

## **The Sustainable Development Communications Network, 1996-2001: An Evaluation**

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# The Sustainable Development Communications Network, 1996-2001: An Evaluation

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## Introduction

From 1996 to 2001, IDRC provided 2 major grants and supplemental funding to the International Institute for Sustainable Development, to support the first and second phases of the project “Spinning the Web” (STW), which evolved into the Sustainable Development Communications Network (SDCN). In the second phase, IDRC requested that IISD undertake an in-house evaluation (self assessment) of the project.

The self assessment approach to evaluation is an internally guided and controlled process, using an agreed performance framework, questions and a facilitated process. We developed a performance framework from a combination of the following:

Methodology	
Modified outcome mapping	<p>We customized a planning framework to capture the vision, objectives, partners, related stakeholders, desired activities and outcomes as reflected in the original project proposals, governance agreement, and reports of partner meetings.</p> <p>We customized an evaluation framework to capture the actual outputs and outcomes of the project.</p>
Logical Framework Analysis	<p>An LFA was prepared as part of developing the STW Phase 2 proposal to CIDA. Selected indicators of success identified at the time have been included in the modified outcome mapping frameworks<sup>1</sup>.</p>
Appreciative Inquiry	<p>Stories are a key element in demonstrating outcomes. We used an Appreciative Inquiry approach in designing questions for e-consultations and interviews with members, to elicit their stories.</p> <p>AI questions:</p> <ul style="list-style-type: none"> <li>a) Describe the best 2 (3 at the most) experiences you had with the SDCN: when did you feel most excited about the network; when did you feel you accomplished something valuable as a result of being part of the network?</li> <li>b) What did you value the most about the SDCN? What do you think you learned or gained from being part of the SDCN?</li> <li>c) What do you feel you contributed to the rest of the network?</li> </ul> <p>We also drew stories from meeting reports and reports of interns placed with members and others involved in the project.</p>

<sup>1</sup> The original LFA was prepared to accompany a multi-million dollar, 3 year proposal to CIDA. A two-year, \$300,000 grant was awarded; consequently not all of the goals, outcomes and outputs in the LFA were retained in the revised proposal.

While this was a consultative process, it was not a collaborative process. The evaluation of outcomes, conclusions and recommendations are those of IISD, based on consultations with members, related correspondence and five years of network documentation. The evaluation report has been made available to members on the network extranet. The conclusions and recommendations have been circulated to members and will form the basis for the next virtual meeting of the members, in April 2002.

### Sources of information

1. Open e-consultation with founding members, using the Appreciative Inquiry approach
2. One on one interviews with selected members
3. Documentation, as follows [Documents marked with an \* are attached in Network Document Appendices]:
  - a. Core project proposals, phase 1 and 2 (IDRC and CIDA)\*
  - b. Supplementary project proposals, phase 1 and 2
    - i. DFAIT, CIDA, HRDC internship proposals, 1997-2002
    - ii. Global Knowledge Partnership (GKP) youth consultations (for GKP Action Plan and G8 digital divide consultations)
    - iii. CIDA -- Sustainable Development Web Communications Initiative
  - c. Vision statements for STW from members, Phase 1 \*
  - d. Logical Framework Analysis from original CIDA Phase 2 proposal \*
  - e. Minutes from members meetings
  - f. SDCN current governance agreement \*
  - g. Final report to IDRC, phase 1 \*
  - h. Draft final reports to IDRC, CIDA phase 2 (to be forwarded to the respective funders separately)
  - i. Selected intern and host organization reports
    - i. Development Alternatives (DA)
    - ii. Environnement et développement du tiers-monde (ENDA)
    - iii. Fundacion Ambiente y Recursos Naturales (FARN)
    - iv. Regional Environment Centre for Central and Eastern Europe (REC)
    - v. Earth Council (EC)
    - vi. Stockholm Environment Institute (SEI)
    - vii. International Institute for Sustainable Development (IISD)
    - viii. Global Knowledge Partnership (GKP)
  - j. Tomorrow magazine's review of the SD Gateway (April 2001)\*
  - k. Selected email correspondence, 1996-2001
4. Working papers [attached in Working Paper Appendices]
  - a. Tools for assessing web site usage
  - b. Measuring while you manage: planning and evaluating knowledge networks

The evaluation process was led by Heather Creech. Ms. Creech was trained in Outcome mapping by the IDRC Evaluation Unit in February 2001, in preparation for this evaluation. Terri Willard, Network Coordinator, provided the documentation and validated the metrics of outputs.

## Background to Spinning the Web

Spinning the Web (STW) began as a partnership project with seven leading sustainable development organizations: five based in developing and transitional countries and two based in the north. STW was an experiment on how we might use technology to get more information from the south onto the net. Efforts in the first two to three years were focused on working together to better understand how to use the web medium, including building the capacity of all members to expand their websites to communicate the knowledge of their respective institutions. Interns played an important role in facilitating this process. The SD Gateway was created to integrate the partner knowledge bases, and to provide a central navigation point, in English, French and Spanish, to sustainable development knowledge, in particular knowledge coming from the south.

### **Members**

As the relationships with the founding partners matured, the project evolved into the Sustainable Development Communications Network (SDCN). During the second two year phase, it was decided that the membership should be expanded in order to increase representation from other regions of the world. New partners with complementary technical and substantive expertise were also needed to enrich the activities of the network. At the same time, the network wanted to ensure that new members understood that this was a working network, not just an information exchange network. The following accommodations were made. Three categories of network membership were created for organizations depending on the length and intensity of their working relationships with other network members:

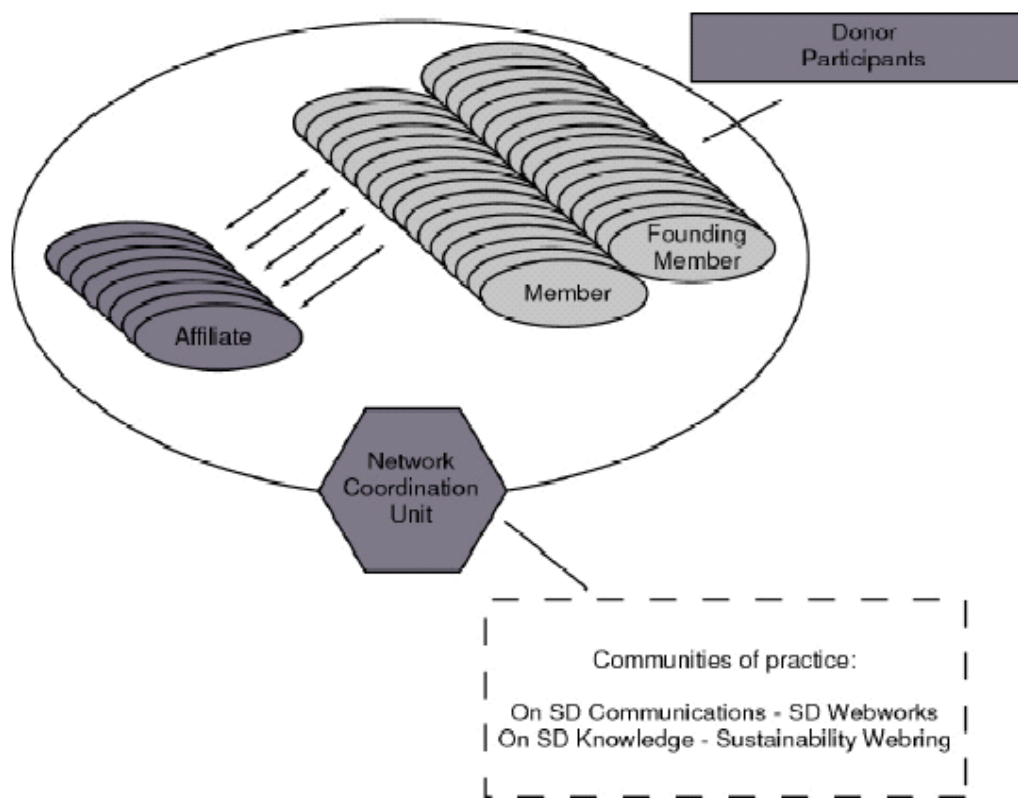
- Founding members: the seven organizations that have been involved in the network since 1996; oversee network vision and objectives
  - Development Alternatives (DA)
  - Environnement et développement du tiers-monde (ENDA)
  - Fundacion Ambiente y Recursos Naturales (FARN)
  - Regional Environment Centre for Central and Eastern Europe (REC)
  - Earth Council (EC)
  - Stockholm Environment Institute (SEI)
  - International Institute for Sustainable Development (IISD)
- Members: civil society organizations that have been active in two or more network projects over the past two years.
  - Population and Community Development Association, Thailand (PDA)
  - Institute for Sustainable Development, Poland (ISD-Poland)
  - Fundacion Futuro Latinoamericano, Ecuador (FFLA)
  - EcoNews Africa, Kenya
- Affiliate members: Affiliate members include other organizations that are approached by an SDCN member to participate in a single network project, or that approach the SDCN with a project idea of interest to at least one founding member. These members retain their affiliation with the network only for the duration of the project.

- Foundation for Media Alternatives (FMA), Philippines
- Fundación Acceso, Costa Rica
- MekongInfo, Vietnam

The Sustainability Webring and SD Webworks provide the means for connection and interaction with organizations outside of the core membership. The Webring is an Internet tool that allows users to navigate easily between organizational Web sites that deal with the principles, policies, and best practices for sustainable development. At the present time, 181 organizations have joined the Webring. The SD Webworks provides an online discussion forum on best practices in web communications for sustainable development, together with training materials and case studies. 330 individuals participate in the SD Webworks.

Donors are also considered to be members of the SDCN, and are encouraged to learn from SDCN experiences.

SDCN relationships diagram, phase 2



## Network Activities

In addition to general information sharing and support activities, the SDCN undertakes two types of activities focused on external audiences: substantive projects and capacity-building projects.



## **1. Substantive activities**

Substantive activities focus on specific sustainable development issues. These projects aim to inform sustainable development decision-makers within governments, industries and communities about alternative policies and practices that have been developed around the world. They involve collaborative research and communications by two or more network members. Examples include online modules on water management, sustainable livelihoods, and sustainable cities.

## **2. Capacity-building activities**

Capacity-building activities allow network members to share with other sustainable development organizations what they have learned about communications through their participation in substantive projects. Capacity building can involve workshops, distributed learning, peer mentoring and consulting arrangements. Examples include the SD Webworks online community and presentations at Global Knowledge Partnership events.

## ***Network financial resources, management and monitoring***

In addition to the support from IDRC, IISD provided financial contributions to both phase 1 and phase 2 activities. In phase 2, a major grant was secured from CIDA, with a second grant provided for specific training work. The World Bank Institute also supported a number of activities which came under the umbrella of the SDCN, via the Global Development Network (for training), and the Global Knowledge Partnership (for travel of southern members to GKP meetings; and for IISD's work on including youth in ICT policy and planning). Interns provided to SDCN members were funded through Canada's Youth Employment Strategy, with grants from DFAIT, CIDA and HRDC. All network members provided additional financial support directly to their interns. The Earth Council and ENDA provided support for hosting network meetings in Costa Rica and Senegal. The Regional Environment Center sourced additional grant funding for its SDCN project on cities; SEI funding for Hanover 2000 was used to engage SDCN input to its Global Dialogue 1.

A Governance Agreement, signed by all members, provides the vision, objectives, roles and responsibilities, and the decision making mechanisms for the Network. An annual face to face meeting of the members is preferred. Five of these have taken place since 1996. Several virtual meetings and consultations have been held in lieu of a face to face meeting. Members that receive funding for projects from grants administered by IISD, must sign contracts and provide deliverables and financial reporting to IISD. Members that host interns to work on SDCN related projects must sign a three party contract with IISD, themselves and the intern. Both interns and host organizations are required to submit substantive and financial reports at the conclusion of the internships. A Network Coordination Unit (NCU), housed at IISD, performs the secretariat functions for the network, including monitoring of network activities.

## Monitoring stages

Phase 1, 1996-1998	Interim evaluation mission (primarily dealing with assessing web traffic on member sites) Network meetings Intern reports Final reports to funders, Phase 1
Phase 2 1998-2001	Network meetings Intern reports Final reports to funders, Phase 2

An extranet has been in operation for several years. It holds the archive of all the core network documentation and the closed listserv for member communications.

## Foundation research for the SDCN Evaluation

Throughout both phases of Spinning the Web, we were aware of the scarcity of information on how to evaluate networks (as opposed to individual projects or organizations) and in particular, how to evaluate the electronic communications component of this particular network.

We therefore undertook two additional pieces of research related to evaluation:

### **1. Web site use**

We needed to develop some simple tools and guidelines for evaluating website usage. A detailed assessment of the SD Gateway was carried out and published in 2000, using guidelines we published in the working paper “Tools for assessing web site usage”, by Anderson et al.

For this evaluation, we have chosen the following indicators to assess the web communications products that were among the principal deliverables of the SDCN:

- page requests (as a rough equivalent to amount of information used);
- key words used in search engines that led to the site (as a rough indication of information needs of users)
- PDF file downloads and subscriptions to mail lists with web archives (as an indication of interest in specific content).
- User assessment

We also added ranking in the Google search engine as an indication of the level of interest of external stakeholders in the SD Gateway.

We have been deliberate in not placing too much emphasis on web traffic analysis, for reasons which are adequately covered in the working paper [attached in the Working Paper Appendices].

## **2. A Network Evaluation Framework**

We had to develop a simple framework for network evaluation, that we could then apply to other networks either hosted by IISD or in which IISD is an active member.

We believe that networks need to be evaluated on two fronts.

### **1. The effectiveness of the network (doing the right thing)**

In a network supported by a single major grant, there is a certain cohesiveness of objectives which makes it somewhat easier to monitor how the network is building capacity, creating joint value and influencing policy processes. This becomes much more difficult when the network is supported by a variety of grants for a variety of projects within the network (as has been the case in the last 2 years of the SDCN). Nevertheless, in both cases it is necessary to find the means to demonstrate the value added of the network modality, for three reasons:

- a) Formal knowledge networks come together to lever change in policies and practices, supportive of sustainable development. A network needs to be able to determine what changes it has effected through its research and communications work. It needs to monitor whether it is fully realizing its “network advantage”. This requires a methodology that not only assesses individual activities, but provides some means for identifying changes as a result of its combination of efforts.
- b) Value added propositions – ones which demonstrate real leverage of money and influence -- are highly attractive to funders. Networks need to be able to make the case that operating in a network mode does lead to focused collaboration, better informed research results, new knowledge and real influence.
- c) Networks often require a great deal of in-kind support from member institutions, especially during gaps in specific project funding. The network coordinators need to be able to demonstrate to the members whether it is worth the additional investment of time and effort in order to sustain network momentum over the long term.

### **2. The efficiency of the network (doing things right)**

This point is often overlooked in traditional evaluation frameworks, and yet over and over we hear about the transactional costs of networks, that they are cumbersome and time-consuming to manage, that motivation and performance of individual members is often at issue and that the cost effectiveness of the network approach is in question.

As part of our work on evaluation, we therefore undertook a review of available project planning and evaluation methodologies.

