



MEMO

From: Holly Kaufman, President, Environment & Enterprise Strategies
To: Hen-biau King, ILTER Executive Committee Chair
ILTER Coordinating Committee
Subject: ILTER Funding Research – Status Report & Recommendations
Date: August 1, 2006

I. EXECUTIVE SUMMARY

The International Long-term Ecological Research Network (ILTER) embarked on a process to **diversify and increase its funding sources** in 2005. Though ILTER member networks contributed significant in-kind services, including volunteer staffing, the US **National Science Foundation (NSF) was virtually the only source of external financial support** since it helped launch ILTER in 1993. ILTER hired Environment & Enterprise Strategies (EES)¹ in 2005 to guide a strategic planning process that included developing a fundraising strategy and raising funds.

Accomplishments

The past year's accomplishments include:

- Raised \$50,000 for delegate travel from NSF
- Raised \$20,000 for legal entity research from NSF
- Engaged NSF and tried to improve NSF relationship and impression of ILTER
- Tallied member contributions
 - Approximately \$180,000 cash and mostly in-kind contributions from members January 2005-April 2006 period, including \$2,000 pledge towards future Executive Director's salary
- Engaged ILTER leadership & membership – formed Development Task Force
- Raised awareness among ILTER members of need for funds, fundraising function, budgeting & accounting
- Identified fiscal conduits
 - Watson Institute at Brown University is US non-profit, a university, and “NGO”
 - Consultative Group on Biological Diversity (CGBD) offer

¹ Environment & Enterprise Strategies specializes in designing and managing projects that integrate environmental and economic interests. For information on the company, associates, and the President, Holly Kaufman, see www.EnvironmentStrategies.com.

- Researched estimated expenses and prepared budget estimates
- Researched numerous foundations & agencies
 - Researched funding sources of similar organizations
 - Developed list of other sources to research
 - Kept track of “rejects”
- Launched standing Fundraising Committee and external ILTER advisory council

Status

Despite this progress, EES and ILTER had to scale back their 2005-2006 fundraising expectations. Because **ILTER never had a fundraising function or any fundraising experience**, it had no record of its expenditure history, estimated budget, relationships with funders other than NSF, or an established legal entity. EES therefore **focused on most likely sources of funding in the near-term --NSF and ILTER members, and helped ILTER secure funding to research legal entity options.**

EES suggested to ILTER that it **engage NSF in a transition plan** for declining NSF contributions over time with a **continuing base level**. The strategy with NSF will continue to also include trying to **enlist NSF’s help in getting its counterparts in other countries to contribute** to ILTER, and to **inquire about other NSF funding pools**, including for at least partial **funding of ILTER’s cyberinfrastructure**. EES engaged ILTER members in fundraising, tried to solicit cash contributions from them with the Chair’s urging, and **formed a Development Task Force (DTF)** which has scoped potential public and private funding sources including other national science agencies. ILTER **tallied its cash and in-kind member contributions** in order to use the numbers to help prepare an ILTER **budget** and to **leverage funds** from potential funders.

ILTER has made tremendous progress in the fundraising area in one short year in terms of funding research, fundraising, and a shift in members’ awareness of and involvement in fundraising. However, ILTER faces significant funding **challenges**, the most critical of which is that it has **no money**.

ILTER **may receive immediate funding** (in approximately August 2006) via one of its members’ governments (Taiwan), but ILTER will need to **decide about the best use of any funds and how to fulfill essential functions** through continued volunteer labor and in-kind member contributions. In addition, ILTER must contend with **new issues**, including **potential competition for funding between member networks and the international one**, as well as **competition with other international science organizations**. ILTER is a unique and potentially a very valuable organization in the global scientific community, and as it develops its organizational and funding base and produces scientific results, its **value to its members and the larger scientific and policymaking communities will increase**.

Next Steps & Recommendations

ILTER will continue the fundraising work it has begun, the Development Task Force will become a standing **Fundraising Committee**, ILTER will **decide on its legal entity and location** such that they **minimize costs**, optimize the potential for acquiring funding, and eventually ILTER will hire a Development Director. The most important strategy in fundraising is **relationship-building** and nurturing, including keeping all past and potential funders, external advisors and past leaders informed of ILTER's progress.

Though ILTER primarily **needs funding for its Secretariat functions**, certain necessary **ILTER-wide projects are more fundable**, and a percentage of ILTER project grants, such as for developing the **cyberinfrastructure** and conducting **collaborative research**, would go to the Secretariat.

The sources of funding most readily available to ILTER are **contributions from member networks, contributions that members can solicit, and annual dues**. Though most US foundations are unlikely sources of unrestricted funding, certain **US federal agencies** may prove to be good sources. The Fundraising Committee will need to **continue research into public and private sources in other countries and regions**, particularly in countries that are likely to be good donor sources but were not represented on the DTF.

As prospective funders see ILTER members' commitment to their organization, the funds that members contribute, and scientific product, **fundraising will get easier and funders will become increasingly interested**. **ILTER should expect this to take about two years**, at which time ILTER should begin **to realize more stable and diverse core funding**.

II. BACKGROUND

The International Long-term Ecological Research Network (ILTER) embarked on a process to **diversify and increase its funding sources** in 2005. Though ILTER member networks contributed significant in-kind services, including volunteer staffing, hosting meetings and other essential needs, the US National Science Foundation (NSF) was virtually the only source of external financial support since it helped launch ILTER in 1993.

After ILTER's first ten years building its network membership under this model, NSF and ILTER recognized that the organization's long-term survival required that it establish broader financial ties and transition from an informal association of networks to a formal,

legal organizational structure with a professional, paid staff to carry out ILTER's administrative and international-coordination functions.

ILTER hired EES in 2005 to guide a strategic planning process that included developing a fundraising strategy and fundraising. This report documents ILTER's funding related work that has taken place with EES's assistance over the past year (August 2005 - July 2006).

III. EES'S ORIGINAL WORKPLAN

EES's original workplan called for developing:

“...a five-year funding plan after completion of the strategic and organizational plans. The funding plan will focus on funding for the global ILTER organization, rather than regions or member networks. Funding recommendations for regional groups or members will be included only if EES becomes aware of resources in the course of research for the global plan.”

EES would:

“...raise US \$100,000 to help fund initial implementation of the ILTER organizational structure...and to fund travel for developing-country networks to attend the 2005 and 2006 annual meetings (\$20-30,000 each) in Mexico and Namibia, respectively...This is a total of \$140-160,000...”

During the first week of EES's contract, EES raised \$50,000 from NSF for African delegates' travel to the September 2005 African Regional Meeting in Malawi and the October 2005 ILTER Annual General Meeting (AGM) in Mexico. (Some AGM funds were re-allocated to other developing country members due to visa problems for African delegates.)

EES began to research possible sources of funding, including other US agencies, US foundations, non-US government agencies and foundations, and international organizations, while it embarked on the strategic planning process. EES's goal was to raise sufficient funds so that ILTER would have some funding to start implementing its strategic plan after the August 2006 annual meeting, begin to establish relationships with some funders, and to help diversify ILTER's funding sources -- consistent with EES's mandate to internationalize the organization and foster greater member engagement.

IV. FUNDRAISING STRATEGY AUGUST 2005-JULY 2006

During and soon after the 2005 AGM, ILTER came to see that it did not have a legal structure or record of its expenditure history. The fact that ILTER is a “network” or

“association” and not a registered charity, educational organization or other type of legally-sanctioned entity in any country, changed the short-term fundraising potential from what was originally envisioned.

Likewise, owing to the fact that much more groundwork and time would be required to develop ILTER’s strategic plan, EES would not be able to complete the operations plan and associated budgets necessary to approach funders in time to assure funds or pledges of funds by the 2006 AGM (and near end of EES’s contract).

Therefore, EES changed its tactics and timeline. The goal remained to internationalize ILTER’s funding base, increase members’ awareness of ILTER’s funding needs and engage members in the fundraising effort. However, **EES focused on most likely sources of funding in the near-term: NSF and ILTER members.**

The three main components of the strategy consisted of:

- Research options for and establish ILTER’s **legal entity** and Secretariat office location
- Engage **NSF** in a transition plan for declining funding over time with an ongoing base level
- Engage ILTER **members** in fundraising, via contributions and a development task force, and use member contributions as leverage with NSF and eventually other funders

Legal Entity

A U.S. university connected with one or more LTER sites (University of New Mexico followed by Brown University) has served as the recipient of the NSF grants to ILTER. Though some funders could possibly donate to ILTER via Brown University, ILTER needs to establish an office with secretariat functions that is able to seek and receive funds from foundations and agencies around the world.

