006 (UTV) 06/13 Evaluation of Sida Information and Communications Technologies Support to Universities (SIDA30086en).
http://sida.se/shared/jsp/download.jsp?f=SIDA30086en_Utv06-13.pdf&a=25086

2007 (in prep, DESO) Evaluation of Sida support to ICT training for the visually impaired in Vietnam.

Country ICT Surveys

Commissioning country ICT surveys for Sida:

2001 Country ICT Survey for Mozambique.
http://sida.se/shared/jsp/download.jsp?f=ICTMoz.pdf&a=2742

2001 Country ICT Survey for Tanzania (SIDA2042en).
http://sida.se/shared/jsp/download.jsp?f=ICTTanz%5B1%5D.pdf&a=2558

2001 Country ICT Survey for Rwanda (SIDA2041en).
http://sida.se/shared/jsp/download.jsp?f=ICTRwa%5B1%5D.pdf&a=2557

2002 Country ICT Survey for Sri Lanka (SIDA26636en).
http://sida.se/shared/jsp/download.jsp?f=SIDA26636en_SriLanka.pdf&a=21636

2002 ICT in Nicaragua (SIDA26393en).
http://sida.se/shared/jsp/download.jsp?f=SIDA26393en_Nicaragua.pdf&a=21393

2002 TIC en Nicaragua (SIDA26393es).
http://sida.se/shared/jsp/download.jsp?f=SIDA2451es_TICNic.pdf&a=21393

2003 Country ICT Survey for Namibia (SIDA2459en).
http://sida.se/shared/jsp/download.jsp?f=ICTNamibia.pdf&a=2708

2003 Country ICT Survey for Zambia (SIDA2458en).

http://sida.se/shared/jsp/download.jsp?f=ICTZambia.pdf&a=2707

2004 Vietnam. Survey of ICT for improved governance and rural development (SIDA4178en). http://sida.se/shared/jsp/download.jsp?f=SIDA4178en_ICT+Vietnam+web.pdf&a=3298

2005 Mali. Les Technologies de l'Information et de Comunnication au Mali (SIDA4761fr). http://www.sida.se/shared/jsp/download.jsp?f=SIDA4761fr_Etude+National+web.pdf&a=3521

2006 Country ICT Survey for Mozambique (SIDA2608en). http://sida.se/shared/jsp/download.jsp?f=SIDA2608en_ICT+Moz+2006+web.pdf&a=2742

Other publications

Commissioning other publications for Sida:

2002 ICT – Transforming the World by Transforming Universities (SIDA1725en). http://sida.se/shared/jsp/download.jsp?f=SIDA1725en_ICT.pdf&a=2488

2003 Informationsteknologi (ICT) för utveckling (SIDA3059sv). http://sida.se/shared/jsp/download.jsp?f=SIDA3059sv_Informationsteknologi.pdf&a=2905

2003 Training for ICT development in Sri Lanka and Tanzania (SIDA2264en). http://sida.se/shared/jsp/download.jsp?f=TrainingForICTSriLankaTanzania.pdf&a=2676

2004 Open Source in Developing Countries (SIDA3460en). http://sida.se/shared/jsp/download.jsp?f=SIDA3460en_Open+SourceWEB.pdf&a=3055

2004 Information and Communication Technology (ICT) for development (SIDA3791en). http://sida.se/shared/jsp/download.jsp?f=SIDA3791en_ICT+Factsheet+web.pdf&a=3152

2004 Profitable Universal Access Providers. http://www.scanbi-invest.com/download/Rural_Access.pdf

2005 Sida support for ICT in developing countries (SIDA4944en). http://sida.se/shared/jsp/download.jsp?f=SIDA4944en+web.pdf&a=3611

2005 Strategy and Action Plan for ICT in Development Cooperation (SIDA4474en). http://sida.se/shared/jsp/download.jsp?f=SIDA4474en_Strategy+for+ICT_web.pdf&a=3404

2005 ICTs for Poverty Alleviation. Basic Tool and Enabling Sector (SIDA4937en). http://sida.se/shared/jsp/download.jsp?f=SIDA4937en.pdf&a=3607

2006 (final draft) ICT for mitigating HIV/AIDS in Southern Africa. http://www.spidercenter.org/visa.html?artikelid=993

2007 (in prep). Options for Terrestrial Connectivity in Sub-Saharan Africa. http://www.scanbi-invest.com

2007 (in prep). The innovative use of mobile telephony in the Philippines and potential applications in Africa.