- a. SWOT analysis [Strengths, Weaknesses, Opportunities, Threats]
- b. Results Based Management
- c. Logical Framework Analysis
- d. Outcome mapping
- e. Appreciative inquiry
- f. Human resources performance evaluation

We took elements from each of these and developed a set of frameworks for use in planning and evaluation of networks:

- a. a planning framework
- b. a monitoring framework
- c. an annual evaluation framework and an end of grant evaluation framework, to be used to aggregate information to report to donors

At the heart of our approach is the focus on outcomes as changes in behaviour, activities and relationships. There are two groups that will be changed or influenced by their interaction with a network and its work program(s):

- a) the network members themselves, demonstrating
  - o Changes in individual member activities as an outcome of network participation
  - o Progressive levels of interaction among network members
  - o Progressive levels of effort to engage the stakeholders each member wishes to influence
- b) the stakeholders: those individuals and groups outside of the network that the network wants to influence; those who should have a vested interest in the work of the network, with the ability to act or to influence others to act.

At its simplest, a network planning and evaluation framework seeks answers to the following questions:

- what will success look like for the network as a whole;
- is the network advantage being realized
  - o influencing policy processes and practices (leveraging change)
  - o joint value creation
  - o capacity development
- for each activity, who is going to benefit, be changed or influenced by the work (both members and stakeholders);
- what will be the indicators of success for each activity?
- has the network operated efficiently? Have the transactional costs of working in multiple relationships with members been mitigated through good work planning, financial and human resources management practices?

The frameworks we prepared for the SDCN evaluation have been adapted from our working paper on the evaluation of networks. An explanation for the elements in each framework has been attached in the Prototype Planning and Evaluation Framework Appendices. “Measuring

while you manage” is included in the Working Paper Appendices. Once we designed these frameworks, we were then able to apply the relevant components to the evaluation of the SDCN.

## Evaluation of the SDCN

Final reports for the major grants contributed by IDRC and CIDA have been prepared, and include the record of specific deliverables against project grant objectives. This evaluation focuses more specifically on the SDCN itself, what the vision of the members has been, the network objectives and outcomes from our collaboration. Throughout the evaluation, we assess where the SDCN sits within the constellation of information networks, ICT training, and SD organizations.

### *Objectives for the Evaluation*

- Assessment of network effectiveness:
  - did we do the right things? Did we realize our “network advantage”?
- Assessment of network efficiency:
  - did we do things right? Were we able to mitigate the transactional costs of working in multiple relationships with members through good work planning, financial and human resources management practices?
- Mapping of outcomes, both expected and unexpected
- Locating the energy in the SDCN
  - to determine what to build on for the future
  - to identify where collaboration is needed with other organizations and networks.

We have recast the “nuts and bolts” of the SDCN into our Network planning sheets out of the original project proposals, vision statements from members at the start of Phase 1, the Logical Framework Analysis prepared for CIDA for Phase 2, and the Network Governance Agreement.

We have not attempted to recreate “progress journals”. Formal monitoring of the network took place on average twice a year, through the intern reports and the annual members’ meeting. Data, including stories from members and stakeholders, have been drawn from intern reports and meeting minutes, final reports to funders for phases 1 and 2, and the Appreciative Inquiry consultation with members. The data have been presented in the Network evaluation sheets.

## Network Effectiveness (*Doing the right thing*)

### Planning sheet: Vision and objectives

<b>Vision</b>	<p>The Sustainable Development Communications Network (SDCN) is a global network of leading sustainable development organizations, seeking to accelerate the implementation of sustainable development through broader, integrated information and communications about what we know. [from the SDCN Governance Agreement]</p> <p>In initiating and championing the SDCN, IISD wishes to contribute to the creation of a new model of international co-operation and development based on knowledge sharing. [From the IDRC project proposals]</p>												
<b>Step 1: What were we going to do?</b>	<table border="1"> <tr> <th colspan="2" data-bbox="462 625 1186 657">Network objectives and major programs of work</th></tr> <tr> <th data-bbox="462 657 1186 690">Network objectives [from the Governance Agreement]</th><th data-bbox="1186 657 1911 690">Major work programs</th></tr> <tr> <td data-bbox="462 690 1186 787"> <ul style="list-style-type: none"> <li>To undertake joint communication activities to inform broader audiences about sustainable development.</li> <li>To inform each other about SD research and action underway within each organization.</li> </ul> </td><td data-bbox="1186 690 1911 787">SD Gateway and related SD knowledge products</td></tr> <tr> <td data-bbox="462 787 1186 885"> <ul style="list-style-type: none"> <li>To build capacity among Members to communicate sustainable development through new communications technologies</li> </ul> </td><td data-bbox="1186 787 1911 885">Member capacity development</td></tr> <tr> <td data-bbox="462 885 1186 1047"> <ul style="list-style-type: none"> <li>To provide a forum for Network Members to share experiences in the management of sustainable development communications</li> <li>To broadly share the knowledge about how to use ICTs efficiently and effectively.</li> </ul> </td><td data-bbox="1186 885 1911 1047">Capacity development for civil society organizations</td></tr> <tr> <td data-bbox="462 1047 1186 1144"> <ul style="list-style-type: none"> <li>To experiment with new communications technologies and to develop methods for their seamless integration with existing communications technologies.</li> </ul> </td><td data-bbox="1186 1047 1911 1144">Research and demonstration project on integrated communications approaches</td></tr> </table>	Network objectives and major programs of work		Network objectives [from the Governance Agreement]	Major work programs	<ul style="list-style-type: none"> <li>To undertake joint communication activities to inform broader audiences about sustainable development.</li> <li>To inform each other about SD research and action underway within each organization.</li> </ul>	SD Gateway and related SD knowledge products	<ul style="list-style-type: none"> <li>To build capacity among Members to communicate sustainable development through new communications technologies</li> </ul>	Member capacity development	<ul style="list-style-type: none"> <li>To provide a forum for Network Members to share experiences in the management of sustainable development communications</li> <li>To broadly share the knowledge about how to use ICTs efficiently and effectively.</li> </ul>	Capacity development for civil society organizations	<ul style="list-style-type: none"> <li>To experiment with new communications technologies and to develop methods for their seamless integration with existing communications technologies.</li> </ul>	Research and demonstration project on integrated communications approaches
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## Planning sheet: SD Gateway and related SD knowledge products

<i>For Work program 1</i>	<b>SD Gateway and related SD knowledge products</b>		
<b>Step 2: Who did we want to influence or change?</b>	a) Members: IISD, SEI, Earth Council, REC, FARN, ENDA, DA b) Stakeholders: in general, users of SD knowledge (researchers, bureaucrats, students, media); SD organizations outside of the core SDCN membership seeking means to profile their research, information		
<b>Step 3: How</b> were we going to effect those changes?	<b>Work plan Activities and Outputs</b> Specific activities to meet objectives; metrics of deliverables	<b>Anticipated Outcomes : Network members</b> Assessing change in behaviour, relationships, activities in network members	<b>Anticipated Outcomes: Stakeholder group</b> Assessing change in behaviour, relationships, activities of parties targeted by network members
	<ul style="list-style-type: none"> <li>SD Gateway               <ul style="list-style-type: none"> <li># links, emphasis on southern /transitional country knowledge</li> <li>analysis of web traffic to the Gateway</li> <li>user feedback</li> </ul> </li> <li>In depth module development               <ul style="list-style-type: none"> <li># of modules created</li> <li>Use of modules on the Gateway</li> </ul> </li> <li>Sustainability Webring               <ul style="list-style-type: none"> <li># of organizations in the webring, with good representation from the south/transitional countries</li> </ul> </li> <li>SDCN Announces               <ul style="list-style-type: none"> <li># of subscribers</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Members voluntarily posting links to SD Gateway (SD Gateway jointly maintained by all members)</li> <li>Joint participation in the preparation of the modules; modules demonstrating both the convergence and divergence of views of members</li> <li>In preparing the modules, both research and communications staff of member organizations participate</li> <li>Members develop additional collaborative research and/or communications projects</li> <li>Members sharing information about current research, new products via SDCN Announces               <ul style="list-style-type: none"> <li>Increased visibility of Southern perspectives of sustainable development on the World Wide Web</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Broad audiences are aware of and utilize the Network's Internet products</li> <li>Users seeking further information from network members</li> <li>Requests for partnerships with other network, gateway, portal site providers</li> <li>Requests to post information on the SD Gateway</li> </ul>

## Evaluation Sheet: SD Gateway and related SD knowledge products

Level of success: 1-did not meet expectations; 2-met expectations; 3-exceeded expectations

Work program 1: SD Gateway and related SD knowledge products		
Activities; Cumulative Outputs	Level of success	Indicators
SD Gateway	3	<p>The SD Gateway, at <a href="http://sdgateway.net">http://sdgateway.net</a>, is updated bimonthly by the Network Coordination Unit at IISD. Over 50% of the content in the SD In-depth and SD Topics sections originates from the southern/transitional country members.</p> <p>A detailed assessment of the Gateway was published in 2000, in the working paper “Tools for assessing web site usage” [see Working Paper Appendices]. Over the past year, traffic on the SDGateway has doubled, with an average in the fall of close to 80,000 pages per month downloaded. The SD Gateway is currently the #11 site retrieved by Google, using the keywords sustainable development. This reflects not only good metatagging on our part, but the number of organizations around the world that have linked to the SD Gateway.</p> <p>Very little user feedback on the SD Gateway is received. User testing was carried out as part of the assessment for the working paper. Revisions to the Gateway were carried out in response. The site has not been substantially changed since then.</p> <p>An independent evaluation was conducted by Tomorrow Magazine in April 2001. The reviewers declared the SD Gateway to be the top SD portal on the Internet. The review is attached in the Network Documents Appendices.</p> <p>On gender issues: The Gateway directs users to sustainability initiatives that have been developed by women, as well as those that build their capacity to participate at all levels of decision-making. The Sustainable Livelihoods module is particularly good at bringing forward the voices of women.</p>
Joint modules	2	<p>All modules agreed to in Phase 1 and 2 have been completed. They are online, but they have not yet been linked into the “SD In-depth” section of the SD Gateway (this will be completed by April 2002).</p> <p>The Introduction to SD, which represents both the convergence and divergence of founding member views on global sustainability, is the most popular module, according to our web traffic analysis.</p>
SD Webring	3	<p>Requests to join the Webring are screened by the NCU against stringent criteria. Consequently the Webring, combined with the SD Gateway, provides one of the best access points to SD knowledge on the Internet.</p> <p>181 organizations have joined; 10% representation from the south.</p>



SDCN Announces	1	Listserv established to promote publications, events etc. from the members of the SDCN to each other and to broader audiences.
<b>Cumulative Outcomes: Network members</b>	<p>As anticipated, the SD Gateway and Webring provide increased visibility of developing/transitional country SD perspectives. Members have commented on the utility of the Gateway providing access to their work.</p> <p>The NCU has observed that the joint module development was cumbersome and at times unsatisfactory in terms of process. We might have set the level of success for this initiative at 1-2, but it turns out, during the Appreciative Inquiry process, that most members actually got a great deal out of the joint module development process. Much to our surprise, members involved in joint module development all commented that while they found the process of collaboration challenging, they learned a great deal both in terms of converging and diverging views on sustainability issues, and in terms of how to carry out joint communications projects. They are more aware of the knowledge and expertise held by other members in the network.</p> <p>However, while joint value aggregation and creation have taken place with the SD Gateway and the in-depth modules, it has been effected only through the planning and funding provided through the NCU. At present, only FARN voluntarily adds content to the SD Gateway. Only EC and DA mentioned ideas for new joint projects, but to date neither have taken the next step to draft concept papers and funding strategies. Interns have noted that at times the joint communications efforts seem forced, and that some member organizations would rather use funding to continue to improve their own communications products than work on integrating communications products.</p> <p>One of the desired outcomes was that the joint module work would serve to bring the research staff of member institutions into more contact with the research and communications staff of other members, and would strengthen their understanding of the role of communications in sustainable development. Only two members were successful at bringing their research staff into the joint module process.</p> <p>The lack of attention to gender issues in some modules in part reflects the lack of engagement of research staff in the production of those modules. This flags an interesting issue in capacity development for communications professionals: how much training is required in the substantive, cross cutting issues of their organizations so they can ensure the knowledge of their organizations is adequately presented, and knowledge gaps are addressed? Are there key issues that they always need to watch for, as they prepare the knowledge of their organizations for delivery?</p> <p>Members rarely share information about current research and new products via SDCN announces.</p>	
<b>Stories: members</b>	<p>The Earth Council values the SD Gateway for its holistic approach to sustainable development (in contrast to other directories, gateways and portal sites which focus on environment, or development, or social justice issues). The Gateway provides them with the means to demonstrate that while they may have chosen not to work on a particular issue or in a particular area, they have partners who do, who complement the Earth Council's work.</p> <p>REC believes that we achieved our desire for "two way information flows" through this work. DA believes that through the modules we</p>	

	<p>have collated information “in such a way that it is enriched by a global perspective”. FARN was able to profile its work on Public Participation. Finding that REC shared FARN’s view of the importance of public access to environmental laws led to the EcoLegis project.</p> <p>REC “found the creation of the online module on sustainable cities rather interesting: virtual players all around the world all working to quite a large and visible result...as part of the “virtual” networking (with real results) the peak was definitely the online module.”</p> <p>DA was pleased that even though only REC and DA contributed extensively to the module on water management, they were able to reflect a balance of views across the network: “the module in no way shows a bias only for South Asian case studies”.</p> <p>ENDA has commented many times that they would like the SDCN to take positions on substantive issues, demonstrating a convergence of organizations’ views on key issues such as trade. However, the work on joint modules has demonstrated that in fact there is little homogeneity of views within the SDCN membership – complementary views certainly, but not necessarily uniform views necessary for advocacy positions.</p> <p>EC had some interest in exploring linking the National Councils for Sustainable Development (NCSD) directories with REC’s directories of Eastern Europe organizations; and for linking the sustainable cities/communities work with the NCSD. However the REC supporter of this idea left REC, and no further work was done to develop the idea into a proposal for funding.</p> <p>Based on the joint module experience, DA is looking for other ideas to collaborate, in particular with regional stakeholders TERI and ICIMOD. However, a funding proposal has not yet emerged.</p> <p>SEI has valued the SDCN as a means to promote SEI’s work to the other members, and to learn about work going on in member organizations. SEI sees the SDCN as a vehicle to market the member organizations and to involve other professionals and networks.</p>
<b>Cumulative Outcomes: Stakeholder Group</b>	<p>Web traffic analysis and the Tomorrow magazine review demonstrate that we are reaching broad audiences with the SDCN knowledge products. The requests to join the Webring indicate stakeholder interest in the SDCN, and recognition that there is an advantage to being affiliated with the SDCN.</p> <p>Both DA and FARN have noted that they are receiving requests for information as a direct result of the knowledge products created through SDCN.</p> <p>Other major information systems, gateways and portals have approached the SDCN for collaboration and integration. MIT has invited the SDCN to make presentations at meetings of the GSSD project; members were able to make interventions to the World Bank on the Development Gateway based on their experience with the SD Gateway; discussions are ongoing with the Development Gateway, to act as a thematic section of the Development Gateway; there is considerable interest with IIED’s RING (Regional and International Networking Group) to use the SD Gateway as a communications vehicle for the knowledge bases of RING members. ELDIS (IDS at the University of Sussex) is the only major system with which we have not established some level of engagement.</p>