Beginning in November 2005, EES worked with ILTER to try to obtain funding from the membership to assist ILTER with the legal entity research. As time to complete that research in advance of drafting the operations plan waned, EES recommended in April 2006 that ILTER formally decide that ILTER be housed for the present at Brown University. Additionally, EES recommended that EES base its operations plan and budget estimates on that scenario, and that one of the first tasks ILTER would undertake after the August 2006 AGM would be to research and establish the most suitable legal entity and location. The Executive Committee approved that recommendation.

In a June 2006 meeting with NSF, NSF agreed with the critical need for ILTER to establish itself as a formal organization. NSF asked for a proposal to fund the research, which EES prepared and Brown University submitted on behalf of ILTER. (See Appendices for funding proposal.)

NSF approved the funding request for EES to carry out the research necessary to identify the best three options for the legal and physical establishment of the organization's Secretariat, and EES started work immediately (July 2006) so that it could identify options and present the preferred alternative to the Coordinating Committee at the August general meeting.

In the meantime, EES initiated a relationship for ILTER with the Consultative Group on Biological Diversity (CGBD). The CGBD is an association of science-oriented funders, primarily foundations in the US and the US Agency for International Development. The CGBD is a tax-exempt, charitable organization in the US, and offered the possibility of serving as a **fiscal conduit** for ILTER in order to receive grants from US foundations that can only contribute to this particular type of legal entity.

The Watson Institute at **Brown University** is also such an entity, and qualifies as a non-governmental organization (NGO) in United Nations' classifications. Therefore, Brown University can serve ILTER's organizational-structure needs for a variety of funders until the time that ILTER chooses to establish a different entity.

National Science Foundation (NSF)

NSF funded ILTER's strategic planning effort to wean ILTER from the agency's support. However, NSF launched ILTER and invested in it for 12 years; it is also one of the world's foremost institutional supporters of the LTER concept. With ILTER never having had a fundraising function or relationships established with any other funders, in addition to its lack of formal organizational status, ILTER and EES saw that it would not be realistic to keep ILTER functioning in next several years without NSF's support.

EES suggested a **strategy for ILTER to present to NSF**:

ILTER should present to NSF the picture of a **diversified portfolio of phased, multi-year, declining NSF funding, with matches from ILTER members and other sources, leveling off to an ongoing, minimum annual level** to coincide with the nature of ILTER's long-term research needs, as well as the need for annual travel, researcher exchange, and special projects funds. ILTER should make the case for ILTER becoming an increasingly valuable entity for international scientific collaboration. (See NSF Strategy, March 6, 2006, in Appendices.)



ILTER representatives met with NSF, pointing out NSF's stake in ILTER and the need to **build on the successful model that NSF helped create, and to sustain the asset that no other international organization duplicates**. ILTER prepared a **tally of member in-kind and cash contributions to help leverage NSF support**. The January 2005-April 2006 amount is approximately **\$180,000**. (See tally in Appendices.)

ILTER and NSF representatives met in June 2006. Unfortunately, the NSF representatives as a group were **not keen on continued support** to ILTER at present. However, **NSF did award ILTER \$20,000 for the legal entity research** (approximately \$5,000 to Brown for ILTER operations and \$15,000 to EES to hire an additional associate to conduct the research). In addition, ILTER also asked NSF if it could **refer ILTER to other US government agencies** for possible support. Jim Gosz, formally at ILTER and now at NSF, referred ILTER to the US Forest Service and other agencies, and ILTER will be scheduling meetings with contacts there.

Follow-up meetings with NSF individuals will hopefully prove fruitful, especially over time. It is important that ILTER continue to **work with NSF to dispel NSF's impressions of ILTER largely being a vehicle for scientists to socialize at international gatherings**. The more that ILTER develops a positive relationship with NSF and continues to **inform the agency of its scientific-collaboration, organizational and fundraising progress** – including contributions from ILTER members, the more likely some funding from NSF is likely to be.²

ILTER's strategy for seeking NSF funds will continue to be to seek declining funding over time while maintaining a minimum annual level of support. In addition, ILTER will try to **enlist NSF's help in working with its counterparts in other countries to contribute to ILTER** on an ongoing basis ("bilateral strategy"). ILTER will also approach NSF about **"end-of-the-year" funds** (unspent funds remaining in NSF accounts at the end of its fiscal year), and **competitive and non-competitive grants** (and associated deadlines).

ILTER representatives will be speaking to NSF this month about these ideas, and to talk to NSF about ILTER's estimated two-year operating budget, including the cost of developing ILTER's cyberinfrastructure to the point that it can enable ILTER to fulfill its

² NSF also suggested that partnering would be a good strategy for ILTER, including with the NEON program in the US and organizations in other countries. One NSF official recommended that ILTER emphasize to NSF the unique added value, such as its dual mission, that ILTER provides beyond other information-sharing groups; propose a "second stage" planning grant to NSF to get ILTER members together to work on its science program; look at the possibility of a joint US/EU science effort at NSF or a joint US/EU Secretariat; emphasize the importance of science and technology in US competitiveness; and meet with high-level NSF officials.

scientific-collaboration goals. ILTER and NSF will hold **follow-up meetings in person** at the US-LTER All Scientists Meeting in September of this year.

ILTER Members

Most, if not all, member organizations receive funds from the members. With support from the NSF, ILTER members were never in the position of having to **pay a fee to join the organization or annual dues**. However, now that NSF's full support will no longer be available, and members have articulated through the strategic planning process the values that ILTER provides to them and their individual scientists, it is time for members to devise a dues system, (probably on a tiered or gradual basis), and start paying annual dues.

Dues play several important roles in addition to providing direct funding. **Dues increase members' awareness of the value** that the organization provides to them; likewise, **members will ensure that their organization continues to provide value to them**, which will **make ILTER a stronger organization**. Dues also help **leverage funds** from other potential funders, as they see hard evidence of members' commitment to their organization, and that they are contributing funds along with other funders. Dues are also one of the few sources of funding that **can support administrative functions**; most external funding sources must be spent on project-related expenses.

The issue of not having any guaranteed funds coming to ILTER in 2006 is motivating the involvement of ILTER's leadership and membership. The Executive Committee Chair has been actively **seeking funds in Taiwan**, his home base, and other parts of Asia, and impressing upon the membership at annual and regional meetings the fact that **ILTER will not continue to without everyone's involvement in fundraising**.

ILTER's leadership has called on members to make financial contributions to ILTER over this past year to help ILTER through this critical juncture. About seven members have said that they could contribute to ILTER³, and one (the Costa Rican network) pledged **\$2,000 towards the salary of an Executive Director**. Many members have and continue to **contribute in-kind services and goods, particularly through hosting meetings and subsidizing delegate travel**. Even **prospective members** (including Malawi, Japan and Thailand) **have done the same** (an indication of the value they foresee in becoming an ILTER member).

Along with the general call for member contributions and fundraising, EES formed a **Development Task Force (DTF) to work on budgeting, funding research and**

³ Networks from Canada, Mongolia, Romania, Slovakia, United Kingdom, Venezuela, and possibly China.

fundraising during the strategic planning process with a subset of ILTER members.⁴ (ILTER members can see minutes of the meetings on the ILTER website.)

The DTF has essentially been ILTER's "Development Director," initiating the work that such a director would have to do – prepare budgets, scope a wide range of potential funding sources, talk to funders and funder associations for additional potential sources, and continue to both expand and narrow the list until reaching a list of reasonable prospects, and then conduct more thorough research on those. EES and the DTF scoped a number of possibilities, primarily US foundations, narrowed that list considerably, and has continued to search for other sources, primarily in countries where DTF members work, and started to **expand that search in their respective ILTER regions**.

EES also compiled a list of **funding sources for similar international science organizations**. (See Appendices.) Though competition for funding is a prospective issue, ILTER will eventually pursue possible **collaborations and partnerships** with these or other organizations, which can improve the funding prospects for the two or more organizations in the alliance.⁵

DTF members have been contacting their **national science agencies** to see if they would be interested in participating with the US NSF in long-term, core funding for ILTER. Already, the **Venezuelan science agency has said that it could likely contribute the country's portion of ILTER's cyberinfrastructure development**. The DTF and other members of the Coordinating Committee are contacting members of the **International Group of Funding Agencies for Global Change Research (IGFA)** to see if funding for ILTER might be available from the member institutions.

ILTER has made **tremendous progress** in the fundraising area in one short year. Given that no one in ILTER ever had to think about funding or raise any funds for it before (except for the administration associated with the NSF grants), had no knowledge of potential other funders or relationships with them, and no fiscal conduit established for receiving funds, the engagement of the members and the information they have collected are critical first steps. With the list of funding contacts that may prove worthwhile for ILTER, along with the list of inappropriate sources, ILTER's new Fundraising Committee and eventual Development Director will have **tools in hand** to continue this work that is essential to ILTER's short and long-term survival. (See Appendices for lists of sources scoped, other potential sources, and unlikely sources.)

⁴ DTF members represent networks from China, Costa Rica, Germany, Namibia, Romania, Slovakia, Taiwan, Venezuela, and the US.