Studies participated in:

2003 (DESO). A strategy for ICT for development (ICT4D) for DESO. Digital Empowerment (SIDA3302en). http://sida.se/shared/jsp/download.jsp?f=SIDA3302en_DigitalEmpower-StrateWEB.pdf&a=2991

2003 (DESO). Guidelines to the DESO Strategy for the ICT for development (ICT4D). Digital Empowerment (SIDA3301en). http://sida.se/shared/jsp/download.jsp?f=SIDA3301_DigitalEmpGuidWEB.pdf&a=2990

Funding large scale activities

Swedish resource base for ICT4D

The secretariat has promoted and funded the process for establishing SPIDER.

The secretariat has promoted the establishment of a Sida ICT4D helpdesk at SPIDER.

SPIDER (The Swedish Program for Information and Communication Technology in Developing Regions)
(planning grant 2003, appx 0.5 MSEK), (separately funded 2004–2009, appx 87 MSEK).
[71700010, 71700016]
Co-funding with KTH.
http://www.spidercenter.org/

Global support and international cooperation

InfoDev (Information for Development Program) (1997–2006, appx 34 MSEK).
[71000666, 71000433, 71700033, 71000496, 71700039].
Co-funding with WB, EU, Dfid, Cida, Danida, Switzerland, Germany & Finland.
http://www.infodev.org/en/index.html

Eldis (The Gateway to Development Information) (2000–2007, appx 15 MSEK). [75008002]
Co-funding with Danida, Dfid, SDC & Norad.
http://www.eldis.org/

Bellanet (Supporting the collaboration within the development community) (2000–2007, appx 9 MSEK).
[75008001]
Co-funding with Danida, SDC, Cida & IDRC.
http://home.bellanet.org/

GKP (Global Knowledge Partnership) (2001–2007, appx 5 MSEK).
[75008015, 75008027, 71700025, 71700036]
Co-funding with WB, SDC & IDRC.
http://www.globalknowledge.org/

UN ICT Task Force (2002–2006, appx 8 MSEK). [75008045, 75008046]
Sida funding Swedish staff at UN ICT Task Force (Astrid Dufborg/Samuel Danofsky).
http://www.unicttaskforce.org/

WSIS Gender Caucus (The World Summit on the Information Society) (2003–2005, appx 1.5 MSEK).
[71700005]
Co-funding with Norway, Denmark & Finland.
http://www.itu.int/ITU-D/gender/GenderWSIS/index.html

Funding medium sized activities

ICT4D as targeted invitation area in SARECs Swedish development research program
(2001–2005, appx 7 MSEK). [13200128, 71700001]

CATIA (The Catalysing Access to ICT in Africa programme). (2005, appx 5 MSEK). [75008041]
http://www.catia.ws/

NetTel@Africa (Network for Capacity Building and Knowledge Exchange in ICT Policy, Regulation and Applications). (2006–2007, appx 3 MSEK). [71700038, 71700035]
Co-funding with Dfid & USAid.
http://www.nettelafrica.org/index.php?module=splashscreen

IX, Internet Exchange (2003–2006, appx 6 MSEK), (Rwanda, Burundi, Namibia, Zambia, Mozambique, Malawi, Laos, Bolivia & Nicaragua).[71700008]
Co-funding with Cisco & cooperation with AfrISPa.