	<p>A relationship with OneWorld is discussed under the capacity development work program #3 below.</p> <p>Because of IISD's work in general on knowledge networks, we have been successful at joining IIED's research partnerships initiative, in collaboration with the RING. We will be leading a component on integrating the research and communications process. While this may have been a gap in the SDCN outcomes, our lessons learned will strengthen the contribution to be made to the RING.</p>
<b>Stories: Stakeholders</b>	<p>IUCN Pakistan informed us that they found the Gateway extremely useful, because it reduced the amount of time they needed to spend online to find key sustainable development information. This has meant real savings to them, given their costs for Internet access.</p> <p>The Development Gateway approached IISD (based on its SD knowledge and its hosting of the SDCN) to be considered for the Gateway editorial committee. No appointments to the committee have been made at the time of writing.</p>
<b>Unexpected</b>	<p>The establishment of the Development Gateway initially appeared to jeopardize the niche for the SD Gateway. Development and expansion plans for the SD Gateway were slowed down in response. Maintenance of the SD Gateway has become in part a "critical mass" issue: the Development Gateway draws on the extensive resources (staffing and financial) of the World Bank; ELDIS draws on the graduate student labour pool of the Institute for Development Studies, University of Sussex.</p>
<b>Adjustments</b>	<ol style="list-style-type: none"> <li>The SD Gateway and related products promoting the SD knowledge within the network will need a different support mechanism. While members value them, they are of secondary interest. While there is no cost to members to post links on the Gateway, or notices to SDCN Announces, we do not expect that they will integrate those efforts into their daily marketing / information sharing activities.</li> <li>Some attention should be paid to training in cross cutting concerns (gender in particular) as part of the capacity development for communications professionals.</li> <li>We are currently seeking funding through WSSD initiatives that will allow us to update and expand a number of SD knowledge products on the SD Gateway.</li> <li>Given the stronger interest from stakeholders in the SD Gateway (in comparison to members), the NCU will explore collaboration with other networks and systems, in particular the RING, as a means to maintain the niche and growth for the SD Gateway and related products.</li> <li>The critical mass of resources behind other gateways/portals will not be an issue if the SD Gateway keeps a narrow, very selective focus on its content, so that it can be maintained with minimal investment.</li> <li>Unless members themselves bring collaborative communications ideas forward together with proposals for funding, efforts to create joint communications products should be discontinued in the next phase of the SDCN.</li> </ol>

## Planning sheet: Member capacity development

<i>For Work program 2</i>	<b>Member capacity development</b>		
<b>Step 2: Who did we want to influence or change?</b>	a) Members: REC, FARN, ENDA, DA, EcoNews Africa, PDA, ISD Poland, FFLA [note: these members received funds from the SDCN in phase 1 and 2 specifically for putting their organizational knowledge bases online] b) Stakeholders: None		
<b>Step 3: How were we going to effect those changes?</b>	<b>Work plan Activities and Outputs</b> Specific activities to meet objectives; metrics of deliverables	<b>Anticipated Outcomes : Network members</b> Assessing change in behaviour, relationships, activities in network members	<b>Anticipated Outcomes: Stakeholder group</b> Assessing change in behaviour, relationships, activities of parties targeted by network members
	<ul style="list-style-type: none"> <li>Member website development (advice, technical assistance, peer review of web products)               <ul style="list-style-type: none"> <li>Project funds used for staff time, consultants to upgrade websites</li> <li># new or upgraded organizational websites, or significant changes or additions to organizational websites</li> <li>Improved use of web traffic analysis</li> </ul> </li> <li>Intern support               <ul style="list-style-type: none"> <li># interns placed with members</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Improved functionality and navigation of member websites</li> <li>Increased content on member websites</li> <li>Increased institutional and human capacity to work with the Internet</li> <li>Members establish communications policies and procedures that designate significant portions of their knowledge bases for international public access on the Internet.</li> <li>Members have successfully implemented models of two-way regional information flows</li> </ul>	

## Evaluation sheet: Member capacity development

Work program 2: Capacity development for Members		
Activities; Cumulative Outputs	Level of success	Indicators
Member website development	2	<p>New websites established: FARN, ISD Poland, PDA Old websites replaced with new, expanded versions: ENDA, DA Website architecture and navigation improved: REC</p> <p>Guidelines have been prepared by the NCU and shared with members on the following:</p> <ul style="list-style-type: none"> <li>• Listserv and e-conference management</li> <li>• Tools for measuring web site use</li> <li>• Communicating SD on the web</li> </ul> <p>An informal “help” desk was provided by the NCU in phase 1 and the first part of phase 2, largely for technical support.</p>
Intern support	3	<p>From 1997 to 2001, 25 interns were placed with various network members. The NCU trained the interns in web communications practices prior to sending them to their host organizations. Interns provided a range of support services for members, from assistance with html coding to get the core knowledge up on the Web, to training staff in web maintenance, to assistance with database and other information gathering and processing projects.</p>
<b>Cumulative Outcomes: Network members</b>		<p>In all cases, members involved in this work program have been able to increase the amount of content on their respective websites as a direct result of SDCN support, through financial contributions from the SDCN grants, through advice from the NCU, and through intern support. Design and navigation have improved on a number of sites. Most important, however, all members in this work program have moved beyond the typical “brochure ware” sites to the delivery of substance, reflecting a change or commitment in institutional policies to the delivery of knowledge for international access.</p> <p>The “help desk” function of the NCU was discontinued in phase 2, largely due to the decreased demand for information and assistance with technical issues (equipment, software, connectivity, management questions). We see this decreased demand as an outcome of successful capacity development of members.</p> <p>An attempt was made to strengthen regional capacity by “twinning” founding members with new members in their region: REC with ISD Poland; ENDA with Econews Africa; FARN with FFLA; and DA with PDA Thailand. While the new members benefited from the financial support and advice (the output level), we do not feel we achieved the outcome, that there would be stronger exchanges and aggregation of regional content as a result. As we observed under work program 1, members are primarily concerned with building their</p>

	<p>own capacity to get their institutional knowledge bases online, rather than attempting the next level of aggregation of knowledge.</p> <p>While the joint modules projects were intended to increase the richness of SD knowledge on the Internet, they had a related, unexpected outcome: most members commented on how the collaboration reinforced their ability to work virtually with others. This signals a need for more support and “learning by doing” opportunities for virtual collaboration.</p> <p>All members have commented either through the Appreciative Inquiry process or through their reports on interns, how important the interns have been to the SDCN. In many respects, they have acted as the “glue” for the network, providing both the necessary staff assistance in getting the members on the web, and in connecting the members with the NCU.</p>
<b>Stories: members</b>	<p>ENDA has commented in the past that they have learned through the SDCN more about institutional policies and procedures necessary for maintaining web sites.</p> <p>DA felt the interaction with PDA was very fruitful at first, in that DAINET was able to share its experiences with PDA, however illness in the point person at PDA disrupted the continuity of the work.</p> <p>REC was very disappointed in the performance of their “twin”, the Institute for Sustainable Development, Poland. As a result of ISD’s poor performance, the final payment to ISD was withheld.</p> <p>ENDA and EcoNews focused on a review of Internet access in Africa as the starting point for strengthening their collaboration on the communication of SD issues in the region; however no additional projects and work plans have been forthcoming.</p> <p>FARN’s relationship with FFLA was perhaps the most successful of the “twinning” exercises; they believe they promoted the growth of the SDCN through the inclusion of FFLA.</p> <p>FFLA valued what they received from the SDCN in terms of capacity development, but felt they should have contributed more in turn but were unclear how to do so.</p>
<b>Cumulative Outcomes: Stakeholder Group</b>	<p>While there were no stakeholders explicitly identified for this work program, the need for capacity development on electronic communications was taken up by other IISD-hosted networks. In particular, the Trade Knowledge Network conducted technical reviews of members in advance of beginning the TKN research activities, in order to ensure that members had the tools, or could get the support through interns or other methods, to be able to work together virtually.</p> <p>Members not directly involved in this work program (EC, SEI) also noted benefits from the discussions and exchanges of technical advice, especially in Phase 1. EC appreciated the informal advice provided by IISD’s systems manager; SEI also (early in Phase 1) had discussions with IISD’s systems manager. EC in particular commented that the email discussions and debates at members’ meetings helped to validate some of their communications approaches. EC hosted the DA website for several years, and learned much through trial and error from that experience. IISD learned how to develop web products that could be accessed in developing countries (formats, download times, etc.)</p>

	The experience of working on the joint modules was sufficiently rich that IISD chose to document it for external audiences in the working paper “Helping Knowledge Networks Work” (published as chapter 5 in the book Strategic Intentions).
<b>Stories: Stakeholders</b>	
<b>Unexpected</b>	
<b>Adjustments</b>	Every organization, whether in developed, developing or transitional countries, continues to need financial support to meet the costs of delivering knowledge on the web. We believe at this point in time that it is more appropriate to put resources into training for effective use of the medium, for good web planning and management practices, and for virtual collaboration. As organizations come to a better understanding of integrated communications and engagement strategies, they will begin to include communications lines in project budgets that will be more robust and will cover the web development costs.

## Planning sheet: Capacity development for civil society organizations

<i>For Work Program 3</i>	<b>Capacity Development for Civil Society Organizations (CSOs)</b>		
<b>Step 2: Who did we want to influence or change?</b>	a) Members: IISD, ENDA, DA, REC, FARN, Earth Council, Mekong Info, Foundation for Media Alternatives, Acceso b) Stakeholders: CSOs in developing and transitional countries seeking to improve their web communications; CSOs involved in ICT training; IGOs, SDCN donor group seeking advice on web communications		
<b>Step 3: How</b> were we going to effect those changes?	<b>Work plan Activities and Outputs</b> Specific activities to meet objectives; metrics of deliverables	<b>Anticipated Outcomes : Network members</b> Assessing change in behaviour, relationships, activities in network members	<b>Anticipated Outcomes: Stakeholder group</b> Assessing change in behaviour, relationships, activities of parties targeted by network members
	<ul style="list-style-type: none"> <li>• Peer mentoring <ul style="list-style-type: none"> <li>• creation of SD Webworks</li> <li>• # of participants in the discussion list</li> </ul> </li> <li>• Distributed learning <ul style="list-style-type: none"> <li>• # case studies, tools developed for the SD Webworks</li> </ul> </li> <li>• Workshops <ul style="list-style-type: none"> <li>• # held, # of participants</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Active participation in SD Webworks, sharing their experiences and asking for advice</li> <li>• Contributing case studies of their web practices</li> <li>• Sharing their experience through workshops organized by SDCN</li> <li>• Sharing their experience in other venues</li> </ul>	<ul style="list-style-type: none"> <li>• Level of interaction on SD Webworks</li> <li>• Level of representation from the south</li> <li>• New members joining the SDCN</li> <li>• Partnership requests with other training groups</li> <li>• Consulting requests from CSOs, IGOs</li> </ul>



## Evaluation sheet: Capacity development for civil society organizations

Work program 3: Capacity Building for Civil Society Organizations		
Activities; Cumulative Outputs	Level of success	Indicators
Peer mentoring	3	330 participants in the SDWebworks discussion list; 25% representation from the south/transitional countries. Web reviews carried out by 6 members for 20 organizations in 13 countries, at the request of those organizations.
Distributed learning	3	Tools initially developed for SDCN members (listserv management, tools for assessing website use, etc.) have been shared with SD Webworks. Most recently, a web review guide was prepared so that users could undertake self assessments of their websites. Website at <a href="http://sdgateway.net/webworks/management/default.htm">http://sdgateway.net/webworks/management/default.htm</a> holds tips, articles and 14 case studies from SDCN members on site management, information architecture, design, advanced features. Articles were prepared by NCU staff; 80% of the case studies were contributed by southern/transitional country members of the SDCN.
Workshops	3	3 workshops held: Global Knowledge 1997 [35 participants] Global Knowledge 2000 [60 participants] SD Web Communications Initiative “Writeshop”, Vancouver, 2001. By invitation: 24 web managers from CSOs around the world brought together to prepare a training curriculum for CSO web communicators.
<b>Cumulative Outcomes: Network members</b>		<p>Members all commented on how much they valued the opportunity to share their communications practices (challenges, barriers and successes) with other organizations through major workshops at the Global Knowledge meetings in 1997 and 2000, and through the SD web communications writeshop in 2001. Every founding member has contributed to every workshop with the exception of SEI, which was unable to attend either GK 2000 or the 2001 writeshop. FFLA, EcoNews Africa, Acceso and Foundation for Media Alternatives participated in the writeshop. All founding members and Mekong Info have contributed one or more case studies to SD Webworks.</p> <p><b>This demonstrates an over 90% level of engagement and support from the membership for this work program</b> (the sole exception was the Institute for Sustainable Development, Poland).</p> <p>A number of members have gone to other venues to promote this capacity building component of the SDCN: ENDA has been seeking funding for regional training workshops; SEI invited IISD and EC to contribute to the Hanover 2000 meeting; DA promoted the SDCN at TaskNet; REC is using lessons from the SDCN in its initiative on Environmental NGO Networking in SouthEastern Europe.</p> <p>This work program was most successful at positioning the SDCN within a crowded field of ICT trainers and information networks. Members focused on the effective use of the web medium (writing, editing, design, navigation, and management of the communications process integrated with other media – print, audio, etc.) rather than on technical and infrastructure issues. Members liken this to learning how to make a movie rather than learning how to turn on a camera.</p>

<b>Stories: members</b>	<p>DA: found “the opportunity to come together and document a manual for budding web managers” to be one of the most exciting outcomes of participating in the network.</p> <p>FARN: “the SDWCI writeshop was one of the most exciting experiences in my work with the SDCN. I felt it was a great opportunity to learn a lot from other participants while bringing a useful tool to the NGO community. It also resulted in significant personal growth, by allowing me to meet people from different parts of the world and share with them different experiences, knowledge and points of view.” FARN in particular noted that they believe they have contributed to the SDCN a better understanding of how the Internet is used in a developing country.</p>
<b>Cumulative Outcomes: Stakeholder Group</b>	<p>This work program has been a solid success for the SDCN, demonstrated by the growth of the SD Webworks, the level of participation of stakeholders in SD Webworks, and the inclusion of the SDCN knowledge on web communications and management practices in the new international portal site “ITrainOnline”, a collaboration of the major organizations involved in ICT capacity development for civil society: OneWorld, APC, Bellanet, IICD, Benton Foundation, TechSoup. DFID funding is currently being sought to support a major expansion of ITrainOnline, including the SDCN component.</p> <p>As an effort to increase the communication between various CSOs dealing with sustainable development, the SDCN began carrying out web reviews free of charge to selected organizations. In total, six members carried out the reviews of twenty organizations in thirteen different countries.</p> <p>Given the number of competing workshops during GK2000, we were extremely pleased to have a sellout crowd for the SDCN workshop. A contributing factor was that the workshop was largely focused on developing country experience with using the web medium for communications, rather than technical and infrastructure issues.</p> <p>As a result of the success of the SDCN with this work program, we were approached by the Commission for Environmental Cooperation and UNEP-DTIE to provide advice on their web communications practices. We also provided input to IDRC’s web development.</p>
<b>Stories: stakeholders</b>	
<b>Unexpected</b>	
<b>Adjustments</b>	As this is the area of greatest interest and energy for SDCN members, we will focus our Phase 3 plans here.