⁵ ILTER can bring projects to prospective funders with other organizations, pointing out which pieces of an undertaking each group will implement, thereby showing the funder the cost-effectiveness of funding both groups.

V. CHALLENGES

Despite the progress ILTER has made in funding research, fundraising, and shifting its culture to one that recognizes the need for and initiated fundraising activity, ILTER faces significant challenges. The most critical is that it has **no money**. Although the possibility exists for ILTER bring in some funds before the end of the August 2006 AGM, (through the Taiwanese government, member contributions and/or NSF end-of-year funds), without such an influx, **the organization will not have any operating funds**.

Even if ILTER receives this immediate funding, it is almost certain to be insufficient to cover all of what will be needed to pay for the administrative work that Brown University supplies, establish a legal entity and Secretariat office, cover salaries for paid staff, launch an ILTER-wide cyberinfrastructure that will enable ILTER to achieve its scientific goals, and pay for any necessary travel. ILTER will clearly need to **make explicit decisions about the best use of any funds** and how to fulfill needed functions and services through continued volunteer labor and in-kind member contributions.

In addition, ILTER must wrestle with several issues related to fundraising on the part of member representatives. These include the **potential for competition for funding between member networks and ILTER, competition for people's time between fundraising for their own network and for the global one**, and the fact that fundraising, especially for administrative functions of an international organization rather than for scientific research, is not aligned with the **skills, expertise and contacts** of most ILTER scientists. As mentioned above, ILTER will potentially **become a competitor for funding with other international scientific institutions**.

VI. NEXT STEPS & RECOMMENDATIONS

ILTER is a unique and an extremely valuable organization in the global scientific community, and as it develops its organizational foundation and funding base, its value to its members and the larger scientific and policymaking communities will only increase. In order for ILTER to realize its mission and goals, ILTER must continue the fundraising work it has begun.

One of the key steps ILTER has already decided on during the strategic planning process is to have the Development Task Force shift from being a short-term effort to a standing **Fundraising Committee**. The Fundraising Committee will hold its inaugural meeting at the Namibia AGM where it will draft its charter, begin to craft its workplan, and determine its means and frequency of communication. Members of the Committee will

hopefully include at least some former members of the DTF, and will consist of representation from all ILTER regions, including from countries that are likely to have greater sources of funding and countries that have members that are more likely to be funding recipients.

Once ILTER is able to hire a **Development Director**, that person will work closely with the Fundraising Committee, the Executive and Coordinating Committees, and the Executive Director, in his/her responsibility for fundraising. In the meantime, the Committees will have to take responsibility for fundraising, and it is likely that ILTER's Executive Director will have to double as the Development Director until sufficient funds exist to hire two people.

Other early important steps include **deciding on ILTER's legal entity and location/s**, as this will affect both expenses and the types and location of funders that can contribute. It is likely that remaining at Brown University at least in the short-term will be a viable option, and if ILTER does so, it should be certain to account for the in-kind contributions of staff time and office expenses so that they are accounted for in ILTER budgets, including those presented to potential funders. Likewise, all ILTER members should **keep track of all their in-kind contributions, including volunteer labor**, to ILTER and submit them to the Secretariat at least annually so that ILTER can tally these and use the numbers in funding proposals both to show what expenses need to be covered and, importantly, to help **leverage funds from funders**.

The **most important strategy in fundraising is relationship-building and nurturing**. As ILTER continues to research potential funders and gets to the point of initial meetings with them, ILTER should be sure to maintain contact with most of these people, whether or not they are likely to provide funding in the short-term. Funders can provide suggestions of other more likely potential funders and be helpful in other ways, and over time, may be inclined to provide funding.

This relationship nurturing is especially important now with NSF. ILTER fell out of favor with at least some key NSF officials who were not seeing sufficient international scientific collaborations (including with US scientists) or results from them. In order to **re-engage NSF's commitment to ILTER**, NSF has to see that its investment over the past twelve years is paying off. ILTER should be certain to send status reports to NSF after every important ILTER meeting, and periodically to keep NSF abreast of ILTER's organizational and scientific developments, member cash and in-kind contributions, and funding from other sources. ILTER representatives should meet with NSF staff in person whenever possible and appropriate, invite NSF to ILTER meetings, and send scientific products (*e.g.*, publications) as they are available. ILTER should also **explore as many sources of funding within NSF as possible**, including those mentioned above, and for projects that will result in international scientific results such as the cyberinfrastructure.

Though **ILTER primarily needs “core” or “unrestricted” funding for its administrative and coordinating Secretariat functions**, certain necessary **ILTER-wide projects are more fundable**, and a **percentage of any grants would go to the Secretariat**. These projects include the **cyberinfrastructure**, and **scientific projects** that ILTER will determine are consistent with and will further the organization’s mission and goals, such as projects that identify research gaps or that synthesize data from multiple sites or members.

ILTER’s new Science Committee will play a major role in determining ILTER’s scientific agenda. The **external advisory council** that ILTER chose to establish will assist ILTER, and its **members are likely to also be excellent sources of contacts** to potential funders. ILTER will benefit from forming this advisory council as soon as possible, and be certain to build strong relationships with its members and keep them informed, as discussed above. Members of this or a separate, small advisory council of **past ILTER leaders** (Executive Committee Chairs and Committee members) will provide institutional memory, continuity, scientific-agenda advice, and potential contacts to funders as well.

The **sources of funding most readily available** to ILTER are, as mentioned above, **contributions from member networks, contributions that members can solicit, and annual dues**. The DTF’s research thus far has determined that most private **US foundations** are unlikely sources of unrestricted funding for an international organization, though research is still in progress, and some are certain to be good prospects. A number of **US government agencies**, however, may prove to be good sources, especially for data archiving, access and other information management projects, and ILTER members should continue research on these now and arrange to meet with representatives of the most likely prospects.

The new Fundraising Committee will also need to continue research into **public and private sources in other countries and regions**, particularly in countries that are likely to be good donor sources but were not represented on the DTF (*e.g.* Western European and Scandinavian countries, and Japan). ILTER has not yet investigated the **business sector** as a source of funding, but should look into such ideas as major software companies contributing cash or in-kind products and services towards the cyberinfrastructure development, and pharmaceutical companies to ongoing ecological monitoring.⁶ Regardless of its location, ILTER should eventually establish **partnerships with other organizations and possibly companies** so as to maximize fundraising possibilities. The Fundraising Committee should **keep track of sources it scopes that are not good prospects**.

⁶ The Global Biodiversity Information Facility (GBIF) has significant funding from Microsoft.

As prospective funders see ILTER members' commitment to their organization, the funds that members contribute, and the ongoing data collection and policy-relevant research results ILTER produces, fundraising will get easier and funders will become increasingly interested. ILTER should **expect this to take about two years**, at which time ILTER should begin **to realize more stable and diverse core funding**.

FUNDING RESEARCH TOOLS AND APPENDICES
ILTER

APPENDIX A:

RESULTS OF ILTER FUNDING RESEARCH ENVIRONMENT & ENTERPRISE STRATEGIES AND THE ILTER DEVELOPMENT TASK FORCE

AUGUST 1, 2006

This document presents the results of the research that Environment & Enterprise Strategies (EES) and the ILTER Development Task Force (DTF) have conducted to date. It lists the most likely sources of possible funding – including member dues, potential sources that should still be researched, and current funders of several other international science organizations that may be good sources for ILTER, including through possible collaborations with one or more of those groups. We also list the sources that we have determined would not be good sources of ILTER funding in the near future.

I. MEMBER DUES

Among members of the DTF, these are the answers to date on which networks would be able to pay some level of ILTER annual dues:

Korea: The Korea network could pay ILTER dues in principal, but would need to know the amount.

Namibia/Southern Africa: The Third World Nations Science Organization (TWNSO) will help Namibia with ICSU membership fees, so Namibia will become a member of ICSU. Joh feels that the TWNSO or the Third World Academy of Sciences (TWAS) could possibly help ILTER members with ILTER dues, and he will look into it.

Romania: Angheluta and his colleagues are looking for a way to pay annual ILTER membership dues. He is not clear what level they could pay, perhaps a few thousand US dollars, starting in 2007.

Slovakia: Julius said he could arrange for the Slovak Academy to pay the network's annual ILTER dues. The Academy pays for Slovakia's DIVERSITAS dues of 1020 euros per year, which he suspects is about the same level it could pay towards ILTER membership.

South Africa: SAEON would be the organization to pay ILTER dues.

II. POTENTIAL SOURCES OF FUNDS

US Foundations and Funding Networks

Annenberg Foundation (US)

www.whannenberg.org

Fund improving communication technology and education, including in the field of the environment.

Carnegie Corporation (a foundation)

www.carnegie.org

See if appropriate for ILTER education or information dissemination activities.