MIM, Multilateral Initiative on Malaria Secretariat, VSAT (2003, appx 5 MSEK). [71700011]
http://www.mim.su.se/english/index.asp

DIAMN, Sri Lanka (Training Course in the Design, Installation, Administration and Maintenance of Communications and Network Systems). (2003–2006, appx 4 MSEK). [71700007, 71700022]
Co-funding Jica.
http://www.ucsc.cmb.ac.lk/diamn/

E-learning center, Sri Lanka (2002–2003, appx 1 MSEK). [75008043]
http://www.ucsc.cmb.ac.lk/elc/, http://www.bit.lk/

SCA, Stockholm Challenge Award. (2004–2009, appx 3.5 MSEK).
[Included in the general SPIDER budget above]
Co-funding with Ericsson, City of Stockholm and KTH.
http://www.stockholmchallenge.se/

Masters Programme in InternetWorking, KTH. (2004, appx 1.5 MSEK). [71700021]
http://www.it.kth.se/intms/

Funding DESO/HÄLSO ICT4D at Q-web (Women's Empowerment Base).
(2003–2004, appx 1 MSEK).
http://www.qweb.kvinnoforum.se/

Bridge-funding for DESO/HÄLSO ICT4D at WHC, World Health Chart. (2002, appx 1.5 MSEK).
(DESO decision 0505/01, DESO-2001-02288)
http://www.gapminder.org/, http://www.whc.ki.se/index.php

Funding small scale activities
[75008012, 75008042, 71700015, 71700032] = 10 MSEK.
[75008013, 75008016, 75008020, 75008023, 75008025, 75008028, 75008030, 75008038, 71001625, 71001634, 71700000, 71700004, 71700006, 71700014, 71700017, 71700018, 71700019, 71700020, 71700023, 71700024, 71700026, 71700027, 71700029, 71700031] = approx 9 MSEK.

2001	Networking Workshop ISOC (0.8 MSEK).
2001	Telemedicine Conference (0.4 MSEK).
2001–2002	Country ICT surveys (appx 1.5 MSEK).
2001–2002	Assessment RITA, Rwanda ICT agency (0.2 MSEK).
2002	Lake Victoria Communication Network survey (< 0.1 MSEK).
2002	Nicaragua Country ICT survey (0.3 MSEK).
2002	Sri Lanka Country ICT survey (0.3 MSEK).
2002	Study ICT training Sri Lanka/Tanzania (0.5 MSEK).
2002	Mozambique Open & Mozambique IX (0.8 MSEK).
2002–2003	Namibia & Zambia country ICT survey (0.6 MSEK).
2003	Workshop East African MSc training (0.2 MSEK).
2003	AfNOG Workshop Internet (0.5 MSEK).

2003 Copyright Software dev survey report (< 0.1 MSEK).

2003 1st Open Access workshop, Stockholm (0.25 MSEK).

2003–2004 Vietnam Country ICT survey (0.3 MSEK).

2004 2nd Open Access workshop, Stockholm (0.4 MSEK).

2004 ICT4D conference, Uppsala Univ (0.4 MSEK).

2004 Lessons learnt SchoolNet (< 0.1 MSEK).

2004 Zambia ICT policy (< 0.1 MSEK).

2004 Rural Telephone System GSM (0.5 MSEK).

2004 Rural Telecom Business Model in Tanzania (0.5 MSEK). Co-funding UNDP.

2004 CTO Sri Lanka Rural GSM (0.2 MSEK).

2004 African Fibre Backbone Survey, Comstedt (0.1 MSEK).

2004 E-health study Uganda (0.5 MSEK).

2004 WMAX in DCs (0.1 MSEK).

2004 Open Source in DCs Study (0.2 MSEK).

2004 ICT consultant to Honduras, Bert Geers (0.1 MSEK).

2004 VSAT Study, Olavi Tryhed (0.2 MSEK).

2004 Greater Mekong Secretariat meeting, Björn Söderberg (< 0.1 MSEK).

2004 ICT Cordio East Africa (1.5 MSEK).

2004–2005 Mali ICT country survey (0.2 MSEK).