## Planning sheet: Research and demonstration project on integrated communications

<i>For Work program 4</i>	<b>Research and demonstration project on integrated communications</b>		
<b>Step 2: Who did we want to influence or change?</b>	a) Members: IISD, ENDA, Development Alternatives b) Stakeholders: CSOs, IGOs seeking advice on integrated communications		
<b>Step 3: How</b> were we going to effect those changes?	<b>Work plan Activities and Outputs</b> Specific activities to meet objectives; metrics of deliverables	<b>Outcomes : Network members</b> Assessing change in behaviour, relationships, activities in network members	<b>Outcomes: Stakeholder group</b> Assessing change in behaviour, relationships, activities of parties targeted by network members
	<ul style="list-style-type: none"> <li>Creation of a framework for an integrated approach to communications</li> <li>Demonstration project               <ul style="list-style-type: none"> <li>Creation of a module illustrating an integrated approach to communications</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Members reviewing, commenting on framework</li> <li>Members developing more integrated approaches to communications (as demonstrated in use of multiple media for delivering products, use of multiple media for promoting products)</li> <li>Members coming forward with new ideas for a seamless link between Internet communications and other forms of knowledge sharing.</li> </ul>	<ul style="list-style-type: none"> <li>Takeup of research in other reports</li> <li>Consulting requests from stakeholders</li> </ul>

## Evaluation sheet: Research and demonstration project on integrated communications

Work program 4: Research and demonstration project on integrated communications		
Activities; Cumulative Outputs	Level of success	Indicators
Framework for an integrated approach to communications	2	A case study on integrating print and electronic publications policies and procedures was prepared for SD Webworks. This was expanded upon through a consulting contract with UNEP-DTIE, to create a broader framework that includes all forms of communication with target audiences. This framework evolved into a methodology for engagement, and was published as the working paper “Dating the Decision Makers: moving from communications to engagement strategies” (included as Chapter 3 in “Strategic Intentions”).
Demonstration project	2	The “Search for sustainable livelihoods module” on the SD Gateway illustrates the use of street theatre, story gathering, newsletter publication and Internet delivery as a suite of communications vehicles on livelihoods.
<b>Cumulative Outcomes: Network members</b>		<p>In the earliest days of Spinning the Web, ENDA and DA both expressed the need to develop a seamless link between information flowing onto and off of the Internet with other methods of communications with those who do not have access to the Internet. Both were intrigued with the potential of real audio/real video on the Internet. While we were able to capture messages through story telling, theatre and so forth for delivery via the web, we did not complete the “downlink”: moving information from the web into other formats. Instead, more attention was paid to how members might work in an integrated way with all the media tools available to them to provide knowledge to the local level and to influence decision makers.</p> <p>EcoNews Africa was invited into the SDCN, in part because they have had some experience with taking information off the Internet and redistributing it via their news services to African users. However, we were unable to make use of their expertise during Phase 2.</p> <p>Members have not come forward with new approaches to the “seamless link” concept. Instead, we are seeing a growth of interest in “telecentres” with ENDA’s CyberPop projects and DA’s Tarahaat, addressing the access problem more directly rather than creating intermediary mechanisms. We see similar trends in CEE and Latin America, with the general growth of Internet access in those regions.</p> <p>This work program has been particularly transformative for IISD, in coming to an understanding that relationships, not information, are at the centre of change. “The real problem isn’t that people don’t have access to information. The problem is that once they have information, they can’t influence anyone.” [Willard, Strategic Intentions, p36]. Engagement strategies require knowledge networks to go beyond being providers of information - to gradually engage key sustainable development decision makers in their work – slowly building more formal and enduring relationships with greater impact on policy and practice around the world [Willard].</p>

<b>Stories: members</b>	ENDA used the demonstration project as an opportunity to provide members of associations with training in journalism, including written, radio, theater and video reports. The workshop participants were closely involved at all steps of the process, and developed promotional tools for their group through the preparation of this module. Their print newsletter, "Jokkoo", was created as a forum for community actors collaborating with ENDA.
<b>Cumulative Outcomes: Stakeholder Group</b>	<p>Stakeholders have been more interested in our work on integrated communications and in the process of engagement, rather than in the need for a “seamless link” for information flows.</p> <p>The most significant outcome is that IIED’s RING has agreed to let IISD lead the work on “sharing lessons on the methods and capacities of SD research/ communication/ engagement that are most influential in achieving change”, as part of a major initiative on research partnerships being supported by UNDESA, with funding currently being secured from DFID, UN Foundation, CIDA and Rockefeller.</p>
<b>Stories: stakeholders</b>	
<b>Unexpected</b>	
<b>Adjustments</b>	<p>We will not pursue creating a “seamless link to move information off the Internet into other media. However, it may be useful, starting with EcoNews Africa, to research the efforts of other organizations attempting to move information on and off the Internet, and document their lessons learned.</p> <p>As we stated in the adjustments for work program 2, organizations need to come to a better understanding of integrated communications and engagement strategies, so they will begin to include communications lines in project budgets that will be more robust and will cover the web development costs. As part of the capacity development work for CSOs, we will develop training materials and case studies on planning, funding, and implementing integrated communications strategies.</p>

## Planning sheet: The Network plan; Monitoring the network advantage

<b>Step 4: The Network plan; Monitoring the Network Advantage</b>	In addition to specific work programs which involve individual members, the network plan focuses on those activities related to the network as a whole. This step should show how the network advantage is being realized: linking to stakeholders in policy processes and the implementation of SD (effecting change in policy and practice for sustainable development); joint value creation; capacity development across the network.		
	<b>Work plan Activities and Outputs</b> Specific activities to meet objectives; metrics of deliverables	<b>Outcomes : Network members</b> Assessing change in behaviour, relationships, activities in network members	<b>Outcomes: Stakeholder group</b> Assessing change in behaviour, relationships, activities of parties targeted by network members
	<ul style="list-style-type: none"> <li>Establishing, expanding the network               <ul style="list-style-type: none"> <li>Existence of network</li> <li>Governance agreement</li> <li># members, diversity of regional and SD knowledge in the network</li> </ul> </li> <li>Research on managing knowledge networks               <ul style="list-style-type: none"> <li># workshops held</li> <li>Publication of research</li> <li># of books/papers distributed</li> </ul> </li> <li>Identifying processes where we might have some influence</li> </ul>	<ul style="list-style-type: none"> <li>A well structured, efficient and durable knowledge network with solid representation from developing regions</li> <li>Member organizations see enough benefits from participating in the knowledge network that it becomes self-sustaining.</li> <li>Members review, comment on knowledge networks research</li> <li>Members apply the knowledge network model to other networks in which they are involved</li> <li>Members suggest processes where SDCN might make a contribution</li> <li>Members participate in those contributions</li> </ul>	<ul style="list-style-type: none"> <li>Requests to join the network</li> <li>Participation in workshops</li> <li>Request for further advice on knowledge networking</li> <li>Application of research to their own networks</li> <li>Invitations to contribute to relevant processes</li> <li>Support for participation</li> <li>Changes in policy positions and practices that can be attributed to the input from the SDCN</li> </ul>

## Evaluation sheet: The Network plan; Monitoring the network advantage

The Network plan		
Activities	Level of success	Indicators/Stories/Comments
Establishing, expanding the network	3	<p>The network has grown from 7 founding organizations in 1996 to 14 member organizations in 2001 (85% representation from southern/transitional countries), with a surrounding community of practice in the Sustainability Webring (181 organizations, 10% southern/transitional) and the SDWebworks (330 participants, 25% southern/transitional). Taking some overlap into account, we estimate a combined community of over 450 organizations and individuals, with over 20% representation from the south.</p> <p>The governance agreement, signed by members, provides the guiding vision, objectives, roles, and decision making mechanisms.</p> <p>The founding members have a very well established set of relationships. They believe they have contributed much to each other (through the joint module projects) and to the network as a whole. The affiliate members have been solid contributors to the web communications initiative. Two of four members brought in through the twinning process (EcoNews Africa and FFLA) have been good additions in terms of regional expansion, but in listening to FFLA, it was clear that we did not make enough opportunity for them to contribute to the network as a whole.</p>
Research on managing knowledge networks	3	<p>Throughout the life of the network, IISD has captured the lessons learned on managing knowledge networks. This has been an iterative process with both members and stakeholders, starting with the initial operating principles discussed with network members at the GK 2000 members meeting. Workshops were then held with IDRC, CIDA and World Bank staff. Working papers were prepared and circulated to managers of other knowledge networks at IISD and the World Bank.</p> <ul style="list-style-type: none"> <li>• REC has commented that the GK2000 meeting was a peak point for the SDCN, “where the topic of knowledge networking came to the most intensive discussion ... I really had the feeling that we were doing something innovative and we were at the forefront of progress.”</li> <li>• SEI believes that “getting to know more about how knowledge networks can work” is the mainstay of SDCN. “It has changed my approach to doing international projects”.</li> <li>• EC commented that participating in the SDCN helped to validate some of its approaches with the network of the National Councils for Sustainable Development.</li> </ul> <p>In December 2001, IISD published the book “Strategic Intentions: managing knowledge networks for sustainable</p>

		development”, based on the lessons learned from the SDCN and other networks.
Identifying processes where the SDCN might have some influence	3	<p>In phase 1, several members provided input to and support for the Rio+5 consultations organized by the Earth Council in 1997.</p> <p>The importance of connecting to these kinds of international processes was raised by the Earth Council at the 1999 members meeting in Dakar, and it in many ways formed the basis of our understanding of the “network advantage”. The SDCN focused on Hanover 2000 and the Global Knowledge Partnership (GKP) as the two major events and processes where it believed it could have some influence on organizations promoting ICTs for sustainable development.</p>
<b>Network Advantage Summary</b>	<b>Level of success</b>	<b>Indicators/Stories/Comments</b>
<b>Engagement of stakeholders in policy process and action</b>	3	<p>The Earth Council, SEI and IISD found the Hanover experience to be very useful in terms of articulating the need for communications in moving the sustainable development agenda forward. However, there was no further outcome beyond the awareness raising for participants in the conference; and is on par with the variety of other presentations made by SDCN members over time on issues of ICTs, networks and development (EC- RIO+5 consultations, DA-Tasknet, IISD-Asian Energy Conference, the 2001 RING meeting, and so forth).</p> <p>Choosing GKP as an important process to connect with has had far better outcomes. GKP has led to increased levels of contact, interaction and trust built with key ICT stakeholders in NGO, IGO and donor communities. The building of relationships between APC, OneWorld, IICD, IISD/SDCN and Bellanet could only have happened through the forum provided by the GKP. This has led to the ITrainOnline initiative, which will combine the capacity building efforts of these organizations for far greater reach and impact.</p> <p>As stated in the vision section of this evaluation, IISD in particular saw the SDCN as an opportunity to contribute to the creation of a new model of international co-operation and development based on knowledge sharing. The knowledge networks research carried out by IISD, based on the experiences of the SDCN and other networks, has led to significant levels of engagement with other stakeholders. The following is a list of consultations on aspects of knowledge networking, partnerships and alliances requested by stakeholders as a result of IISD’s work in this area:</p> <p>UNDP – Energy program  CIDA – Environet – CIDA’s internal thematic network on environment issues  GDLN – IISD is working on structure and governance issues for the Global Development Learning Network  GDN – Global Development Network  IIED’s RING – IISD will be working on guidelines for communicating research as part of the RING’s research partnerships initiative</p>



		<p>Friends of the Earth Canada – on the potential of using this approach within the International Network for Environmental Compliance and Enforcement</p> <p>World Bank's Global Programs</p> <p>CISE – Canadian Information System for the Environment</p> <p>UNDP with the WBCSD and the International Chamber of Commerce – IISD will be working with them on a review of multistakeholder partnerships for SD as a contribution to the WSSD.</p> <p>More work needs to be done to determine whether and how the knowledge network approach is benefiting policy development and implementation for sustainable development, how to evaluate network actions and how successful experiences can be replicated.</p> <p>Unexpected outcome</p> <p>As a result of IISD's successful internship program, and in particular the placement of interns with SDCN members, IISD was approached by GKP to host a global consultation on the role of youth in building knowledge societies. From 2000-2001 IISD worked with the Global Knowledge Partnership to ensure that young people from around the world had opportunities to influence the debate on how to bridge the digital divide. The Global Knowledge Youth initiative provided input to both the Global Knowledge Action Plan and the G-8 Digital Opportunities Taskforce. A directory of digital divide initiatives by and/or for youth was incorporated into the GKP Portal.</p> <p>In September 2001, young people from TakingItGlobal, the Global Youth Action Network, and Nation1 took up the challenge of GK Youth to continue the youth-led dialogue, networking and advocacy on digital divide issues. This led to the launch of the Youth, ICTs and Digital Opportunities Network in February 2002. IISD will continue to interface between the SDCN and GKP, through its role chairing the GKP working group on youth.</p> <p>The relevant reports and recommendations are posted at <a href="http://www.iisd.org/networks/youth.asp">www.iisd.org/networks/youth.asp</a>.</p>
<b>Joint Value Creation</b>	2	<p>As discussed in Work Program 1.</p> <p>Members in general value the SD Gateway, are aware that in many cases the Gateway does direct users to members for further information, and has, through the Tomorrow magazine review, raised the profile of the SDCN. Many commented on how much they learned about joint value creation through the joint modules projects, and believe those modules represent good regional knowledge on important SD issues. Nevertheless, it is unlikely that members will seek the funding or in-kind support directly to continue creating SD knowledge products together, in contrast to the capacity development work where there is more enthusiasm for joint fundraising and development.</p>
<b>Capacity Development</b>	3	As discussed in Work programs 2, 3.