Conservation, Food & Health Fund

www.grantsmanagement.com

Supports field research, training, technical assistance to help conserve viable ecosystems and protect biological diversity in developing countries and train developing country personnel in science.

Consultative Group on Biological Diversity (CGBD)

www.cgbd.org

CGBD is a network of funders including the US Agency for International Development (USAID) and numerous environmental foundations in the US and the world. Holly met with two program officers there in separate meetings, and one of them, Bill Hull, gave her a number of excellent contacts. After completing the research on sources listed in this document, ILTER should check the CGBD website for CGBD members for additional foundations that are not listed here. (She and the DTF have already researched the larger, more likely foundations who belong to CGBD or listed them here.)

Environmental Grantmakers Associations

www.ega.org

EGA is a network of 250 environmental foundations in the US and around the world. ILTER can look into the list of member foundations for ideas of possible funders. ILTER can also submit a profile via the EGA website so that funders can learn about the organization.

Richard and Rhoda Goldman Foundation

www.goldmanfund.org

Would be worthwhile to submit 2-page inquiry, per specific Goldman instructions available on the website. Can use Brown as fiscal conduit.

JRS Foundation

Jorge to check on correct name and web address.
May be particularly good for ELTOSA.

Lawrence Foundation

www.thelawrencefoundation.org

Grants to organizations headquartered in the US with programs in the US or elsewhere in the world who are working on the environment.

MacArthur Foundation

www.macfound.org

MacArthur funds biodiversity conservation efforts such as park establishment. They are not a good source of funding for ILTER. However, Bill Hull at CGBD referred ILTER to Michael Wright there, who was head of (or with) the African Wildlife Foundation. He will know the international environmental funding scene and ILTER can contact him to see what ideas he might have.

Andrew W. Mellon Foundation

www.mellon.org

Mellon may be a source of future funding for ILTER's cyberinfrastructure through its IT program, as Mellon wants to support IT applications to research. Mellon is supporting efforts in South Africa between US and South African universities, so ILTER or ELTOSA may want to look into that further for possible education activities between Africa and the US.

Gordon & Betty Moore Foundation

www.moore.org

Barry.Gold@moore.org

Barry Gold agreed to meet with Holly in July but the meeting has not yet taken place. She will still try to meet with him in September. Bill Hull of the Consultative Group on Biological Diversity (CGBD, a funding network) referred her to Barry. The meeting needs to be about what ideas Barry might have for ILTER, *not* about Moore funding. However, ILTER should think of this meeting as the start of building a relationship with him and with the foundation. Barry is familiar with LTER and with ILTER specifically, including through a grant to UC Santa Barbara for research and monitoring equipment at the Moorea LTER site. (Patrick Bourgeron knows the PI's). Barry used to head the science and conservation program at the Packard Foundation.

Oak Foundation

www.oakfund.org

Oak is a group of charitable organizations in various countries. Funds environment, particular emphasis on disadvantaged populations. Funds core costs and capital needs for non-profits around the world. Contact Leslie Harroun in US, referred by Bill Hull at CGBD. Also has offices in Switzerland, UK, Zimbabwe, Denmark, etc. Suggested approach is to talk to Ms. Harroun for suggestions for ILTER funders, not necessarily at Oak.

David & Lucile Packard Foundation

www.packard.org

Walter Reid, whom EES interviewed for the strategic plan, is the head of the foundation's conservation science program. He was the director of the Millennium Assessment. EES also spoke to him about funding ideas for ILTER. He referred ILTER to the International Group of Funding Agencies for Global Change Research (IGFA), and did not suggest Packard. However, EES recommends that ILTER keep Walt informed of ILTER's progress, as Packard may be an excellent source of funding in several years' time when ILTER is on stronger organizational footing and has more scientific products. Packard also has a fellowship program, Fellowships for Science & Engineering, that provides for promising US professors to pursue science research early in their careers.

Pew Charitable Trusts

<http://www.pewtrusts.com>

May be a good source for information technology and dissemination, education and communications activities. Can contact Chuck Fox in Pew's marine program, per Bill Hull at CGBD, for information. Chuck was at the US Environmental Protection Agency and has done LTER research. Josh Reichert heads the Pew environmental program, and ILTER could contact him if appropriate after an exchange of information with Chuck.

Irwin Andrew Porter Foundation

www.iapfoundation.org

Funds international environmental projects (and those in US upper Midwest).

Rockefeller Brothers Fund

www.rbf.org

RBF is very unlikely to a source of funding, but if anyone at ILTER knows Michael Northrup, the environmental officer there, he would be an excellent person to talk to about ideas for funders.

Robert & Patricia Switzer Foundation

www.switzernetwork.org

Switzer would not be a source of funding for ILTER, but is a source of accomplished Switzer fellows who might be able to serve as ILTER Secretariat staff.

Holly helped arrange such a fellowship placement for another organization, which now has a senior fellow working at a subsidized rate on a declining basis over three years. If ILTER pursues this, ILTER can tell the Executive Director, Lissa Widoff, that Holly referred ILTER to Switzer.

Turner Foundation

www.turnerfoundation.org

Funds the environment area, but does not accept unsolicited proposals. Would involve making contact at the foundation after seeing if the “building the movement” program area fit with ILTER’s CI or policy information work.

Wallace Foundation

www.wallacefoundation.org

The foundation’s mission is to expand learning opportunities for all people. May be appropriate for ILTER cyberinfrastructure, communications and/or education activities.

Weyerhaeuser Foundation

www.wfamilyfoundation.org

Supports multi-site, national and international projects that preserve and protect the environment and promise better use of scarce resources. Also supports international education projects.

US Agencies

The US government maintains a grants database for 26 federal agencies. ILTER should register at http://www.ofa.noaa.gov/~grantsonline/grants_gov.html.

Environmental Protection Agency (EPA)

www.epa.gov

EPA awards grants to US agencies, universities and non-profit organizations, as well as to foreign recipients. There are no grants available to apply for at present that match ILTER’s needs, however, this site is updated often, an ILTER should check EPA’s open grants database at least quarterly to see if there are appropriate funds to apply for, especially for science and IM projects:

http://www.epa.gov/ogd/competition/open_awards.htm. (There is a program for the Gulf of Mexico that may be good for the Mexico network to look at.) See also EPA’s international activities office.

Federal Geographic Data Committee

www.fgdc.gov

FGDC is developing the National Spatial Data Infrastructure, which is a set of policies, standards and procedures for organizations to produce and share geographic data cooperatively. Has seed grants to initiate NSDI implementations. Could be good for ILTER cyberinfrastructure.

National Aeronautics & Space Administration (NASA)

www.nasa.gov

Projects have to further NASA's mission -- could be especially good for cyberinfrastructure.

National Archives & Records Administration (NARA)

www.archives.gov

Gives grants to preserve and make accessible records & archives. Could be good for archiving ILTER data.

National Oceans & Atmospheric Administration (NOAA)

Holly has contacted a colleague there to get a good contact. ILTER should also check <http://www.ago.noaa.gov/grants>, though all NOAA grant programs are listed in the US database listed above.

US Agency for International Development (AID)

AID is undergoing a major re-organization so this is not a good time. However, it could be a likely source in the future. ILTER should get one or more contacts there through other US government contacts - including by asking NSF, meet with the contact/s in Washington, DC, and continue to keep them informed. Holly contacted a colleague there without success, and a contact to whom she was referred by Bill Hull at CGBD, Jerry Bisson, who is the AID staff person whom informed her about the reorganization.

US Department of Agriculture (USDA)

www.usda.gov

USDA Agricultural Research Service

www.ars.usda

Offers domestic and international collaborative research grants that promote, among other things, global research on resource management. See some specific agencies below within USDA for possible funding.

USDA – US Forest Service

www.fs.fed.us

Jim Gosz, formerly at ILTER and now at NSF, referred ILTER to three contacts in the International Forest Service Program for Steve to meet with in Washington:

Val Mezainis, Director, (202) 205-1650
Alex Moad, Assistant Director, (202) 273-0163
John Parotta, Steve knows him, (703) 605-4178 (often in Puerto Rico)\

Ask these USDA contacts about other sources at USDA, including following listing, and other contacts for ILTER in the US government, such as at US AID and other agencies.

USDA – Scientific Research Program (SCRP)

www.fas.usda.gov/icd/grants/scrp

Funds short and long-term international collaborative research and exchanges that address environmental stewardship.

US Department of the Interior (DOI)

www.doi.gov

Most of the agencies housed in the DOI have international offices. See for example:

US DOI Fish & Wildlife Service (FWS)

www.fws.gov

US DOI International Cooperation Service

www.doi.gov/intl

US DOI National Park Service (NPS)

www.nps.gov

US Geological Survey (USGS)

www.usgs.gov/contracts/grants

Through its contracting process, considers research proposals in variety of areas, including earth sciences, geography, conservation and remote sensing. Could be good for ILTER data collection via remote sensing or other information collection/management.