2004–2005 Eldis Report (< 0.1 MSEK).

2004/2007 ASEM Games Network (0.2 MSEK).

2005 3rd Open Access workshop, Mozambique (0.5 MSEK).

2005 VoIp demo at 3rd Open Access workshop, Mozambique (0.3 MSEK).

2005 Pre-Precom WSIS Africa (0.1 MSEK).

2005 E-government Rwanda (< 0.1 MSEK).

2005 Minor ICT survey, Scanbi (0.1 MSEK).

2005 Internet Governance Workshop, Uppsala Univ (0.1 MSEK).

2005 ICT & poverty report (0.3 MSEK).

2005 ICT4D training conference Africa, Kenya (appx 0.1 MSEK).

2005–2006 Cisco (0.5 MSEK): Participation from DCs in Cisco summit.

2006 Mozambique ICT survey report (0.3 MSEK).

2006 EdM ICT strategy/Mozambique, Hilding (0.3 MSEK).

2006 FOSSFA Open Source survey (< 0.1 MSEK).

2006 SAREC ICT evaluation workshop (0.1 MSEK).

2006 EASSY Rwanda Advisory (0.25 MSEK).

2006 PPIAF assessment of Universal Access Fund/Telecom, Malawi (< 0.1 MSEK).

2006 India/Sweden ICT cooperation survey report (0.3 MSEK).

2006 Latinamerica/Sweden business ICT cooperation (0.2. MSEK).

2006 EDGE presentation at CTO conference, Nigeria (< 0.1 MSEK).

2006–2007 Mobile Networks Study (appx 1 MSEK).

2007 (in prep). Mobile application for DCs, Phillipines survey report (0.3 MSEK). "The innovative use of mobile telephony in the Philippines and potential applications in Africa".

2007 (in prep). Sida ICT4D survey report (0.3 MSEK).

2007 (in prep). Monitoring RITA Rwanda, ASKAB (0.3 MSEK).

2007 (in prep). EASSY Regional East Africa Advisory (0.5 MSEK).

ICT support handled by Swedish Embassies

Assisting and supporting large scale ICT support handled by Swedish Embassies.

Sri Lanka

E-learning center Sri Lanka
(2006–2009, appx 15 MSEK). [45003891]
http://www.ucsc.cmb.ac.lk/elc/, http://www.bit.lk/

Sri Lankan ICT policy
(2002–2003, appx 3 MSEK). [45003888]

Population Registry
(2005–2006, appx 11 MSEK but agreement later on cancelled due to political reasons). [45000048]

Open Source, LSF, Lankan Software Foundation
(2004–2006, appx 1 MSEK). [45000047]
http://www.opensource.lk/

Namibia

Schoolnet Namibia
(2001–2007, appx 26 MSEK).
http://www.schoolnet.na/

Rwanda

RITA, Rwanda (Rwanda Information Technology Authority)
(2003–2005, appx 12 MSEK). [75008037]
http://www.rita.gov.rw/

Rawanda, ICT Capacity Development
(2007–2009, appx 24 MSEK). [71700030]

Tanzania

2003–2006 Swedish Embassy in Tanzania:
Sida ICT Adviser working at the embassy in Tanzania (Nils Jensen).

2006–2008 Swedish Embassy in Tanzania:
Regional Sida ICT Adviser working at the embassy in Tanzania (Petra Smitmanis Dry).