		<p>It is most likely that the extended community of practice will provide sufficient momentum to keep the SDCN viable through the ebb and flow of project funding. The high level of interest of members in capacity development will endorse the NCU's continued participation in ITrainOnline, which may provide financial resources to support further development of SDCN training materials.</p> <p>A new area of work is opening up, to provide capacity development for the operations and management of knowledge networks.</p>
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## ***Efficiency of Network Operations (Doing things right)***

### **Planning sheet: Network operations**

<b>Step 5: How were we going to work together?</b>		
	<b>Activity</b>	<b>Measures</b>
	Network meetings <ul style="list-style-type: none"> <li>• Annual face to face</li> <li>• Virtual (electronic /teleconferencing )</li> </ul>	# held # of member organizations represented; level of representation (the principal researcher or a delegate)
	Institutional support	# of member organizations which have signed the governance agreement # which have accepted and provide financial/in-kind support to an IISD intern
	Systems and procedures	Interaction with coordinator: timely, helpful Contract management on projects: on time, within budget Completion of reports (including intern reports)
	Financial resources	Diversification, leveraging of funding (attracting additional funds to network activities) Amount of direct financial contribution and in kind support from member institutions to network Member support for proposal development (providing input to proposals) # members that prepared project proposals and secured grants for network projects activities Information shared by members on network listserv about new funding prospects, requests for proposals
	Human resources	# of staff within each member organization involved with the SDCN # of staff within the Network Coordination Unit Women within member organizations have an increased capacity to utilize the Internet for research and communications

## Evaluation sheet: Network operations

Efficiency of Network Operations		
Cumulative activities	Level of success	Comments
<b>Meetings</b>	3	5 face to face meetings were held; 1 virtual conference was held; plus the appreciative inquiry process was held virtually. All founding members participated either in person or via internet video conference, with the exception of the last Global Knowledge meeting, when SEI was unable to attend, due to prior commitments.
<b>Institutional support</b>	2	The heads of the member organizations have all signed the governance agreement. All founding members, FFLA and Acceso have taken interns, and provided financial support to those interns directly. Members have made good use of the network posters printed by the NCU to raise the profile of the SDCN within their own organizations.
<b>Systems and procedures</b>	2	A closed extranet was established to support communications between the NCU and members. Members in phase 1 greatly appreciated the role of Scott Anderson at the NCU in maintaining regular interaction via email among the members. Terri Willard, as Network Coordinator, did an excellent job with work program planning, contracting, reporting, and championing the web communications capacity development work and youth components.  While all projects were completed within budget, timeliness has always been a challenge within the SDCN. In part it reflects the difficulties of doing joint projects with multiple partners; but it also reveals that institutional support was not always as strong as might have appeared, in that institutional work for all members always took priority over SDCN work, even when the SDCN was providing funds for projects.  Only the Institute for Sustainable Development, Poland, did not meet its obligations and consequently the final payment to ISD was withheld.
<b>Financial resources</b>	2	Core funding for the network from IDRC and CIDA leveraged additional funding from the World Bank (via GDN and GKP initiatives) and from the Government of Canada's Youth Employment Strategy (for interns).  SEI and the Earth Council did not receive funding for their participation in the network, apart from travel costs to attend meetings, and a little support to SEI to provide input to one of the joint modules. The Earth Council noted in particular that the SDCN ideas (objectives and work programs) were too ambitious for the funding available.  Members did review and comment on SDCN funding proposals prepared by IISD, but with one or two exceptions, members did not raise additional funds themselves to support network projects. Members did not share information about funding prospects.
<b>Human resources</b>	2	50% of the founding members have two or more staff directly involved with the SDCN: one at the decision making level (a VP or Director) and one at the technical or implementation level. From 1997-2001, all founding members received interns at

	<p>least twice, and most took an intern every year. In phase 1, the NCU had 3 full time staff (supported by IDRC and IISD); in phase 2, the NCU was managed solely by the Network Coordinator with help from an intern.</p> <p>Staff turnover within the member organizations had significant impact on the network, leading to spurts and stalls on the various work programs over time. REC's representative changed twice; DA and EC's technical people changed once; PDA's representative disengaged due to illness; ENDA's second person was moved to other projects; the EC senior representative has now left the EC; SEI has been constrained in its participation due to a rigorous project accounting system which reduces "pro bono" activities like network participation. MekongInfo's interest dropped off when the point person moved to another organization.</p> <p>We are unable to comment on the gender outcome of network operations, other than to say that as of December 2001, 2/3 of all members have one or more women representatives to the SDCN. In addition to that, ENDA runs a gender in ICT program, and women from member organizations (SEI, Foundation for Media Alternatives) have participated in individual project work. We do not see this as a direct outcome of SDCN activity, but rather a reflection that web communications has evolved from the technical domain and is drawing on the traditional strengths of women – "teamwork, service orientation and communications skills" [Strategic Intentions, p76.].</p>
<b>Operational Results</b>	<p>Apart from the issue of timeliness of deliverables and the lack of member participation in fundraising efforts, the SDCN has operated efficiently, with excellent accountability both to members via the members' extranet and to funders via financial and substantive reporting. The role of the network co-coordinator has been key to the efficient operations, but equally important has been the role (present in phase 1 but absent in phase 2) of the network "busybody" – the person who keeps the conversations going around the network. A future HR model for the network might reduce the % of time required for a network coordinator (who would then be free to work on some of the substantive research areas) and increase the intern position from 6 months to a full year.</p> <p>On the issue of institutional priorities versus network priorities: this is an issue that all networks are struggling with. Earth Council noted that in all such collaborative arrangements, trying to align the agenda of the network with the agenda of each member organization is very difficult. Organizations talk about collaboration, but priorities are always set differently.</p>
<b>Unexpected</b>	<p>On the financial side, recent "mega fund" projects are impacting the SDCN's ability to raise funds for its smaller network projects. In particular, the UNDP's thematic trust fund for ICTs and the Development Gateway Foundation are attracting grants from bilateral assistance agencies and foundations, making it more difficult for networks like the SDCN to secure resources. It does not appear likely that the SDCN will be able to tap into the UNDP or the Development Gateway Foundation for some time to come, given that both organizations appear to be focused entirely at the country level, rather than at the regional or international networking level.</p>
<b>Adjustments</b>	<ol style="list-style-type: none"> <li>1. IISD will continue to provide a role for the SDCN Coordinator, through various designated grants related to SDCN activities, and consulting contracts to other organizations. In addition, some thought will be given to a year long internship to provide communications support among the members, and to maintain some of the knowledge products on the SD Gateway.</li> <li>2. A new model for the SDCN is proposed in the conclusions section, which will address operational sustainability together with substantive work programs in the next phase of the SDCN.</li> <li>3. Additional work must be done to examine the tension between institutional and network priorities, as this seems to be a significant and unresolved issue to many organizations seeking to collaborate with others.</li> </ol>

## Conclusions

The SDCN has been established and operational since its initiation as Spinning the Web in 1996. Representation in the network is global, with 14 member organizations located in South and Central America, South and Southeast Asia, Africa, Central and Eastern Europe, Western Europe, and North America (85% representation from developing/transitional countries), and an extended community of over four hundred and fifty organizations and individuals throughout the world, participating through the SD Webworks and the Sustainability Web Ring (over 20% representation from developing/transitional countries).

In its earliest days, the SDCN was initiated with a strong technical component to improve access to and aggregate the SD information from the member organizations. This led to the development of the SD Gateway and related SD knowledge products. The SDCN has now branded itself as a network focused on strengthening electronic communications and collaboration practices within organizations, in order to move the SD agenda forward. Particular emphasis has been on building the communications capacity of developing country organizations in order to get their SD knowledge more widely shared. While valued by members, the SD Gateway has become a secondary function of the SDCN, serving largely to profile selected developing country organization knowledge bases once they are available.

The SD Gateway and its related products (including the Sustainability Web Ring) are, however, widely used by a variety of audiences around the world, and do serve to direct users to further information from network members in developing/transition countries. The SD Gateway clearly has a niche and user demand, with demonstrable benefits to developing/transitional country organizations. More work needs to be done to consolidate that niche, in light of the emergence of the Development Gateway and the growing sophistication of ELDIS (University of Sussex).

In participating in the Appreciative Inquiry portion of the evaluation, members found their highest energy points when they shared their communications practices (challenges, barriers and successes) with each other at the network meetings, and when they were able to inform other organizations through major workshops at the Global Knowledge meetings in 1997 and 2000, and through the SD web communications writeshop in 2001. The production of joint modules on SD issues was important as much for the “learning by doing” experience with virtual collaboration as it was for the actual knowledge products created. Internally, members used SDCN to build communications capacity within their respective organizations and to validate their approaches to technology and electronic publishing. Externally, members used SDCN to promote their lessons learned to other SD communications practitioners in developing/transitional countries. The reputation built through the SD Webworks has led to the inclusion of the SD Webworks knowledge base in the ITrainOnline collaboration of OneWorld, APC, Bellanet, and IICD. The SDCN has clearly found its niche in the capacity development activities.

We do not believe, however, that future capacity development in SD communications should be carried out by providing funds directly to selected organizations for increasing the content

on their respective websites. As we stated under work program 2, every organization, whether in developed, developing or transitional countries, will always need financial resources to support web publishing. We recommend that it is now more appropriate to put resources into training, knowledge sharing and peer mentoring for effective use of the medium, for good web planning and management practices, and for virtual collaboration. As organizations come to a better understanding of integrated communications and engagement strategies, they will begin to include communications lines in project budgets that will be more robust and will cover the web development costs. Benefits to developing/transitional organizations will go beyond increased visibility of their knowledge (through the SD Gateway) to improved interaction with decision makers and greater take-up of knowledge from the south.

At the level of the specific objectives and related work programs, the SDCN was successful in producing all deliverables, and meeting the basic objectives of the network: joint communication of SD knowledge, building communications capacity for members and others, experimentation with integrated communications approaches. The majority of outcomes met or exceeded expectations, in terms of strengthening communications capacity in members, raising awareness among stakeholder groups and engaging stakeholders in the work programs. Only a few outcomes were marginal at best. These related primarily to institutional support and integration issues: the reliance of most members on the NCU to promote research and other activities of members through the SD Gateway and SDCN Announces rather than taking responsibility for these tasks directly; institutional priorities taking precedence over network activities leading to delays on projects, and the lack of active participation in proposal development and fundraising for network activities from most network members.

IISD monitored the SDCN, together with other networks hosted by IISD and others, in order to create a number of principles and protocols for network operations, and to determine what advantage there is in institutional collaboration and partnerships. IISD was able to elicit from the SDCN experience and its other research the “network advantage”: the ability to bridge the research/action gap through effective linking to policy processes; joint value creation; and capacity development for research and communications. IISD’s work on knowledge networks has served to engage significant interest from stakeholders involved in SD research (IIED/Regional and International Networking Group, Global Development Network), development learning (World Bank/Global Development Learning Network), and multistakeholder partnerships (UNDP with WBCSD and the International Chamber of Commerce). Aspects of IISD’s model are being taken up and tested by others. More work needs to be done to determine whether and how the knowledge network approach is benefiting policy development and implementation for sustainable development, how to evaluate network actions and how successful experiences can be replicated. An unexpected outcome was the success in engaging youth around the world in the debate on building knowledge societies and bridging the digital divide.

## Recommendations

### ***1. Consolidation of the SDCN into an open community of practice***

#### **Vision, structure**

The vision of the SDCN remains valid: the acceleration of the implementation of sustainable development through broader, integrated information and communications about what we know. However, the objectives should be narrowed and the organizational model should be revised.

The formal knowledge network model is no longer suited to achieve the vision of the SDCN. That model serves best when the focus of the network is on joint research projects between member organizations. Instead, the SDCN has been most effective and had most energy when it has worked to strengthen communications managers to become more effective within their organizations. A community of practice model is more in line with this work.

The SDCN should revise its structure and governance as follows:

- Membership should be individual rather than institutional. It should be open to all communications practitioners who wish to share knowledge about communicating more effectively for sustainable development. The target membership group should be practitioners in civil society organizations in developing/transitional countries.
- A steering committee should guide the network, composed of representatives from the active members of Phases 1 and 2 of the SDCN (REC, DA, ENDA, FARN, EC, SEI, IISD, FFLA, EcoNews Africa, Acceso, Foundation for Media Alternatives). The role of the steering committee should be:
  - To maintain the continuity of the vision of the SDCN,
  - Advise on and evaluate tools and services for the network,
  - Promote the network to ensure strong participation from the south.
- The Network Coordination Unit at IISD should continue to provide the secretariat functions for the network. The relationships and communications vehicles are sufficiently well established that the NCU should be able to function with a half time coordinator and a full time intern.
- Financial resources to support the NCU and the Steering Committee should come from the designated grants secured for the work programs developed to meet network objectives. Special effort should be made to source funds for the internship position, to recruit young communications professionals from developing/transition countries to work in the NCU every year.
- The SDCN should focus its work to meet two objectives:



- Strengthen the capacity within civil society organizations in developing/transitional countries to communicate SD knowledge more effectively.
- Maintain the SD Gateway as the vehicle to integrate and promote the SD knowledge of the world's leading organizations.

The most significant outcome of the first objective will be the increase of in-depth, well presented knowledge products from key developing/transitional country organizations in the SD Gateway.

## **Objective 1. Capacity development for SD communications**

### **Recommended areas of work**

- Membership engagement
  - Profiles of areas of expertise
  - Staff exchanges and internships
  - General discussion forum combined with highly focused e-consultations on specific communications challenges
  - Marketing and promotion of the network
- Peer mentoring
  - Frameworks for reviewing communications products
  - Members can then use frameworks to review their own and each others' work in a systematic, constructive process
- Distributed learning
  - SD Webworks: curriculum for web management, including articles, case studies, other resources
  - SD Publishing: curriculum for management of editing, printing practices, including articles, case studies, other resources. Special attention to be paid to training in cross cutting issues such as gender, so that communications managers ensure that such issues are consistently addressed in the products of their organizations.
  - SD Communications Strategies: techniques from advocacy campaigns, social marketing, fund raising, multistakeholder processes; techniques for integrated approaches, including moving information up to and down from the web; integrated planning and budgeting to move web development costs into more robust communications lines in substantive research projects.

### **Recommended alliances**

In general	Global Knowledge Partnership [ongoing]
SD Webworks	ITrainOnline [alliance in place]
SD Publishing	Simon Fraser Centre for Publishing [initial discussions held]
SD Communications Strategies	Johns Hopkins Communications Initiative [no approach made as yet] Tools of Change [currently developing some frameworks through another project]

## Objective 2. SD Gateway and related SD knowledge products

### Niche clarification

SD Gateway	The SD Gateway will be highly selective directory of information resources from the leading SD research institutions, with particular emphasis on institutions in developing/transitional countries. The SD Gateway will raise awareness of knowledge in the south, will enable comparisons between northern/southern knowledge bases, and will direct users quickly and efficiently to the information they need for research and decision making.
Google	Google is the premier search engine on the web. We believe that the majority of users start with Google rather than a specialized portal site. However, smaller southern websites have difficulty getting into the higher rankings in Google, due to the Google catch 22: if other organizations don't know you exist, they won't link to you; if they don't link to you, you won't get a high ranking in Google; without a high ranking in Google they won't know you exist. By continuing to build the market for the SD Gateway, and maintaining its rank in Google's top 20 websites for sustainable development, and its reputation as the best portal site, we can then drive users more directly to the best information from key organizations in the south.
Development Gateway	The most recent emphasis of the Development Gateway is on the building of country level gateways rather than thematic gateways. There is no thematic gateway as yet on sustainable development. The current thematic gateways are compiled by individuals rather than through a network of expert organizations.
Eldis	Both Eldis and the Development Gateway emphasize development information rather than the more holistic "sustainable development" content. While the SD Gateway will serve to bring forward southern knowledge, it will also emphasize the best knowledge bases in the north on SD issues– providing comparative approaches and concentrating on the best information needed for decision making.
OneWorld	OneWorld's approach is more social justice oriented, with a strong media approach, profiling stories rather than providing the quick navigation to in-depth research that the SD Gateway provides.

### Recommended areas of work

- SDCN Steering committee to revise criteria for inclusion of content in the SD Gateway; expand the content base to between 50 and 100 key organizations
- Increase the number of directories on the site to include, inter alia, directories of organizations, biographies of SD leaders, online library databases
- Strengthen the functionality of the Gateway with the purchase of a more robust search engine that will permit the full indexing of key organizations' websites (to complement the more focused and selective SD Topics links directory)
- Create an interface that will permit searching of the major library databases and implement a document delivery system
- Market and promote the SD Gateway through alliances with other portal sites, and promotion at major SD events.

## Recommended alliances

In general	Approach the Development Gateway to use the SD Gateway as the SD thematic gateway Approach Eldis to profile the SD Gateway as a highly selective directory of the best of SD knowledge Continue discussions with IIED/RING to act as the communications vehicle for RING member research.
Expansion of directories	Currently negotiating support for this component through a variety of WSSD funding sources
Technical components (search engine; library database interfaces)	Given the downturn in the IT sector, it is unlikely that we will be able at this time to find an IT champion for this component. We will approach the IT private foundations for support.