US Global Change Research Program (USGCRP)

www.usgcrp.gov

A member of IGFA (see below)

Non-Us Science Agencies

The following DTF member networks (and Francisco) contacted their national science agencies with the following results:

Brazil: Francisco is looking into resources for ILTER from the Brazilian agency.

Korea: Eun-Shik met with the Director of International Cooperation at the Korea Science and Engineering Foundation (KOSEF) to explore the possibility of funding ILTER activities through a bilateral relationship with NSF. This did not seem like a possibility at present, but KOSEF can support a bilateral workshop or symposium, such as an IM workshop if KOSEF and NSF mutually agree to do so. Korea will host the third IM Workshop of the ILTER East Asia-Pacific Region next year, and the contributions from KOSEF, the Korea Forest Research Institute, Ministry of Environment and Eun-Shik's university, Kookmin University, could be considered in-kind contributions to ILTER.

Slovakia: Its agency cannot pay help fund ILTER, which Julius thinks is the case for most CEE countries.

Venezuela: Armando says that the Venezuelan national science agency can likely cover the Venezuelan network's cost of its portion of the ILTER cyberinfrastructure development.

Other ILTER Member Countries (Not On the DTF)

The following countries are likely to have public and private organizations that could fund ILTER, and Coordinating Committee members and/or regional directors should investigate:

Australia

Canada

Brazil: See Brazilian National Institute for Space Research in addition to science agency

Germany

France

Switzerland

UK

Non-Member Countries

The following countries should also have potential resources, and Coordinating Committee members or regional directors should investigate.

Italy – to become member at 2006 AGM

Japan – to become member in 2007

See **Japanese Fund for Global Environment**

www.erca.go.jp

Application must be in Japanese.

Denmark, other Scandinavia
Netherlands

International/Multilateral Organizations

European Union (EU)

Patrick and Terry are looking at possibilities with Felix's help.

International Council for Science Unions (ICSU)

www.icsu.org

Joh met with a contact in the regional South African office and plans to meet with the Namibia ICSU representative to find out who best to work with at ICSU. EES also interviewed the ICSU director, Thomas Roswell, twice – once for the strategic plan and once for the legal entity research.

ILTER should pursue ICSU as a source of funding, being cautious about the fact that ILTER will also be seen as a competitor. Patrick advised that ICSU would be willing to work with ILTER on specific projects (meetings, capacity building), similar to what Conservation International (CI) might be willing to do on a project or national basis; but if ILTER tries to get major funding for ILTER infrastructure, it would be in conflict with ICSU's fundraising interests

International Group of Funding Agencies for Global Change Research (IGFA).

www.igfagcr.org

IGFA has members in a number of ILTER member countries, including Austria, China, Canada, France, Germany, Mexico, Romania, South Africa, Taiwan, Ukraine, UK, US, and Japan – who will be an ILTER member next year, and the EU. See below for list of contacts/agencies in each of these countries.

The DTF should review the IGFA member agencies and contact people and see whom it would be productive to contact. In the US, three contacts are at NSF and one at the US Global Change Research Project (USGCRP), so Steve could meet with these people if appropriate on a future trip to Washington, DC.

Global Environment Facility (GEF)

www.gefweb.org

Funds programs that benefit climate change, biological diversity, international waters and ozone layer depletion. (May have new categories.) Funded by UNDP and UNEP. Projects must be developing-country driven. Joh is identifying a contact for ILTER.

Inter-American Institute for Global Change Research (IAI)

www.iai.int

Give grants to for scientific activities, including research, workshops, training and travel. Jorje looking into this.

International Research Institute for Climate Protection (IRI)

www.iri.ldeo.columbia.edu

May have funding for research and information management projects, though not certain whether they supply funding to outside interests.

UN Environment Program (UNEP)

www.unep.org

Brown University has a UNEP grant, so Steve must look first into any potential conflict with Brown.

UN Development Program (UNDP)

www.undp.org

Joh located the following contact for another member of the DTF or future Funding Committee to contact for how to pursue ILTER funding:

Mr. Philip Dobie
Director, Drylands Development Centre, UNDP
Tel +254 20 7622057 : Fax +254 20 7624648
P.O. Box 30551, Nairobi, Kenya

UNESCO

www.unesco.org

Funders of Other International Science Organizations

Now that ILTER is trying to expand its funding base beyond the US National Science Foundation (NSF), it will be in competition with other similar organizations for funding. However, funding opportunities for ILTER and some other organizations may improve if ILTER collaborates with them on projects, or goes to funders jointly describing what each group will do – showing that each group has the ability to do different critical components.

Global Change System for Analysis, Research and Training

www.start.org

Financial Supporters:

Asia Pacific Network for Global Change Research (APN)
David and Lucille Packard Foundation
European Commission (EC)

German Federal Ministry for Education and Research (BMBF)
Inter-American Institute for Global Change Research (IAI)
International Council for Science (ICSU)
National Science Council of Taiwan
Netherlands Ministry of Foreign Affairs
New Energy and Industrial Technology Development Organization (NEDO)
Norwegian Agency for Development Cooperation (NORAD)
United Kingdom Department for Environment, Food, and Rural Affairs (UKDEFRA)
United Nations Environment Program/Global Environment Facility
United States Climate Change Science Program (13 agencies)
United States National Aeronautics and Space Administration (NASA)
United States National Science Foundation (NSF)

Previous Financial Supporters:

Canadian International Development Agency (CIDA)
Danish Ministry of Foreign Affairs
European Commission
Japan Ministry of Education, Science, Sports, and Culture
Japan Science and Technology Agency
International Geosphere-Biosphere Program (IGBP)
International Human Dimensions Program on Global Environmental Change (IHDP)
Millennium Ecosystem Assessment
Obayashi Corporation – Japan
Rockefeller Foundation
Swiss Agency for Development and Cooperation
United States Agency for International Development
United States National Oceanic and Atmospheric Administration (NOAA)
United Nations Development Program/Global Environment Facility
World Bank
World Climate Research Program

U.S. Civilian Research & Development Foundation (CRDF)

www.crdf.org

CRDF is a non-profit organization authorized by the U.S. Congress and established in 1995 by the National Science Foundation. This unique public-private partnership promotes international scientific and technical collaboration, primarily between the United States and Eurasia, through grants, technical resources, and training. It is based in Arlington, Virginia, with offices in Moscow and St. Petersburg, Russia, and Kiev, Ukraine.

Funders:

U. S. Department of State
U. S. National Science Foundation
U. S. National Institutes of Health
U. S. Department of Defense
The John D. and Catherine T. MacArthur Foundation
Carnegie Corporation of New York
Bechtel National, Inc.
The Soros Foundation - Open Society Institute
The Spencer Foundation
The Bill and Melinda Gates Foundation
Blue Moon Fund (formerly The W. Alton Jones Foundation)
U.S. Agency for International Development (USAID)

Consortium for the Barcode of Life

www.barcoding.si.edu

The Consortium for the Barcode of Life (CBOL) is an international initiative devoted to developing DNA bar-coding as a global standard in taxonomy. CBOL has more than 100 Member Organizations from 40 countries

CBOL is hosted by and housed in the Smithsonian Institution's National Museum of Natural History in Washington, DC. The Smithsonian Institution has obtained funding for the CBOL Secretariat Office from the Alfred P. Sloan Foundation for the period of April 2004 to October 2007. The Smithsonian will have responsibility for fulfilling the goals and meeting the requirements of this grant.

International Council for Science (ICSU)

www.icsu.org

ICSU is a non-governmental organization representing a global membership that includes both national scientific bodies and international scientific unions. ICSU provides a forum for discussion of issues relevant to policy for international science and the importance of international science for policy issues.

The budget for ICSU's "central/core" functions is approximately 3 million € per year, although this represents only a small fraction of the total financial investment in ICSU programs and other activities. ICSU's principal source of "central/core" income is member subscriptions.

The other major sources of income are grants from other organizations and Foundations (*e.g.*, US National Academy of Sciences, US National Science Foundation, France & China for ICSU GA, Packard Foundation), including a subvention from UNESCO. As well as supporting the Secretariat and the various Policy and Advisory Committees, a significant proportion of this income is returned to members via the competitive grants scheme.

Center for International Earth Science Information Network (CIESIN)

www.ciesen.org

CIESIN is a center within the Earth Institute at Columbia University. CIESIN works at the intersection of the social, natural, and information sciences, and specializes in on-line data and information management, spatial data integration and training, and interdisciplinary research related to human interactions in the environment.

CIESIN receives funding through grants, contracts and collaborations, international organizations, foundations, centers, and departments within Columbia University.

Ideas for the Future

Google.org.

www.google.org

Google has a philanthropic arm now called Google.org. The two areas of giving are climate change/energy and poverty. However, as Google's emphasis is on saving the world via access to information, Google.org might be a good source of funding for ILTER's cyberinfrastructure (CI) development.