ICT4D programmes handled by Sida ICT Adviser at the Swedish Embassy in Tanzania:

ICT in Teacher Colleges
(2005–2007, appx 28 MSEK). [32000017]

ICT Programme Development
(2003–2006, appx 5.5 MSEK). [32010044]:
- 2003. ICT School Workshop Bot (0.1 MSEK).
- 2003. Investment conf (0.1 MSEK).
- 2004/2006. Study ICT in TCs (0.3 MSEK).
- 2004. Dev. concepts rural comm (0.1 MSEK).
- 2004. ICT feasibility study BCA (0.3 MSEK).
- 2004. OUT org. & ICT study (0.8 MSEK).
- 2004/2005. Open Source Swahili (1.2 MSEK).
- 2004. Open Access Workshop (< 0.1 MSEK).
- 2004/2006. DDP ICT & demand model (0.5 MSEK).
- 2004. PD elaboration ICT in TCs (0.3 MSEK).
- 2004. Zanzibar ICT in Education (0.1. MSEK).
- 2004. WSA Road Show (DigITAf.) (0.2 MSEK).
- 2004. ICT Framework for Education (< 0.1 MSEK).
- 2004/2006. BCA ICT follow up (0.3 MSEK).

ICT Programme Development
(2005–2006, appx 5 MSEK). [32000016]:
- 2005. Rural ICT Dev KTH + (1.2 MSEK).
- 2005. ICT Awareness in DDP (< 0.1 MSEK).
- 2005. Rural ICT workshop + (appx 0.2 MSEK).
- 2005. TZ ICT Challenge Award (0.3 MSEK).
- 2005. Eschool W/S 0508 TEA (< 0.1 MSEK).
- 2005. BGA, Bagamoya College of Arts at WSIS 0511 (appx 0.1 MSEK).
- 2006. MoEVT map & plan Eschool (0.3 MSEK).
- 2006. MoCT Init. RCAF fund prep (0.3 MSEK).
- 2006. Satellite Hub Study (0.2 MSEK).
- 2006. MoEVT to Addis (< 0.1 MSEK).
- 2006. BGA, Bagamoya College of Arts, user study, Paula U (0.2 MESK).
- 2006. Zanzibar ICT in Educ W/S (appx 0.5 MSEK).
- 2006. ICT4RD Formul, TZ progr. (0.3 MSEK).
- 2006. TEA Visit to Kenya NGO (< 0.1 MSEK).
- 2006. Consorti & Minihub, Olavi (0.2 MSEK).
- 2006. EAC w/s Reg. Networks (0.2 MSEK).
- 2006. Education Policy Workshop (< 0.1 MSEK).
- 2006. TanEdu Awareness (0.3 MSEK).

ICT for Rural Development Phase 2
(2006–2009, appx 5.5 MSEK). [32000039, 32000047]:
- 2006/2007. ICT4RD Phase2 (2.5 MSEK).
- 2006. ICT4RD Phase2 KTH (1.4 MSEK).
- 2006. ICT4RD Phase2 COSTECH (0.8 MSEK).
- 2006. ICT4RD Phase2 DIT (0.2 MSEK).

Lake Victoria: LVI safety com/mobile
(2005–2006, appx 1 MSEK). [32000034]

Program Formul Eschool
(2006, appx 0.4 MSEK). [32000038]

India

2006–2007 Survey concerning ICT cooperation between India & Sweden.

Other Swedish stakeholders

The secretariat has provided support and assistance to other Swedish stakeholders:

2003	Swedish Ministry of Foreign Affairs: Sida funding DC and Swedish stakeholders participation at WSIS 1. http://www.itu.int/wsis/index.html
2002–2006	Swedish Ministry of Foreign Affairs: Sida funding Swedish staff at UN ICT Task Force (Astrid Dufborg/Samuel Danofsky) (appx 8 MSEK), handled by UNIFEM. http://www.unicttaskforce.org/
2003–2005	Swedish Ministry of Foreign Affairs: Sida co-funding WSIS Gender Caucus (appx 1.5 MSEK) together with Norway, Finland & Denmark. http://www.itu.int/ITU-D/gender/GenderWSIS/index.html
2005	Swedish Ministry of Foreign Affairs: Sida funding DC and Swedish stakeholders participation at WSIS II (appx 0.8 MSEK). http://www.itu.int/wsis/index.html
2006/2007	Swedish Ministry of Industry: Providing assistance in preparing ASEM highlevel meeting in Vietnam.