## ***2. Separate IISD's research interests on formal knowledge networks from the SDCN.***

### **Purpose**

In listening to our stakeholders, it is clear that there is enormous interest and need for learning how to bridge the gap between research and action for sustainable development. However, as the Earth Council noted in the Appreciative Inquiry process, the SDCN attempted to undertake more projects than it had sufficient resources for. And while more effective communications is an important component in bridging that gap, other tools are also needed. Different types of relationship structures; improved management of partnerships and alliances; better monitoring and evaluation to determine what really works – these are also important, and go beyond the SDCN focus on strengthening communications practices.

We therefore recommend that the work on knowledge networks, which was conducted by IISD in part under the auspices of the SDCN, be continued by IISD as an independent activity. IISD should focus its activities to meet the following objective:

- Develop, document and promote the collaborative structures, tools and strategies needed to bridge the research-action gap in sustainable development

### **Objective: Bridging the research – action gap**

#### **Recommended areas of work**

- Develop a two year research program to explore the following questions
  - how to strengthen the engagement strategies of networks and alliances in order to move their advice and solutions into practice;

- how to strengthen the management and governance of networks and alliances, with particular attention to financial and human resource sustainability;
- how to address the tensions between institutional priorities and network agendas;
- how to learn from private sector experience with strategic alliances. Will the civil society community working in sustainable development be transformed through similar approaches to collaboration? Will the use of network and alliance models streamline internal business processes in organizations, leading to more rapid and effective interventions in policy and practice?; and
- how to measure and evaluate the work of networks, to determine whether the network advantage is being achieved.

We need to effect at least one significant behaviour change with our research: that network members and managers will begin to monitor their work more regularly, to see whether their collaboration is in fact leading to better-informed research results, new knowledge and real influence.

- Build a community of practice around the issue of knowledge networks, multistakeholder partnerships, global public policy networks, and strategic alliances as critical organizational models for moving the SD agenda forward.
- Continue to include and draw upon the strengths of young professionals in the knowledge networks in which IISD is a member.
- Develop and implement a communications strategy to promote the research program and community of practice.

### Recommended alliances

Research program	IIED/RING and the Research Institutes initiative with UNDESA
Community of practice	UNDP with WBCSD/ICC
Youth	GKP; TakingITGlobal

## I. Prototype Planning and Evaluation Framework Appendices

Note: an earlier version of these frameworks appears in the Working Paper, “Measuring while you manage.”

### A. Detailed Planning Framework

A. Doing the right thing: Network Effectiveness	
Steps	Explanation
<b>Step 1: What are we going to do?</b>	<p>Members refine goals and objectives as described in funding agreements. The purpose of the discussion is to:</p> <ul style="list-style-type: none"> <li>• Seek clarity and endorsement of the overarching goal of the network</li> <li>• Refine specific objectives: these could be amended, enhanced or prioritized so long as they remain consistent with the goal.</li> <li>• Seek from members what they can contribute to, and hope to gain from, participating in the network as a whole.</li> <li>• Seek from members a preliminary view of what success would look like for the network.</li> </ul> <p><b>Several major projects or programs of work for the network will be identified through this discussion.</b></p>
<b>For Work Program1 (2,3)</b>	<i>Steps 2 and 3 may need to be repeated for each of the major areas of works, if there are significant differences in stakeholders, activities, and outcome for each work program.</i>
<b>Step 2: Who are we going to influence or change?</b>	<p>In a network, there are two groups that will be changed or influenced by their interaction with the network and its work program(s):</p> <ol style="list-style-type: none"> <li>1. the network members themselves</li> <li>2. the stakeholders</li> </ol> <p>a) The network members themselves. Network members should be chosen based on their strengths as maveens, connectors, and/or salespeople<sup>2</sup>. They each have some measure of influence in the world. However, participation in the network can serve to strengthen the effectiveness of each member, including the dominant/lead partner. The resulting changes in their behaviours, relationships and activities can fall into three categories:</p> <ul style="list-style-type: none"> <li>○ Changes in individual member activities as an outcome of network participation</li> <li>○ Progressive levels of interaction among network members</li> <li>○ Progressive levels of effort to engage the stakeholders each member wishes to influence</li> </ul>

<sup>2</sup>We have adopted these characteristics from M. Gladwell, *The Tipping Point: How little things can make a big difference* (Boston: Little, Brown, 2000). Maveens are the research experts; connectors are those with connections to decision makers; salespeople are those with the ability to craft and communicate messages. Selection of members with reference to these characteristics is discussed in our working paper “Form follows function: management and governance of knowledge networks”.

	<p>b) The stakeholders: those individuals and groups outside of the network that the network wants to influence: those who should have a vested interest in the work of the network, with the ability to act or to influence others to act. Specificity is needed in this discussion – broad categories of stakeholders (government, media, and academia) will not be helpful, as it will be difficult to articulate desired outcomes as behaviour changes for broad categories. This list of stakeholders may vary for each member and for each project.</p> <ul style="list-style-type: none"> <li>• Government ministers – which ones? Name positions [eg, the trade minister for Chile]</li> <li>• Mid-level bureaucrats – which ones? Name positions [eg, the climate change negotiator for Senegal]</li> <li>• Private sector: CEOs or environmental managers? Multinationals or small and medium sized enterprises?</li> <li>• Journalists – for which papers or networks? Mainstream or alternative?</li> <li>• Top researchers—at which institutions?</li> </ul> <p>Changes in behaviours, relationships, and activities of stakeholders can be determined by progressive levels of their awareness of and interaction with individual network members, and with the network as a whole.</p>		
<b>Step 3:</b> <b>How</b> are we going to effect those changes through this program of work?	This is the substantive discussion of the work plan for the specific program of work		
	<b>Work plan and outputs:</b> Specific activities to meet objectives; metrics of deliverables on work plan	<b>Outcomes :</b> <b>Network members</b> Assessing change in behaviour, relationships, activities in network members	<b>Outcomes:</b> <b>Stakeholder group</b> Assessing change in behaviour, relationships, activities
	<i>Types of activities; sample outputs, indicators</i>	<i>Types of outcomes; sample indicators</i>	<i>Types of outcomes; sample indicators</i>
	<ul style="list-style-type: none"> <li>• individual members undertaking new research / communications projects done under the auspices of the network, measured by # specific research outputs</li> <li>• two or more members undertaking new projects or services jointly, measured by # products, services</li> <li>• holding electronic consultations on research findings, measured by # public electronic conferences held; # of participants in e-conference</li> <li>• presentations at peer-oriented conferences (professional, academic associations), measured by # presentations given</li> <li>• Face to face workshops with stakeholder group, measured by # workshops held</li> </ul>	<ul style="list-style-type: none"> <li>• Members strengthening each other's work, indicated by circulating research papers to each other for comment, peer review.</li> <li>• Members creating new knowledge together, indicated by co-authoring papers.</li> <li>• Members improving their linkage to policy process, indicated by hosting of workshops with stakeholders invited; securing face to face meetings with key decision makers.</li> </ul>	<ul style="list-style-type: none"> <li>• Stakeholders interacting directly with network members, as indicated by # participating actively in electronic conferences, # attending workshops; level of representation at workshops.</li> <li>• Stakeholders approaching network members for more advice or research, indicated by #accepting face to face meetings; # decision makers contracting network members for further work.</li> <li>• Stakeholders changing activities based on network actions/outputs, as indicated by replicating workshops on their own; by preparing position papers drawing from network research.</li> </ul>
<b>REPEAT FOR ADDITIONAL PROJECTS BEFORE GOING TO STEP 4</b>			

<b>Step 4: The Network Plan</b>	Once the specific projects and research interests have been addressed, members can revisit the general objectives, and begin to consider how to capture the cumulative effect of the individual projects and whether there are activities that all members can contribute to, which help to consolidate the network as more than an umbrella for individual projects. This step should refocus members on how to realize the network advantage: joint value creation, linking to stakeholders in the policy process; capacity development across the network.		
	<b>Process:</b>		
	<b>Work plan and outputs:</b> Specific activities to meet objectives; metrics of deliverables on work plan	<b>Outcomes : Network members</b> Assessing change in behaviour, relationships, activities in network members	<b>Outcomes: Stakeholder group</b> Assessing change in behaviour, relationships, activities
	<i>Types of activities; sample outputs, indicators</i>	<i>Types of outcomes; sample indicators</i>	<i>Types of outcomes; sample indicators</i>
	<ul style="list-style-type: none"> <li>• Creating a network website and public listserv to share information about network activities, measured by website traffic, # subscribers to listserv</li> <li>• Identification of major events related to the interests of the network; plans for displays, side events, presentations, etc.</li> <li>• Monitoring the activities of the network for their cumulative “network advantage”.</li> </ul>	<ul style="list-style-type: none"> <li>• Members sharing information with each other across the network, indicated by linking materials to website, posting notices to listserv.</li> <li>• Members working together on articles related to network objectives, for publication in main stream media outlets.</li> <li>• Members actively participating in major events they otherwise would not have had access to.</li> </ul>	<ul style="list-style-type: none"> <li>• Stakeholders demonstrating increased levels of interest in network activities/outputs, indicated by # users <u>from stakeholder group</u> downloading content from website, joining network listserv for further information.</li> <li>• Stakeholders approaching network members for more advice or research, indicated by #requests for materials, # decision makers contracting network members for further work.</li> </ul>

<b>Doing things right: Efficiency of Network operations</b>		
<b>Step 5: How are we going to work together?</b>	<b>Process:</b> Network coordinator reviews with members the internal operations of the network. This is usually the last item on a network meeting's agenda, and deals largely with logistics and finances. The Network coordinator should encourage members to provide some indicators of efficient operations.	
	<b>Types of activity</b>	<b>Sample Indicators</b>
	Network meetings	# held, participation by members
	Institutional support	# institutions which sign governance agreement # presentations which network members make to their institutions # references to the network in individual member corporate communications
	Systems and procedures	Interaction with coordinator: timely, helpful Completion of quarterly progress journals Contract management on projects: on time, within budget
	Financial resources	Attracting additional funds to network activities Renewal of grants Amount of direct financial contribution and in kind support from member institutions to network activities
	Human resources	# of staff within member organizations assigned to network activities



## ***B. Monitoring Framework: Progress Journals***

### Quarterly Progress Journal for each Network Member

Activities tracked should be consistent with the planning framework; and should only be no more than 10 or 12. The Journal should be completed quarterly by the member and shared with the Network Coordinator. A separate journal should be kept for each major work program. This is simply a record of what happened during that quarter, the interesting stories about what is being done, but not an assessment of the work. At the evaluation stage, outcomes for the member and the stakeholders will be derived from the record of progress that has been made by that member, and the member's interaction with representatives of the stakeholder group.

<b>For individual work program</b>	<b>Network member progress notes</b>	<b>Stakeholder interaction</b>
Specific activities from work plan	What they have done during the quarter	Who they have interacted with during the quarter
1. Eg, publish research paper on web communications	<ul style="list-style-type: none"> <li>Eg, circulated draft paper to network members for peer review.</li> </ul>	<ul style="list-style-type: none"> <li>Eg, Circulated draft research paper to experts outside of the network</li> </ul>
2. Eg, hold training workshop on web communications	<ul style="list-style-type: none"> <li>eg, secured additional funding</li> </ul>	

<b>The Network Plan</b>	<b>Network Coordinator Progress Notes</b>	<b>Stakeholder interaction</b>
Specific activities for network as a whole Combined activities that demonstrate the network advantage		
1. Network website	<ul style="list-style-type: none"> <li>Eg, established network website</li> </ul>	<ul style="list-style-type: none"> <li>Eg, Announcements of network website sent to key organizations</li> </ul>
2. Participation in policy process	<ul style="list-style-type: none"> <li>Eg, created calendar of key processes where network should be represented</li> </ul>	<ul style="list-style-type: none"> <li>Approaching contacts to attend key processes</li> </ul>

<b>Network Operations</b>	<b>Network Coordinator Progress Notes</b>
<b>1. Network meeting</b>	Eg, held network meeting, x number of members attended
<b>2. Institutional support</b>	Eg, interns placed with network members
<b>3. Financial resources</b>	Eg, nothing this quarter

## C. Evaluation Framework

We propose two points at which Network activities are evaluated.

1. An annual evaluation is needed in order to make adjustments to objectives, work plans and expected outputs and outcomes.
2. An end of grant evaluation is usually required by the funder.

**Level of success: 1-did not meet expectations; 2-met expectations; 3-exceeded expectations**

<b>Network effectiveness:</b>		
<b>Overall network goals and objectives: what did we think success might look like for the network during this period and did we achieve that? General observations</b>		
<b>For Work Program 1 (2,3)</b>		
<b>Activities</b>	<b>Level of success</b>	<b>Outputs</b>
Eg, Training Workshops	3	Eg, 2 workshops held; 50 participants; a report on workshops published
<b>Outcomes: Members</b>	Eg, Members undertook the project jointly and added significant value to each others' work, without which the workshops would not have been as influential.	
<b>Stories: Members</b>		
<b>Outcomes: Stakeholders</b>	Eg, Increased demand from stakeholders for training	
<b>Stories: Stakeholders</b>		
<b>Unexpected</b>		
<b>Adjustments</b>		

<b>Network work plan</b>		
<b>Specific Activities</b>	<b>Level of success</b>	<b>Outputs</b>
1. Network website	2	Website established
<b>Monitoring the Network Advantage:</b>		
	Note: this section is where the Network Coordinator consolidates the findings from the individual projects into an assessment of whether the network is fulfilling its potential	
Engagement of stakeholders in policy processes and action	Eg, not yet realized	
Joint value creation:	Eg, This is working extremely well at the individual project level, as demonstrated by the success of the training workshops.  Across the network as a whole, however, joint value aggregation and creation is not as evident.	
Capacity development across Network	Eg, More work needs to be done on strengthening individual member communications capacity, to improve their effectiveness within their regions (this includes northern members).	
<b>Unexpected</b>		
<b>Adjustments</b>		

<b>Network operations (efficiency)</b>	<b>Level of success</b>	<b>Comments</b>
<b>Meetings</b>	3	Eg, all members attended the network meeting
<b>Institutional support</b>	2	Eg, 11 members signed the governance agreement; 8 members hosted interns
<b>Financial resources</b>	3	Eg, Seed funding for the network from foundation levered additional funding from bilateral development assistance agencies
<b>Unexpected</b>	Eg, staff turnover in 3 members	
<b>Adjustments</b>	Eg, create network manual for new representatives from members	

## **II. Network Documents Appendices**

### ***1. IDRC Phase 1 Proposal***

## ***2. IDRC Phase 2 Proposal***

### ***3. CIDA Phase 2 Proposal***

#### ***4. Member vision statements, Phase 1***

## ***5. Logical Framework Analysis, Phase 2***

Note: The original LFA was prepared to accompany a multi-million dollar, 3 year proposal to CIDA. A two-year, \$300,000 grant was awarded; consequently not all of the goals, outcomes and outputs in the LFA were retained in the revised proposal. Those that were have been highlighted.