Private sector

Companies in various countries may be interested in supplying products, services or funding. For example, Microsoft helps fund the GBIF.

Endowment fund and/or conservation investments

These are major and challenging efforts, but something ILTER may want to pursue in some years when it's organizational, funding and science basics are more solidly in place.

III. UNLIKELY PROSPECTS AT PRESENT

The following is a list of organizations researched in 2005 or 2006 that are not likely prospects for ILTER funding in the near future:

Blue Moon Fund (formerly W. Alton Jones Foundation – US)

Supports cultural and economic approaches to resource and energy use.

Center for Environmental Research & Conservation (at Columbia University)

www.cerc.com

Conservation International, CI's Global Conservation Fund, & Verde Ventures

www.conservation.org

Patrick says not a good source. Keep in mind in case appropriate in the future.

Foundation for Eastern Carpathian Biodiversity Foundation

A Swiss foundation.

Wallace Global Foundation

www.wgf.org

Not a good source of funding for ILTER, but the director, Melissa Dann, knows a lot of people in the funding community. If anyone at ILTER knows her and is able to get any of her time, she is likely to be a helpful resource.

APPENDIX B:
GUIDELINES FOR
COLLECTING FUNDING SOURCE INFORMATION
June 5, 2006

These are the guidelines that ILTER Development Task Force members used to research and document information on prospective funders:

- **ILTER is seeking funding for *international/Secretariat* level activities, not research funding required at the member network level. ILTER requires funding for:**
 - 1) Transforming the association into a formal organization, including probable establishment of a legal entity and office
 - 2) Establishing paid staff positions including an Executive Director, Administrative Coordinator, Development Director and an Information Coordinator
 - 3) ILTER-wide priority infrastructural and scientific projects such as developing a consistent cyberinfrastructure to ensure preservation of, access to, and comparability of data. Once ILTER has identified its organization-wide scientific priorities and possible common data collection and/or research areas, the Fundraising Committee can seek funding

- **The information that DTF members collect about potential funding sources should include all of the following:**
 - 1) Name of the organization
 - 2) Prospect level (High, Medium, Low)
 - 3) Type of organization they give to
 - 4) Website address
 - 5) Due dates (include inquiries and applications)
 - 6) What they fund/Why a match for ILTER
 - 7) Funding Levels (The range of grants they give, in US dollars. Include the anticipated level ILTER could get)
 - 8) Contact person, address, phone, email
 - 9) Who at ILTER knows contact person
 - 10) Who at ILTER will contact them
 - 11) Application process
 - 12) Other relevant notes

- **Please prepare a separate sheet for each type of source: national science agency; other government agencies; private foundations.** If you are familiar

with any multilateral or international agencies or private businesses that may be good prospects, please also include separate sheets for each category.

- **Until ILTER has determined and established its legal status and location, the Executive Committee in April 2006 decided that Brown University would remain the temporary fiscal agent for ILTER.** This means that funders can give funds through Brown. However, if preferable, they can also give to ITLER through other institutions after discussion with the Executive Committee. **Brown (Steve Hamburg) has to be notified of any intention to submit a funding application through the university.**

APPENDIX C:
CONTRIBUTIONS TO ILTER ACTIVITIES
CASH & IN-KIND
2004-2006⁷

Activities	Date Place	Funding Agency ¹	Funds ²	Remarks
I. Administrative Meetings		Subtotal: US\$56,614		
2004				
2004 ILTER Executive Committee Meeting	Apr/01-05 Taipei	NSC TFRI	\$15,713	NSF defrayed the expenses of 3 US scientists. And NSC & TFRI paid for all other participants to draft the <i>Bylaws</i>
2004 ILTER Annual Meeting & Executive Committee Meeting	Jun/28-Jul/09 Manaus, Brazil	MOFA NSC	\$17,073	The TERN delegation consisted of 5 members from TERN (M Gutelman, HB King, KC Lin, FW Horng, YJ Hsia)
2004 EAP Regional Annual Meeting	Sep/05-13 Beijing China	NSC NSF	\$2,374	NSF covered the expenses of 2 US scientists for attending the meeting: (P. Bourgeon and John Vande Castle)
Fundraising: Meeting	Dec/06-13 NSF USA	NSC MOFA	\$6,892	A meeting in NSF for Fundraising. NSC & MOFA covered 4 participants' expenses
2005				
Fundraising: Proposal Drafting	Feb/17-27 Taipei, Taiwan	MOFA	\$3,928	Michel Gutelman traveled to Taiwan for this occasion.
2005 ILTER Annual Meeting & Coordinating Committee Meeting	Oct/25-Nov/05 Colima, Mexico	MOFA	\$6,923	MOFA defrayed the expenses of 5 participants including representatives from France (Michel Gutelman) & Slovakia (Julius Oslanyi) to the meeting

⁷ The future Thailand LTER member has offered to host an IM workshop in 2007 which is also tallied here.

Activities	Date Place	Funding Agency ¹	Funds ²	Remarks
All Hands Meeting	Jun/10-20 Santa Fe, NM USA	NSC	\$2,714	HB King participated in the meeting
2006				
2006 EAP Regional Annual Meeting	Mar/20-23 Kyoto	COA	\$997	NSF defrayed the expenses of 4 attendants (Patrick Bourgeon, Steve Hamburg, Holly Kaufman, and Kristin Vanderbilt)
2006 ILTER Annual Meeting	Aug/15-20 Gobabeb Namibia	NSC	NA	The Annual meeting will be hosted by Namibia LTER Network
2006 All Scientists Meeting, US-LTER Network	Sep/20-23 Colorado, A	NSC	NA	The ASM is hosted by the US-LTER network
2007				
2007 ILTER Annual Meeting	Sep Beijing	NA	NA	The Annual meeting will be hosted by CERN
II. Science Workshops Subtotal: US\$19,269				
2004				
Forest Diversity and resistance to native and exotic pest insects & Fire Ant Science Workshop	Aug/08-25 NZ, AU	MOFA	\$1,090	JT Chao (from TERN) attended the meeting
Forest Dynamics Training Workshop	Aug/16-17 Fu-Shan, Taiwan	NSC NSF	\$18,179	CTFS supported US\$ 98,744 for the workshop,
III. Information Management Training programs Subtotal: US\$41,734				
2004				
IM Training Program I Setting Up National Long Term Ecological Monitoring System by Using Grid Computing	Jan/31-Feb/20 CAP, KBS, NTL, VCR USA	COA	\$16,364	3 TERN data managers visited John Porter at VCR and the data managers of 3 other US-LTER sites
IM Training Program II Eco-informatics Study for Promoting and Establishing Network Information System in Taiwan	2004 Sep/27-Dec/31 NTL USA	NSC	\$6,539	A 3-month IM training program specifically designed for Dr. SS Lu from TERN
2005				

Activities	Date Place	Funding Agency ¹	Funds ²	Remarks
IM Training Program III Training Program: Eco-informatics study for the promoting and establishing of Network Information System in Taiwan	Feb/17- May/26 VCR USA	NSC	\$8,741	A 3-month training program provided by VCR specifically for MR Jeng from Taiwan. Local expenses, in part, were covered by the VCR site
IM Training Program IV Study of the setting Up and Extension of Information Management system	Mar/06~18 San Diego, VCR USA	NSC	\$2,933	Dr. CC Lin attended the IM meeting hosted by US-LTER Network
2006				
IM Training Program V Study on Building of Ecological Information System and Monitor Technology	Mar/10-Jun/09 VCR, Univ. of Virginia U.S.A.	NSC	\$1,975	A 3-month IM training program provided specifically for JW Chen by VCR thru NSF funds.
IM Training Program VI Study on the Building of Ecological Information System and Monitor Technology	Jun 20-Sep 10 VCR USA	COA NSC	\$3,207	VCR will provide a 3-month IM training program for MR Jeng. VCR will cover her local expenses thru NSF funds.
IM Training Program VII Study on the Building of Ecological Information System and Monitor Technology	Sep 25-Dec 30 VCR USA	NSC	\$1,975	VCR will provide a 3-month IM training program for CW Hsiao thru NSF funds.
IV. Information Management Workshops			Subtotal: US\$15,730	
2005				
IM Training Workshop I: Ecological Meta Language Workshop	Jun/06-17 Taipei Taiwan	TFRI	\$1,172	A training workshop conducted by Dr. John Porter from the VCR LTER site
IM Training Workshop II International EML Workshop	Jul/19-24 Beijing, China	NSC	\$3,382	CC Lin, SS Lu, and MR Jeng attended the workshop
2006				
IM Training Workshop III: A Workshop on Capacity Building in Ecological Information Management Workshop, 2006 International Workshop on Ecological Information Management	Feb/13-25 Taipei Taiwan	NSC TFRI	\$11,176	NSFC & COA financed the IM workshop for EAP scientists. Lecturers included John Porter Don Henshaw, and