Global ICT4D policy

The secretariat has influenced global ICT4D policy making through the following participation:

UN ICT Task Force

Funded and supported Swedish Task Force delegate (Astrid Dufborg).
Funded Swedish staff at the Task Force secretariat (Samuel Danofsky).

WSIS

The secretariat funded a number of WSIS activities:

2002. African Regional conference prep WSIS, Mali.
(2002, appx 0.6 MSEK). [75008031]

2003. WSIS I ICT4D Platform, DC participation.
(2003, appx 0.6 MSEK). [71700009]

2005. WSIS II, DC & Swedish partcicipation
(2005, appx 0.8 MSEK). [71700028]

The secretariat also hosted a number of workshops at WSIS I & II.

WSIS (The World Summit on the Information Society)
http://www.itu.int/wsis/index.html

Directly on other policy arenas

Influence directly through Sida's ICT4D Secretariat:

- EU ICT4D experts coordination.
- Dot Force (G8).
- OECD Infrastructure & poverty.
- Development of ICT4D policy at Dfid, Danida, Dutch.
- Influencing open access, backbone africa and UbuntuNet policy making.
- Influencing EASSY cable policy making.
- Assessment of the importance of PFM Systems.
- Maintaining contacts with governmental agencies such as PTS, Vinnova, Nutek, former IT-kommissionen (Governmental commission of Inquiry) etc.

Indirectly on other policy arenas

Influence indirectly through Sida's ICT4D Secretariat via other actors:

- WB, via InfoDev.
- UN ICT Task Force, via Astrid Dufborg.
- WSIS, via Swedish Ministry for Foreign Affairs reference group/Ingrid Ultvedt.
- Development of ICT4D policy at SDC, via Astrid Dufborg.
- GeSCI, via Astrid Dufborg.

Other activities

The secretariat has promoted Sida to consider establish support for mobile telephony as tool for development.

The secretariat has promoted Sida to consider Public Private Partnership as a tool for ICT4D work. At present this is held at an informal level with Cisco and Ericsson.

SAREC

2.1. SAREC

SAREC has integrated ICT in most its bilateral research cooperation programmes (appx 300 MSEK since 1998). Support of these projects started when the Secretariat was part of SAREC and continued after it moved to INEC.

Mocambique (2000–2003, appx 15 MSEK).
Tanzania (2000–2008, appx 23 MSEK).
Uganda (2000–2009, appx 51 MSEK).
Rwanda (2002–2006, appx 35 MSEK).
Ethiopia (2002–2006, appx 21 MSEK).
Burkina Faso (2003–2008, appx 15 MSEK).
Sri Lanka (1998–2007, appx 62 MSEK).
Vietnam (2001–2004, appx 5 MSEK).
Laos (2003–2007, appx 10 MSEK).
Nicaragua (2001–2007, appx 21 MSEK).
Honduras (2005–2008, appx 19 MSEK).
Bolivia (2000–2006, appx 20 MSEK).

Also see: 2006 (UTV). 06/13 Evaluation of Sida Information and Communications Technologies Support to Universities (SIDA30086en).
http://sida.se/shared/jsp/download.jsp?f=SIDA30086en_Utv06-13.pdf&a=25086

Libraries and Internet
(2001–2002, appx 2 MSEK), and
INASP (International Network for the Availability of Scientific Publications)
(2001–2003, appx 8 MSEK). [75008014, 75008018]
http://www.inasp.info/

Appendix 6. Terms of Reference

1. Background

Sida supports the integration of ICT in developing countries in order to improve communications and the exchange of information. Sida's policy is outlined in the document "Strategy and Action Plan for ICT in Development Cooperation". The role of ICT4D is also described in Sida's report "ICTs for Poverty Alleviation".

Sida has identified ICT as an important tool for development. Sida is now commissioning a Study to primarily serve as background material and input for the coming discussion at Sida's management group how the future integration of ICT in the Swedish development cooperation should be designed and organized. The study and the recommendations shall be based upon information from at least four perspectives: benchmarking with other donor agencies, but also take into account the opinions/recommendations of colleagues within Sida and other Swedish stakeholders, as well as developing countries.