## **6. SDCN Governance Agreement**

## ***7. IDRC Phase 1 Final Report***

## ***8. Tomorrow Magazine review of the SD Gateway***

### **III. Working Paper Appendices**

#### ***1. Tools for assessing Web site use***

## ***2. Measuring while you manage***

**SPINNING THE WEB**  
**A PROPOSAL TO**  
**EXPAND AUDIENCE AND CAPACITY OF**  
**ELECTRONIC NETWORKS FOR SUSTAINABLE DEVELOPMENT**

Submitted to IDRC  
by the  
International Institute for Sustainable Development (IISD)

**IISD and Global Communications**

IISD believes that global progress to sustainable development must be supported by new information technologies. We have chosen to be at the forefront of applying computer-based technological innovations to support rapid communication of our own research, to link elements of the global knowledge base, and to build new reporting services on global issues and earth negotiations. Our well-established, award winning World Wide Web sites, IISDNet and Linkages, act as hubs for sustainable development information on the Internet. **With various partners and like-minded organizations cooperating, we believe there is a foundation now for a new sustainability information network for the global village. IISD proposes to expand its existing efforts and collaboration towards achieving this objective. IDRC will be a strategic partner in this effort.**

We are seeking not only to inform, but also to use the new technology in innovative ways that engage the attention and commitment of decision makers in their work for global and local change. **We want to take many more people from all sectors beyond their current awareness of sustainable development to an ownership of these concepts and an understanding of how to put them into practice. Our goals are to give decision-makers in all parts of the world better access to the tools for sustainable development planning, to globally share experience about what actually works, and to compound the current international knowledge base by new forms of electronically facilitated dialogue.** The new information technologies are much more than research tools. They support a dynamic, interactive, new approach to empower people to change the way we live and work on this earth.

This proposal will allow IISD to enhance our own efforts and those of other sustainability organizations by improving the design of information products, by expanding interconnectivity, and by taking advantage of continuous improvements in technologies and technological access. Our intent is to broaden audiences so there is acceptance and understanding of sustainable development beyond the already converted. We are keenly aware of the need to level playing fields of various sorts through improved information access.

In a 1995 report by the Twentieth Century Fund, *The New Information Infrastructure*, one author comments that “the global village cannot afford information slums.” Regrettably, there are already multiple tiers of success. These tiers occur within countries and regions as well as between developing and industrial countries, and certainly between OECD and eastern European nations. **Yet expanded use of the World Wide Web and other networking services can ensure not only that the cost and timeliness of access to high quality information will be improved, but also that capacity will be increased for disseminating views and information from sources within developing areas and from marginalized groups.**

**It is our experience that no organization in the environment and sustainable development fields has yet explored the full potential of open system, broadband communications.** Indeed, given the rapid transitions in the technologies, it is difficult to predict all the likely twists and turns. We expect surprises and opportunities, requiring wise choices. Part of our task is to make these choices in a fashion that permits early exploration and transfer of that experience to others who have less technological access and resources.

What we anticipate is that cost-effective technologies becoming available over the next few years will combine the strengths of all communications and information media: the animation and audio-visual excitement of film, the instantaneous global reach of television, the reflective analysis of the print tradition, the exchange of experience by phone and mail, and the brute force of computer processing. By harnessing more of this potential, we can go far beyond current approaches to building databases and exchanging information. At the last annual meeting of World Wide Web movers and shakers, a senior Walt Disney executive warned that the self-congratulatory spirit of the meeting was not warranted. In his opinion, for more people to become fully engaged, computer networking must become much more focused on attributes designed to capture attention and to help people sieve information. Both artistry and authoritative linking of information gateways are needed.

**This proposal is designed around three premises. First, the existing strength and experience of IISD for engaging large audiences via our electronic networks (at times in the hundreds of thousands of entries over periods of a few weeks) can be used to attract new audiences to the field of sustainable development. Second, that any effort can only be judged successful if it expands networking and capacity within developing countries and with other groups marginalized through lack of information access. And third, that a major part of the information challenge is design and innovation for ease of use.**

The initiatives and successes of IISD over the past five years on which we intend to build are noted in Annex A to this proposal.

## Proposal

**IISD's project objective is to foster creation of a highly sophisticated, yet extremely accessible distributed network designed to draw a broader range of people into the web of information required for sustainable development action.** We say "foster" because an important part of the work is to draw together a group of cooperating organizations with whom we will exchange experience and encourage compatible approaches in information handling. There is interest among various organizations either to build consortiums or to systematically involve countries (e.g. UNDP Sustainable Development Networking Project). IISD expects to link with such efforts. **However, in this proposal we wish to place specific emphasis on working with at least four organizations in developing countries and possibly Eastern Europe as key partners.** Our effort will combine two of IISD's strengths: our cost-effective and opportune uses of new information technologies, and our ability to build strategic partnerships.

**We propose both to originate and to adopt from others a variety of new components to enhance the value of the World Wide Web sites used to disseminate environment and development information.** This work will be carried out initially within our existing IISD sites. Our expectation is that the models will be directly useful to others. The critical need is to build advanced services and design that can engage some audiences immediately while not disenfranchising others. Our expectation is for a spread effect of new approaches over reasonably short time spans. The recent history of the Internet suggests that this assumption is reasonable.

**The project will be carried out over a two year period starting immediately.** While the IDRC support is being sought over this period, it is possible that expenditures will be accelerated if necessary in order to take advantage of advances in the rapidly changing field of information networking. **Over the life span of the project it is intended to raise additional funding from a variety of sources to ensure on-going maintenance and development of future activities, and to lever the IDRC funds.** As a start, it should be noted that the IDRC grant will attract matching IISD grant funds from the Province of Manitoba at a level of one dollar for each three in the IDRC grant.

## Tasks

**It will be necessary to identify and formalize partnerships with a core group of at least four organizations in different parts of the world.** The actual selection of institutions will take place once the project is underway. **Early in the project, we will establish an imaginative and engaging new look and feel for our gateway to sustainable development information on the Internet.** While this design effort may seem trivial by comparison to matters of content, it is not. Having a user-friendly interface is what will attract interest of those not regularly using the Internet at present,



the uncommitted and new entrants to sustainable development. This design effort will, of course, be on-going and informed by feedback from partners and Internet users.

**Enhancing functionality is also a key concern.** This is a design issue of course. But functionality relates to several aspects. The first is adequacy of content, especially if the information is to be truly judged useful by decision-makers. Second, functionality is a matter of quality control. And, third, functionality depends upon the successful development and implementation of information tools based upon applications of new and constantly changing software.

The project includes modest resources for capacity building. We stress that capacity building is a two-way street. IISD must learn first hand from others, especially from developing countries, what is working effectively. As well, we wish to assist partner organizations. Thus, we propose two-way staff exchanges. We will expand the range of sources and types of information being contributed to network nodes by encouraging and mentoring organizations as they begin to participate in the information exchange. Much of this effort can be accomplished by electronic dialogue at low cost. It will involve a number of organizations from various sectors, not just the four core partners. Achieving balance between the voices and perspectives of developing and industrialized regions will be a goal.

Specific tasks will involve:

**1. Developing the initial network of cooperating organizations.**

- a. Establish formal partnerships with four regional or national organizations. Work with these organizations will demonstrate how effective links and integration of analysis arising out of different regions can be achieved through electronic ties. Organizations based in South and East Asia, Latin America and possibly Eastern Europe will be approached. Consideration may be given to adding a suitable location in Africa at some point if additional funds can be found. The organizations will be selected jointly with IDRC using several important criteria: each should have well established information networks at a regional or national level; each should have regional coverage in their research and communications effort on sustainable development; and each should have a dedicated individual with skills and interests appropriate for advanced activities in electronic information networking. **IISD is prepared to appoint one person from each of the four cooperating institutions as an IISD associate.** This formal recognition is part of our effort to build a worldwide association of individuals contributing to our activities.
- b. Approach at least six additional minded organizations for advice, support and participation. Over time these organizations might evolve into a broader alliance or consortium, perhaps with and additional ten or more members, although that is not essential.

2. **Designing and implementing an interactive interface and tools to help decision-makers make optimal use of the information provided through the network.**
  - a. Create “intelligent filters” and “electronic flags” for the wealth of information currently available electronically and for new information being loaded to the Internet daily. The filters and flags are helpful to decision makers in matching information to their requirements for principles, policies, best practices, measurement and reporting.
  - b. Present information in engaging and helpful styles and formats taking advantage of the unique characteristics of the electronic medium.
  - c. Implement practical tools including on-line interactive learning, policy evaluation frameworks, and on-line executable methodologies for identifying measures and indicators of sustainable development.
3. **Expanding the knowledge base through linkages to information resources held on-line and off-line by key organizations around the world.**
  - a. Assist cooperating organizations to integrate the electronic delivery of their own research into their regular communications practices.
  - b. Track not only new sites for sustainable development information, but new information being added to existing sites.
  - c. Create data banks of best practices and success stories. These data banks would be structured to support the submission of information electronically from a remote computer. Cooperating organizations could host data banks relevant to their specific mandates; other organizations would then submit appropriate information into them. This nodal approach distributes work load and maintains quality control.
  - d. Support selected organizations with limited access to the Internet by packaging current information not otherwise available to them utilizing new electronic mail formats and diskettes. This would be done with organizations of mutual interest to IISD and the individual regional partners.
4. **Balancing the knowledge base with input from regions throughout the world.**
  - a. Work with regional partners to collect relevant principles, policies and related information from their region, and deliver that body of knowledge to world wide audiences.

- b. Support staff exchanges with our regional partners. A representative from IISD will spend time in each of the four partner organizations. And one representative from each to spend at least one month in Canada at IISD and with visits to other organizations to review Canadian experience in sustainable development information management.

## Results

We anticipate that at the end of two years we will have facilitated the evolution of a distributed network of sustainable development knowledge, contributed to and supported by information alliances around the world.

Specific results will include:

- **10 core collaborators; including 4 regional partners and 6 key organizations actively working on sustainable development information dissemination**
- **Up to an additional 10 allied institutions linking their information**
- **An expanded audience for sustainable development information, of up to 50,000 users per week, as measured by the combined server statistics of collaborating and allied institutions**
- **Geographic distribution of that audience to include significant levels of access from developing and Eastern European countries**
- **Creation of a model interactive gateway to sustainability information around the world, on IISDNet**
- **A suite of interactive learning, information gathering and evaluation tools to be used online by decision makers**
- **A combined knowledge base, at least 25% of which reflects the views and experience of less developed countries**

Decision makers who enter this web of sustainable development information will be led through first principles, be guided in the development of new policies based on those principles, will view how similar policies are applied across regions and sectors, will learn how to measure effectiveness, and will be able to report on their successes and lessons learned to others. **The result should be better informed decision making, and the creation of a common knowledge base built within and among key sectors and regions of the world.**

## **IDRC as a Project Partner**

IDRC recognized the critical importance of information to development at the time of its creation, and has supported research and capacity-building in this area since then. Over the past 25 years, the development and use of new information and communication technologies have played a key role in its programs and networks in this field.

During the preparations of UNCED in 1992, IDRC began its partnership with IISD in the area of sustainable development information, with both agencies jointly contributing to the drafting of Chapter 40 of Agenda 21, Information for decision-making, and assisting with the design of information systems for the UNCED Secretariat. Since then, IISD and IDRC have collaborated on a number of related activities, including Canada's "Projet de société", the Earth Negotiations Bulletin produced by IISD, information work with the Earth Council, and so on. This project represents a continuation of this fruitful relationship.

Following Rio, IDRC supported a number of other projects related to sustainable development information, each of which in turn has created a network of collaborating partners and institutions which may be of use to this project. Examples of these include: the development of the Earth Summit CD-ROM containing the official archives of UNCED, and a companion CD-ROM containing related NGO materials; work with UNDP on its Sustainable Development Networking Program; the global RADAR SATprogram in conjunction with the Canada Centre for Remote Sensing and Radarsat International; and a collaborative effort to develop an "Electronic Atlas of Agenda 21: (ELADA 21), focusing initially on Biodiversity. In addition, IDRC currently houses the Bellanet Secretariat. Bellanet is a partnership of donor agencies and others in the development of community committed to working together using innovative means, such as information and communications technologies, to share information, experiences, and ideas about current and future programming in the area of sustainable development.

This project provide a number of opportunities for collaboration and direct synergy between IISD and IDRC and its networks and research programs. For example, on the technology side, methods to be developed in this project for handling information overload on the Internet (e.g. "intelligent filters: and :electronic flags") are an area of proposed investigation in IDRC's information and Communication Technology Research focal point. Similarly, the proposed "suite of interactive learning, information gathering and evaluation tools to be used online by decision-makers" relates to IDRC's work post-UNCED on identified needs for decision-support systems (DSS) and a recent network on DSS and Sustainable Development which is being created as a result of a IDRC-UNU/IIST workshop earlier this year. In addition, in the policy arena, this issue of access by decision-makers can both benefit from and perhaps feed into a recently approved IDRC project in Latin America on Assessing the Impact of Information and Telecommunications on Policy Formulation.

In terms of capacity-building and information content on sustainable development, IDRC has been investing in electronic networking and in developing countries for a decade. It recently began to focus on connectivity and content issues for its partners and clients through a series of regional initiatives, such as the Pan-Asia Networking Program (PAN) and a recent similar program called Connectivity: Southern Africa (which in turn will complement a successful partnership among donors in the policy area, the Africa Networking Initiative). An increasing commitment to improving networking and information flows among IDRC's two dozen Program Initiatives will provide an impetus to making information, research results, and lessons learned from IDRC projects more readily available in electronic form. The resulting IDRC and partner Web sites can be linked to those of IISD, thus extending the availability and reach of their information. Furthermore, technical lessons learned by these networks and IDRC can be exchanged with those of IISD.

### **Long Term Sustainability of Activities**

**We anticipate that by the end of the second year of the project, the network we have fostered will take on a life of its own, and become self-sustaining in many ways.**

Incremental costs for participation in the alliance will be minimal as organizations come to incorporate electronic communication techniques into their day-to-day operations. Some technology components will support the automatic "filtering" of information on the Internet, requiring minimal intervention and maintenance. The commercialization of the Internet will come into play within two years, providing opportunities for cost recovery of selected information products and services, such as online digests, journals and specialized data banks and tools.

We recognize that the field of information technology changes on a daily basis, limiting the predictability of a long term view for the networking of sustainable development information. What is guaranteed is that technological innovations will always be on the horizon. Through this project, IISD will demonstrate the importance of information technology to support sustainable development. **On successful completion, we anticipate that IISD will be well positioned to attract continuing funding for innovations, particularly from private sector interests and foundations.**

## **ANNEX A. IISD's Sustainable Development Information Networking**

### **IISD's Comparative Advantage**

The Institute, from its start in 1990, has focused on cost-effective communications to link individuals, business, government and NGOs globally and within various regions of the world. This emphasis is to ensure that information about what works in the transition to sustainable development is quickly and widely available. Our efforts in building our Internet communications vehicles, **IISDnet** (<http://iisd1.iisd.ca/>) and **Linkages** (<http://www.iisd.ca/linkages>), are recognized as “cutting edge” in terms of both approach and products. Over the past few years, we have created a number of innovative reporting and information services which draw upon the strengths of the new information technologies. In 1995, IISD's Board agreed that computer-based information dissemination should be the major emphasis in the second phase of our Information and Communications Program. Overall, our effort is to create a “Virtual Institute: with ties electronically to associates and cooperating organizations worldwide.