Activities	Date Place	Funding Agency ¹	Funds ²	Remarks
				Peter McCartney
IM Training Workshop IV: Workshop on Capacity Building in Ecological Information Management	Aug/20-26 Beijing China	CERN	NA	TERN Information Management Team specifically designs an IM training workshop for CERN scientists.
IM Training Workshop V	Oct Seoul Korea	KOSEF KFRI	NA	TERN Information Management Team specifically designs an IM training workshop for CERN scientists.
2007				
IM Training Workshop VI	Spring Bangkok Thailand	NA	NA	To be announced
V. Junior Scientists Training Program			Subtotal: US\$7,285	
2004				
Junior Scientists Study Program I Uncertainty and Variability in Ecological Inference, Forecasting, and Decision Making: An Introduction to Modern Statistical Computation	Jun/03-19 Duke Univ. U.S.A.	NSC	\$1,129	YC Lin to Duke Univ. for 2 weeks. The Univ. covered her local expenses in the USA
Junior Student Study Program II Studying Integration of Automated wireless transmission on Ecological Observatory System	Oct/28-Nov/11 NTL, USA	NSC	\$3,433	A wireless sensors training program specifically arranged for Alan Lai from TERN
2005				
Junior Scientists Study Program III Restoration Assessments of Formosan Land-locked Salmon Habitats: A Watershed Analysis Approach	May/21-Aug/21 OSU, USA	NSC	\$2,723	A 3-month training program provided by AND LTER site. OSU covered Dr. YS Lin's local expenses.
VI. LTER in Agricultural Ecosystems and Forest Plantations			Subtotal: US\$23,531	
2004				
LTER in Agricultural Ecosystems I Visit to KBS Agricultural LTER (ALTER) Station	Oct/03-12 KBS, USA	NSC	\$11,642	7 scientists from TERN visited KBS Site & attended workshop
2005				
Promoting LTER in Plantation Ecosystems: Biodiversity Conservation Biology in	Apr/25- May/03 Bordeaux	NSC	\$8,395	A delegation to France to study LTER in forest plantation, a

Activities	Date Place	Funding Agency ¹	Funds ²	Remarks
Plantation Forests	France			potential LTER program
2006				
LTER in Agricultural Ecosystems III: The KBS Advisory team visited Agricultural LTER Sites of Taiwan	Mar/08-15 Taichung Taiwan	NSC	\$3,494	P. Roberson, S Gage, D. Harwood, and A. Corbin visited Agricultural LTER Site and attended workshop
Grand Total		US\$ 164,163		

¹ Acronyms:

AND: H.J. Andrews LTER site
 AU: Australia
 CAP: Central Arizona Phoenix LTER Site
 CERN: Chinese Ecosystem Research network
 COA: Council of Agriculture, Taiwan
 CTFS: Center for Tropical Forest Science, Smithsonian Institution, U.S.A.
 DU: Duke University
 KOSEF: Korea Science & Engineering Foundation
 KFRI: Korea Forest research Institute
 KBS: Kellogg Biological Station
 MOFA: Ministry of Foreign Affairs (NOG Council)
 NA: Not available
 NSC: National Science Council, Taiwan
 NSF: National Science Foundation, U.S.A.
 NTL: Northern Temperate Lakes
 NZ: New Zealand
 OSU: Oregon State University, Poland, Oregon
 TBA: To be announced
 TERN: Taiwan Ecological Research Network
 VCR: Virginia Coast Reserve LTER site

² Only funds provided by Taiwanese agencies are listed.

Major Activities

- I. **Administrative Meetings**
- II. **Science Workshops**
- III. **Information Management Training programs**
- IV. **Information Management Workshops**
- V. **Junior Scientists Training Program**
- VI. **LTER in Agricultural Ecosystems and Forest Plantations**

- 1) **IM Training Program I-VII: The importance and values having a information management systems that are compatible among ecologists are without addressed here. Rather a plan of promoting information.** A series of IM training programs have been carried out, with collaborations with US-LTER Data Managers (Peter Artzburger, Barbara Benson, Peter McCartney, Don Henshaw, John Porter, Kristin Vanderbilt).
- 2) **IM Training Workshops I-III**
- 3) **Junior Scientists Study Program I-III**
- 4) **Science Advancement Program (including Emerging Technology Adoption)**
- 5) **Strategic Planning (including Legal Entity, Fundraising)**
- 6) **Administrative Meetings**

APPENDIX D:

PROPOSED ILTER FUNDRAISING STRATEGY WITH NSF March 6, 2006

EES suggested the following strategy and timeline to the co-chairs of the US-LTER International Committee:

I. BACKGROUND

The two primary sources of funding that will be available to ILTER between now and August 2006 are ILTER members, including any funding they may bring from other sources, and the NSF. At the start of the strategic planning contract it was hoped that other new sources could pledge and/or contribute in that timeframe. However, though numerous other potential sources have been and will continue to be identified, a number of obstacles are likely to prevent the actual donation of new funds by August.

The central issue is the lack of an ILTER legal entity or physical location. All other obstacles stem from that one. Though it is possible that a number of funders, at least in the US, would be able to donate via the existing Brown University fiscal conduit, the challenge remains of estimating an ILTER operating budget without the basic information of where the organization will be located, including whether it will be an independent or co-housed.

The strategic planning consultants, with the help of the Development Task Force, will still forge ahead with researching potential funders and applying for funds as appropriate. However, strategically, it makes sense to **focus on the most likely sources of funding for the short-term while the longer-term, organizational building block work is taking place** simultaneously. Therefore, **the immediate fundraising focus will be on NSF and ILTER itself.** This document outlines the strategy for pursuing additional multi-year funding from the NSF.

II. NSF STRATEGY

One of the **key objectives of the strategic planning process is to establish ILTER as an organization that can attract long-term and significant funding from a diversity of sources** around the world. For the first twelve years of its existence, ILTER has been dependent on the NSF, which has essentially been its sole provider. **NSF no longer wants to provide exclusive or the greatest proportion of funding**, and therefore it wisely gave ILTER a small planning grant to figure out how to survive without NSF as its lifeblood.

However, the planning grant and the timeframe it covered are insufficient for ILTER to contend with the challenges of having been established as an NSF project that never had to look for funds. **ILTER does not yet have the organizational culture, human resources or physical infrastructure to exist as an independent entity.** Indeed, determining what kind of legal entity and the location for is one of the most critical items that need to be included in the planning process.

However, with the twelve-year **investment that NSF has made in ILTER**, in addition to its longer history nurturing and funding the US-LTER program, NSF values ILTER greatly and wants it to survive. Therefore, approaching NSF with a strategy of how to reduce its funding to ILTER over time at a pace that matches ILTER's new organizational development should be an attractive proposition.

ILTER should present to NSF the idea of phased, multi-year, declining funding, with matches from ILTER members and/or other sources, and a guaranteed minimum annual level to coincide with the nature of ILTER's "long-term" needs, as well as need for annual travel and researcher-exchange funds.

ILTER may also be able to make the case that supporting ILTER is another way that the Bush administration can take credit for supporting *global change* research and institutions, as well as helping to advance scientific discovery to aid US competitiveness in the global marketplace.

III. ACTION PLAN

Per discussion on February 27, 2006, among the Co-Chairs of the International Committee of the US-LTER (Steve Hamburg and Patrick Bourgeron) and the strategic planning consultants (Environment & Enterprise Strategies, aka Holly Kaufman and Miranda Anderson), ILTER will pursue the following steps to approach NSF, identify potential sources of funding at the agency, and solicit funds:

- Steve Hamburg to speak with and submit progress report on strategic planning to NSF's Francis Li, head of NSF's international program, with copies to other relevant staff, including Henry Gholz, head of the LTER program in the Directorate of Environmental Biology.

DUE DATE: FRIDAY MARCH 3

- Steve Hamburg to check with Johan Pauw to make sure that his report on the October 2005 ELTOSA regional meeting is submitted to Libby Lyons, head of the Africa program, Francis Li, and other NSF staff as appropriate. Libby wants to know:
 - 1) What is happening in Mozambique? Zambia? Zimbabwe?
 - 2) Did USDA Food for Progress funding make it to Mozambique for LTER?

3) Did Botswana make its field station in Okavango an LTER site?)