The aim of this study is to provide Sida's management group with an overview of the present ICT4D situation, and propose how Sida should design and organise its future ICT4D work. This should be put in relation to the overall aim of the present Swedish development cooperation – to reduce poverty.

2. Objectives

- Present brief information and data on donor agencies ICT4D work.
- Present a brief assessment of the role and achievements of Sida's ICT Secretariat.
- Present conclusions and recommendations based upon this data and interviews.
- Present different levels of ambition and direction of Sidas future ICT4D work and their consequences.
- Propose how Sida should design and organise its future ICT4D work to achieve this.

The report shall primarily serve as an input to Sida's management group discussion.

3. Scope of the Services

The Consultant shall make an ICT4D Study for Sida. The report shall include:

- a brief description of the ICT4D work among selected donor agencies,
- a brief description of major ICT4D organisations and programmes,
- a brief assessment of the role and achievements of Sida's ICT Secretariat,
- a brief description of the opinions and recommendations of the various stakeholders,
- a basic analysis of the above data, resulting in conclusions and recommendations,
- present different levels of ambition and their consequences and propose the direction of Sida's future ICT4D work,
- propose how Sida should design and organise its future ICT4D work to achieve this.

The brief inventory and data collection for the descriptive part should at least reflect four perspectives:

1a) Benchmarking with *other donor agencies.*

1b) Present the existing *ICT4D organisations*

1c) Present the role and achievements of *Sida's ICT Secretariat.*

2) Recommendations from *developing countries.*

3) Recommendations from *colleagues within Sida.*

4) Recommendations from *other Swedish stakeholders.*

The *descriptive* part shall cover appropriate items and questions for *benchmarking.* The description shall also include information on forecasted changes and developments in the near future, where applicable. Name of relevant organisations and basic data such as size, country, main purpose, etc should be listed in the report or summarised in an appendix. The key data shall be gathered as completely as may be reasonable in terms of cost and time.

The *descriptive* part shall also present how Sida have organised its ICT4D work in the past, and briefly present the role and achievements of Sida's ICT Secretariat. The *descriptive* part shall in addition to this summarize the opinions and recommendations of a selected number of stakeholders. This data should mainly be based upon interviews, meetings and conversations.

The *analysis* should include a discussion of the presented data in the descriptive part. It should address the following questions:

- Which are the major trends in donors work with ICT4D?
- What are the main obstacles for donors work with ICT4D?
- Which are the main opportunities for donors work with ICT4D?
- How has Sida structured and organised its ICT4D work in the past?
- Has Sida's ambition level, direction and structure for its ICT4D work been appropriate and efficient in the past?
- What have been the role and achievements of Sida's ICT Secretariat in the past?
- Which level of ambition for Sida's ICT4D work is proposed for the future?
- Which direction for Sida's ICT4D work would be most strategic in the future?
- How should Sida design and organise its ICT4D work in the future to achieve this?

Thus, the main emphasise and focus of the report is that the consultant shall *analyse the consequences* of a) the different levels of ambition, b) *propose* the most strategic direction, and c) *recommend* how Sida should design and organise its ICT4D work in the future. The proposal shall be based upon three different alternative levels of ambition being elaborated in the report:

1) How to do more (increase).

2) How to continue at the same level (status quo).

3) How to do less (decrease).

4. Methodology

4.1 Methodology

The methodology for the study:

Step 1 – Inventory of information.

Step 2 – Analysis.

Step 3 – Proposal.

The Study shall be made for INEC. The consultant shall present an independent proposal. Sida's ICT4D Secretariat shall provide the consultant with available Sida information and assist in arranging meetings and other practical matters. The ICT4D Secretariat shall also make available a brief list of its main activities and past achievements.