DUE DATE: FRIDAY MARCH 3

- Determine approximate funding level target and timeframe ILTER would like to request from NSF, based on strategic and operational plans

DUE DATE: APPROX MARCH 27

- After Steve receives acknowledgment that NSF has received his progress report, he will contact Francis Li and other staff as appropriate to:
 - *Discuss phased, multi-year funding concept*
 - Inquire about the various “pots” of funds potentially available and levels, including non-competitive (best), competitive, supplemental and fiscal-year end sources
 - Identify all relevant NSF contact people, including Bill Chang’s replacement, Rose Gambay (spelling?), etc.
 - Determine the best means for contacting each of them
 - Arrange meeting in Washington, DC

DUE DATE: MARCH 27

- Contact each of the NSF contacts and confirm or find out:
 - What the potential sources of funding are, at what level, for what kinds of activities, and for what period of time (single or multi-year funding)
 - What the funding cycles and application deadlines are
 - What if anything needs to be submitted in order to apply for funds, e.g. query letter, concept paper, funding proposals

DUE DATE: APRIL 3-7

- Submit documents and/or arrange meetings in Washington, DC as appropriate to garner funds (arrange for same trip as meeting with Francis. Allow at least one month lead time for scheduling.)

DUE DATE: APRIL 7 onwards

- Other
 - Share info with NSF, e.g., give NSF final draft or final strategic plan, organizational plan and funding plans and or list of potential funding sources

DUE DATE: AS APPROPRIATE

- Arrange to have NSF video at Namibia AGM

DUE DATE: Begin discussions April or May

- Travel Funds and End-of-Year Money
 - Be sure to contact NSF in July/August re end of fiscal year funds

DUE DATE: JULY/AUGUST 2006

APPENDIX E:

THE INTERNATIONAL LONG-TERM ECOLOGICAL RESEARCH NETWORK

PROPOSAL TO THE NATIONAL SCIENCE FOUNDATION LEGAL ENTITY OPTIONS FOR ILTER

June 12, 2006

BACKGROUND

The International Long-Term Ecological Research Network (ILTER) is an international umbrella organization for national-level networks of scientists who do site-based research. ILTER provides a forum for scientists to share data, compare findings, collaborate on national, regional and international projects, and deliver sound, scientific information to decision-makers and the public.

ILTER was founded in 1993 with the support of the National Science Foundation (NSF) based on the success of the LTER model in the United States. ILTER was also founded to respond to the growing need for communication and collaboration among long-term ecological researchers around the world.

ILTER now has nearly forty national-level members in the Asia/Pacific, Central and Eastern Europe, Western Europe, Southern Africa, South and Central America and North America regions. Four new networks are applying for membership in 2006 alone (Japan, Italy, Malawi and Thailand). Thousands of scientists working in nearly seventy disciplines conduct long-term ecological and socio-economic research at hundreds of research sites.

Key findings of ILTER's current strategic planning process include:

- ▶ **ILTER is unique.**
It is the only organization that has the following combination of attributes: 1) has a network of research sites in a wide array of ecosystems that can help understand environmental change across the globe; 2) focuses on long-term, site-based research; and 3) operates on a "bottom-up" rather than "top-down" approach.
- ▶ **ILTER fills an unmet niche in the scientific community.**
A need exists for continuous, long-term ecological data, and ILTER is in a unique position to fill this need by virtue of its ongoing monitoring at sites around the

world. Needs also exist for data to help answer pressing ecological questions, and ILTER can also supply data for question and problem-driven research. As members stated at the 2005 ILTER annual meeting, “If ILTER did not exist, someone would have to create it.”

NSF has historically been the primary ILTER supporter, though member and candidate-member networks have contributed to regional and international ILTER research and capacity building activities, including supporting regional offices. From January 2005 through April 2006 alone, ILTER members contributed over \$180,000 (in kind and cash) for international activities.

After over a decade of nearly sole financial support from the NSF, ILTER is transitioning from a volunteer association of networks to becoming a formal and more truly international organization that will have a small staff and diversified, sustainable funding sources to correspond with the long-term nature of ILTER’s work. ILTER has no fundraising function at present.

One of the most fundamental needs for realizing this transition is the formation of a legal entity and location. Until now, a U.S. university connected with one or more LTER sites (University of New Mexico followed by Brown University) has served as the recipient of the NSF grants to ILTER, and has housed part-time staff who have coordinated ILTER activities. ILTER needs to establish an office with secretariat functions that is able to seek and receive funds from foundations and agencies around the world.

Therefore, Brown University is submitting, on behalf of ILTER, this supplemental funding request to carry out the research necessary to identify the best three options for the legal and physical establishment of the organization’s Secretariat.

SCOPE OF WORK

The consultants already under contract to Brown University to carry out the ILTER strategic planning effort, Environment & Enterprise Strategies (EES), will research the options for establishing ILTER’s legal entity and geographical location and identify the best alternatives. This will include:

- Researching possible options
 - Including interviews with up to 5 ILTER member representatives, e.g. the Executive Committee Chair and Planning Task Force members in different ILTER regions; interviews with up to 5 external contacts familiar with establishment of international organization headquarters
- Discussing possible host arrangements with international institutions

- Including interviews with up to 5 potential candidates, including possibilities such as ICSU, GEOSS, universities outside the U.S., UN agencies, NSF contacts, and non-profit organizations
- Identifying selection criteria
- Determining the pros and cons of the options based on the selection criteria
- Consulting with an attorney expert in founding international organizations
- Narrowing the options to approximately three alternatives – possibly including short and long-term solutions
- Recommending to the Coordinating Committee the preferred alternative, which may include both an interim and long-term solution

The scoping work will take place in an expedited fashion primarily between June 15 and July 31, 2006, in order to try to identify the preferred alternative by the 2006 ILTER annual meeting in August (in Namibia).

TEAM

EES will carry out this project, with input from ILTER to the extent feasible.

Holly Kaufman, EES President, will manage the project. She has managed the ILTER strategic planning process since summer 2005. She and her firm's familiarity with the organization enables her and her colleagues to embark on this research immediately with no learning curve.

Ms. Kaufman has designed and managed complex projects for Proctor & Gamble, Conoco, Inc., and the White House Council on Environmental Quality, where she developed the President Clinton's twenty-fifth anniversary report to Congress on environmental trends. She also served as a Presidential appointee representing the Departments of State and Defense at United Nations' climate change treaty negotiations. She managed the climate change and national security portfolio for the Office of the Secretary of Defense, and served as the Department's liaison to the President's Council on Sustainable Development.

Ms. Kaufman previously managed the environmental planning and community outreach for multi-million dollar commercial projects at the Port of Oakland and the fourth largest waste management company in the U.S. She taught ecological land management and sustainable agriculture at the University of California at Berkeley and the California Academy of Sciences. She has led community development projects or conducted research in Asia, Africa, Latin America and the Caribbean.

Ms. Kaufman was awarded a Leadership Fellowship at Harvard for her Master's studies in international environmental policy. She also holds a Bachelor of Science in

Conservation of Natural Resources, with Highest Honors, from the University of California at Berkeley. She speaks fluent French and conversational Spanish.

Miranda Anderson has been primarily responsible for drafting the ILTER strategic and operational plans. She will be responsible for day-to-day management of this project, provide guidance and contacts, and plan for and participate in the presentation of findings and decision-making process with the ILTER Coordinating Committee in Namibia.

Ms. Anderson specializes in strategic and operational non-profit management, corporate responsibility, and organizational development. Her career has spanned both the non- and for-profit sectors, holding management positions in such industries as energy and environmental development in emerging markets, international development, and wireless telecommunications. In addition to her work with EES, she serves as COO at David Gardiner & Associates, a consulting firm that partners frequently with EES. Previously, she served as Director of Operations for Environment2004 and the Solar Electric Light Fund (SELF).

Ms. Anderson graduated magna cum laude with a B.S. in Psychology from Colorado State University, and earned a M.B.A. from George Washington University, specializing in Environmental Management and Policy, with particular research on multi-sector partnerships, market-based environmental solutions, and organizational policy at the business, NGO, and government levels.

David Grossman will execute the research on the legal entity project. He has spent the past decade working in environmental development, law, organizing, politics, media, and policy. Mr. Grossman was a Staff Attorney with the Institute for Governance & Sustainable Development, managing projects for the International Network for Environmental Compliance and Enforcement (INECE). Prior to that, he worked on the 2004 presidential campaign cycle, including on Howard Dean's precedent-setting campaign and with Environment2004 conducting research and doing media outreach. He also served as a law clerk for the Chief Justice of the Alaska Supreme Court, did environmental law with Earthjustice and the Alaska Attorney General's Office, and was a grassroots organizer on endangered species issues with the National Audubon Society.

Mr. Grossman legal writings have been published in the Columbia Journal of Environmental Law and the 7th INECE Conference Proceedings. He currently serves on the board of the National Association of Environmental Law Societies (NAELS).

He graduated summa cum laude from Princeton University with a degree in Politics and received his law degree from Yale Law School.

BUDGET

Research, pre-Namibia (80 hours DG, 20 hours HK, 15 hours MA)	\$11,875
Facilitation of Discussion and Decisions in Namibia (MA)	\$4,000
Overhead to Brown U. (26%)	\$4,128
TOTAL	\$20,003