Data gathering for the study will use sources available internationally, interviews with representatives of selected donors and agencies and from two field visits to Sweden. The field visits to Sweden and with other interview subjects are estimated to total 2 weeks. The consultant shall carry out interviews via e-mail, telephone and in-person discussions.

5.1 Time Plan

The time plan for the study is:

January	ToR finalised.
February	Work initiated & visit to Sweden.
March–April	Visit to Sweden.
23 April	Draft report.
14 May	Final report.
31 May	INEC presents the report to Sida's management group.

5. Reporting

5.1 Written Reports

The following reports will be produced in English by the consultants, and be delivered to Sida in electronic format:

1. A draft version of the Sida ICT4D study.
2. A final version of the Sida ICT4D study.

The Sida ICT4D study is expected to be a maximum of 30 pages excl. appendices as necessary. The final version will be delivered to Sida no later than 2007-05-14.

Appendix 1
Suggested Interview Areas

Selected Donors and International Development agencies.

Selected ICT4D organisations and programmes.

Selected clients within Sida.

Selected Swedish stakeholders.

Selected staff from Swedish Embassies.

Selected ICT champions/think tanks from DCs.

Selection of Interview subjects shall be done in consultation with Sida's ICT4D Secretariat, and the Secretariat will solicit the cooperation of such subjects.

Appendix 2
Suggested guiding documentation

Sida management group's document (2007): "Where we are. Where we are going".

Sida ICT4D strategy (2005): "Strategy and Action Plan for ICT in Development Cooperation".

Sida report (2005): "ICTs for Poverty Alleviation".

Sida assessment memo (2007): "SPIDER, phase 2, 2007–2009".

Brief list of main activities and past achievements of Sida's ICT Secretariat.

Appendix 3
Suggested approach for the descriptive part

1a) Benchmarking with other donor agencies:

Who are the other donors supporting ICT4D? How do they organising their work? What kind of initiatives are they supporting?

1b) Present the existing ICT4D organisations:

Map the major ICT4D organisations and long term programmes, such as InfoDev, IICD, SPIDER, GeSci etc. They are often initiated by the donor agencies.

1c) Present the role and achievements of Sida's ICT Secretariat:

How have Sida organised its ICT4D work? What has been the role of Sida's ICT Secretariat? What are the achievements of Sida's ICT Secretariat?

2) Recommendations from developing countries:

What is the opinion of ICT champions/think tanks from DCs? What do they recommend donor agencies such as Sida to do? And how do they believe donor agencies should organise their ICT4D work?

3) Recommendations from colleagues within Sida:

What is the opinion of colleagues within Sida? What do they recommend Sida to do? And how do they believe Sida should organise its work concerning ICT4D?

4) Recommendations from other Swedish stakeholders:

What is the opinion of other Swedish stakeholders? What do they recommend Sida to do? And how?

Recent Sida Evaluations

07/47 Assessment of Comparative Advantages of Swedish ICT Support in Tanzania
Alan Greenberg
Department for Africa

07/48 Sida Supported Infant and Young Child Feeding Networks.
An Evaluation of Activities, Achievements and Aspirations
Kim Forss, Elisabeth Kylberg, Gaynor Maclean
Department for Democracy and Social Development

07/49 Informe Global de Evaluación de Modelo Integral de Salud Implementado sobre la Base de la Rectoría, la Participación Social y la Gestión Local en Guatemala
Iván Darío Puerta, Alicia Borges Månsson, Marta Medina Sandino, Edwin Haroldo Mayén Alvarado
Department for Latin Americat

07/50 Healthy Support? Sida's Support to the Health Sector in Angola 1977–2006
Kajsa Pehrsson, Lillemor Andersson-Brolin, Staffan Salmonsson
Department for Democracy and Social Development

2008:01 United Nations Regional Centre for Peace, Disarmamant and Development in Latin America and the Caribbean (UNLIREC)
William Godnick, Heido Ober, Charlotte Watson
Department for Cooperation with Non-Governmental Organisations, Humanitarian Assistance and Conflict Management

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