### **Our Information Systems “Modus Operandi”**

We have devised four simple rules to guide our approach:

1. Use existing technology - be innovative with technology rather than attempt technological innovations.
2. Use open system, broadband, public communications networks as opposed to creating either a private virtual network and or a centralized host system.
3. Use affordable systems architecture (both hardware and software) that can be emulated by other organizations.
4. Work in partnerships to distribute the responsibility for the gathering and compilation through intelligent filters of information, and to ensure that unique viewpoints are represented.

What follows is a description of how these rules have been used to create valuable products, a description of selected information partnerships and audiences, and a brief technical overview of how we operate our information systems.

## **Reporting on Sustainable Development**

From bases in New York and Winnipeg, IISD publishes the Earth Negotiations Bulletin (ENB), a daily reporting service on global negotiations on environment and development which is produced wherever these negotiations occur. With a team of 20 mainly part-time people, the ENB is unique in the reliability and timeliness of its reporting of all major United Nations negotiations related to sustainable development. In July 1994, IISD launched *Linkages*, an Internet home page targeted at policy makers who follow these negotiations. By using World Wide Web technologies, we have been able to provide daily and summary reports of UN meetings, and connections to the full text of official documents tabled at those meetings. We also provide interviews with the delegates, through “Real Audio” technology.

The ENB is the Hansard of international negotiations but, most importantly, it permits people worldwide to be informed of progress while events are being shaped, and thus allows for their intervention. The success of the ENB and the Linkages home page is in the funding. It has become self-supporting through the funding of foundations, international organizations and more than 10 countries. When there are no negotiations underway, Linkages logs between 1,500 and 2,000 users a week. The user base jumps dramatically when major negotiations take place. The coverage of the 1995 United Nations Fourth World Conference on Women, in Beijing, for example, resulted in over 400,000 visits to our site from users around the world. The continue success of the ENB is in large part due to its accessibility to decision makers throughout the global information networks. We are building on that strength by creating *Linkages Journal*, a more in-depth, analytical, multimedia journal which will monitor and assess that progress.

IISD also covers what is being said and done outside the corridors of international negotiation. We are now publishing *Developing Ideas Digest* which brings people the inside track on the hottest issues in sustainable development. Another electronically disseminated publication, *Countdown Forests 97*, will focus specifically on the sustainable forestry management debate. We anticipate creating more of these focused information series which can be downloaded with full formatting, colour illustrations, etc., using a portable document file (pdf) format and recently developed software such as Adobe Acrobat available at no cost on the Internet.

## **Making the Best Information Available**

IISDnet offers users a road map to sustainable development information. We take the user from principles and frameworks for SD, through IISD’s contributions to sustainable development policy and practice, to direct connections to other networks and sites on the Internet. We strive to be an authoritative gateway, a starting point for exploration and a hub for information. Through IISDnet, we deliver current information filtered through our Information Centre in Winnipeg, much of it based on our own scanning of electronic

and other sources. IISDnet also logs between 1,500 to 2,000 users a week. Our efforts have been commended by NGOs, politicians, academics and consultants throughout the world. In the development of IISDnet we rely upon inputs from own program staff and upon contributions from partners and a variety of individuals and organizations.

### **Enhancing the Impact of Information**

It has been our experience that people come to the concept of sustainable development not knowing quite what is involved: what are the fundamental concepts and processes that underlie this global transition? Once they start on the learning curve, people next want to review the experiences of others in implementing sustainable development. And finally, they want to talk about their own concepts, approaches, and successful practices. By the end of March 1996 we will have completed work on a prototype, online, interactive "Tool Kit" which will take the user through this process: from learning, to information seeking, to knowledge sharing.

We received support for this work from CANARIE: the Canadian Network for the Advancement of Research, Industry and Education, to develop a tool kit for use by the higher education community worldwide. Sustainable Development on Campus is designed to introduce campus decision makers to the concept of sustainable development as it relates to their community, helps them review policies prepared by other institutions, gives them an interactive policy evaluation tool by which they can assess their own policies and practices, and provides them with an electronic discussion forum to share their visions and successes. Through this work, we have learned how important it is not only to identify and select useful information, but to help users become interactive with the information.

### **Partnership**

The CANARIE-sponsored initiative demonstrates how we approach partnerships and cooperation. The work conducted at IISD is levered through several organizations: the International Association of Universities (IAU), the Earth Council, the Association of Canadian Community Colleges (ACCC), and the Academy for Educational Development (AEU) located in the USA.

Much of our information and communications work has been carried out in partnership with others. Starting with the Canadian node (NirvCentre) for the Association for Progressive Communications in 1993, we have used the most effective technological links available at the time. Through our work with the *Projet de société*, we created a benchmark database of Canada's commitments at the Earth Summit in 1992, and actual followup efforts. Together with the Sustainable Development Research Institute in Vancouver, and women's groups throughout Canada, we compiled an electronic resource guide and directory of Canadian women working on sustainability issues.



Collegial relationships are very important as well. These have included important exchanges with two organizations now out of business. The Centre for Our Common Future and, the US-based Global Tomorrow Coalition. And, on a more on-going basis, discussion and cooperation with IDRC, the Earth Council, Environment Canada, Canada's Global Change Program, CIESIN, UNDP's Sustainable Development Network (SDN), Norway, the World Bank Environment Department, a newly-formed Trade and Sustainable Development Centre in Geneva, and with other like-minded institutes which have been exploring the possibility of a sustainable development information consortium.

## **Our Audiences**

The audiences we reach in the North and South through IISDNet and its sister, Linkages, are those who are in positions to draft, implement and comment upon sustainable development policies and practices. Our audiences include government and international agency officials, elected representatives, policy analysts, business executives, consultants, academics, journalists, and community leaders – those who need both IISD insights and rapid, reliable access to related knowledge across the Internet. With the globalization of electronic communications, we recognize that we are also reaching a broader audience: the rapidly growing Internet communities of browsers (often youth and students) who are curious about environment, development, and social issues. Thus we have an opportunity to influence the decision makers of the future as well as the present.

## **Current Configuration of IISD's Information Services**

Both Linkages and IISDnet are "fourth generation" Web sites. That is, sites integrated within the operations of the organization and drawing upon its collective resources. While we have several information systems staff to provide technical support, training and long range planning, IISDnet and Linkages are maintained and updated by inputs from almost all support and program staff of the Institute. We share the benefit of our experience with our partners throughout the world. By maintaining direct contact with software developers and users in other sectors, IISD maintains a watching brief on new technologies and approaches to take immediate advantage as they become cost effective.

IISD operates an on-site server in Winnipeg linked to the Internet via a 128 kilobit per second Integrated Digital Services Network (ISDN) interface. Components for our continually evolving configuration are selected for their ready availability, inexpensiveness and minimal ongoing management requirements. Part of our effort is to demonstrate what may be done with relatively limited capital investment. Linkages is hosted on MbNet, in order to use the additional computer storage and bandwidth provided by the University of Manitoba. We have implemented Netscape Commerce Server on MbNet to provide high level security for an intergovernmental/intersectoral policy dialogue we are hosting on behalf of the government of Norway.

Direct revenue generation from network initiatives is anticipated, although still difficult. IISD now derives about 1/3 of our publications orders via the Internet. We offer e-mail subscription service for *Developing Ideas*. Over time we expect to take advantage of the growing commercialization of the Internet.

## **PROPOSAL**

### **Development of the "Spinning the Web" Knowledge Network - Phase II**

#### **GOAL OF SPINNING THE WEB**

The Spinning the Web project will operationalize a formal knowledge network on sustainable development policy and practice. This network will improve the knowledge base for governance and decision-making around the world by significantly increasing the exposure of Southern member organisations' understanding of the linkages among environmental, social, and economic issues. Since the network also includes a number of Northern institutes, this project will contribute to the creation of a new model of international co-operation and development based on knowledge sharing.

#### **RESULTS OF PHASE I**

Phase I of Spinning the Web (1996-1998), with funding from IDRC and IISD, has fostered the creation of a highly sophisticated, yet extremely accessible distributed network designed to draw a broader range of people into the web of information required for sustainable development action. Objectives for Phase I work included:

- formalising partnerships with at least four organisations in developing countries and emerging economies;
- expansion of the SD knowledge base on the Internet; balancing the knowledge base with input from regions throughout the world, by working with these organisations to deliver their information on the Internet more effectively; &
- design and implementation of a WWW-based interface, integrating the SD information of the partners into a common framework, thereby providing easy access to their knowledge bases.

An assessment report on Phase I is being prepared by the partners in Spinning the Web and synthesised by IISD, for delivery to IDRC shortly. Based on the reports and comments we have received from all partners, we can identify the following key results of Phase I.

#### **Knowledge network development**

IISD has established a core group of 8 key organisations working in sustainable development around the world: the Regional Environmental Center for Central and Eastern Europe (Hungary), Fundacion Ambiente y Recursos Naturales (Argentina), ENDA (Senegal) and Development Alternatives (India) are regional partners; the Earth Council and Stockholm Environment Institute have joined IISD and IDRC as international partners.

Initially, Spinning the Web was implemented as a set of bilateral relationships in which IISD assisted with building the capacity of four regional partners to create online sustainable development content. The content of the partners was to be integrated through a sophisticated Internet interface. Over the past two years, the project has evolved into a formal network of organisations committed to two mutually reinforcing goals: bringing together for the world's attention the knowledge bases of a group of leading SD institutes and centres; and sharing our experience on how to use the Internet most effectively to do this. As a result, members proposed, and have agreed to sign, a formal network governance agreement (Appendix 1). Of particular note in this agreement is the equal status in the network of all partners, North and South, regardless of funding relations. Each member organisation is represented by a Network Associate; network operations are facilitated through the Network Co-ordination Unit at IISD. Equally important in this agreement is the recognition that the focus of the network is not on process, but on sustainable development knowledge:

*The challenge of Spinning the Web is: to develop Internet content about sustainable development efforts; to adapt learnings available on the Internet to make them relevant within different cultural and geographic contexts; and, to deliver that knowledge effectively to decision-makers and those who influence them*

### **Capacity building**

By August 1998, regional partners will have upgraded their Internet infrastructures with financial and technical support from the network. The international partners have also benefited from the exchange of advice and support across the network. Youth International Interns funded by CIDA and DFAIT have been placed with each partner to assist them in using the Internet creatively and effectively.

<b>Partner</b>	<b>Capacities strengthened as a result of Phase 1</b>
REC	Search engine administration; daily news reporting; Internet broadcasting; <u>upgrading of Internet connectivity</u>
Development Alternatives	Analysis of appropriate technology for Internet connectivity; training in website structures, including the creation of a frames-based interface for DAInet website; <u>Internet videoconferencing</u>
ENDA	Elaboration of electronic communications strategy for all program groups at ENDA (Dakar); redesign of information architecture; hardware, software, connectivity infrastructure upgraded; training of 120 staff; electronic conferencing
FARN	Elaboration of priorities for Internet communications; training on information architecture, HTML, and FTP; training on Internet searching; acquisition of software, computer, and zip drive
IISD	Advice on Internet videoconferencing from the Earth Council; advice on standards and thesauri use from IDRC
IDRC	Advice on structure of IDRC web site from IISD; discussions on methods of distributed management of complex websites
Earth Council	<u>Support for Rio+5 Internet broadcasting from IISD</u>
SEI	Technical information on Internet tools from REC; training of staff at Tallinn office through Internship program

### **Knowledge delivery and navigation**

Each regional partner added significant new amounts of information to the Internet as a direct result of Phase 1. For example,

<b>Partner</b>	<b>Sustainable Development Content delivered in Phase 1</b>
REC	Sustainable Development Initiatives Database, covering Central and Eastern Europe; EnviroPhantom Search Engine, indexing environmental information across the region; <u>Daily Environmental News service</u>
Development Alternatives	DAInet web site; additional program information and newsletters from <u>Development Alternatives</u>
ENDA	Increased quantity and quality of online information on energy and gender issues; Redesigned and expanded website for all of ENDA's programs to be <u>launched in August 98.</u>
FARN	First website established, providing information on FARN's work, and its training project, SUSTENAR. Curriculum outline on training in sustainable development for decision-makers; five full-text books on MERCOSUR issues including harmonisation of environmental legislation; multimedia site <u>on their regional SD colloquium</u>

We have designed a multilingual Internet interface (English-French-Spanish) which brings together the research of the partners under a common framework: the SD Gateway

(<http://sdgateway.net>). In addition, the SD Gateway includes shared directories of electronic discussion groups, upcoming events, sustainable development jobs, and news services, to which partners contribute as new information becomes available. We have also established the Sustainability Web Ring as an equitable and highly visible manner of bringing together a broader community of sustainable development organisations from around the world.

### **Knowledge creation**

Drawing from the information in the Gateway, we are creating a Primer on Sustainable Development, which identifies critical issues and solutions being brought forward by the partners; and we are linking in high quality research from other institutions. All partner organisations are involved in various aspects of drafting and reviewing sections of the Primer. We have also demonstrated how modules of information can be created jointly by partners, through the Earth Council/IISD collaboration on the Rio+5 web site and Internet broadcast; by delivering the Spinning the Web workshop at Global Knowledge 97; through the creation of the first SD Timeline (<http://sdgateway.net/intro/timeline/>), and, by the end of Phase I, an Introduction to Sustainable Development which draws together the unique perspectives of the Network members.

### **PROPOSALS FOR PHASE II SUPPORT**

Phase II (1998-2001) is the critical growth phase for Spinning the Web, during which we will consolidate and expand the backbone of a global network of sustainable development institutes and centres. The strength of the network lies in the sustainable development knowledge bases held by each member, its strong commitment to capacity building across the network, the balance of voices from both North and South, and IISD's capacity to host the Network Co-ordination Unit as the mediator of network development.

CIDA has expressed great interest in the Spinning the Web model. In response, IISD has developed a proposal to CIDA seeking support for sustainable development content creation and capacity building in Phase II. They have indicated particular interest in funding activities which will:

- strengthen and expand the SD knowledge base gathered in Phase I and expand the network into regions not yet covered;
- build capacity, in particular with new network members, in using Internet communications technologies effectively; and
- develop mechanisms to flow knowledge to and from the Internet, for groups within regions without Internet access.

## OBJECTIVES

The general objective of the project is to strengthen the current Spinning the Web Network, to ensure it is well established and durable.

The specific objectives will enable current members to:

- establish principles, protocols, and best practices of knowledge networking for sustainable development;
- exchange technology and SD knowledge across the network, through specific demonstration projects;
- transfer the Spinning the Web knowledge networking model within their regions and to other international networking initiatives; and
- ensure a seamless transition between Phase I and Phase II of Spinning the Web. With IDRC's support for the proposed level of activity and staffing, the Spinning the Web network will be able to bridge any gap that may occur between Phase I (ending in mid-August 1998) and Phase II funding from CIDA.

In addition to IDRC support and the IISD contribution to the project for technical, communications and administrative support, the Spinning the Web Network Associates will provide in-kind support, and financial support as required for Canadian youth interns placed with them during Phase II. This level of funding will support:

- Participation of 4 core member organisations based in developing countries, in demonstration projects on the exchange of SD knowledge and Internet technologies across the network.
- Up to 4 new "associate" members in Spinning the Web, to expand the network into the regions of current members.
- Expansion of access to Spinning the Web products, including CD-ROM production and "mirroring" of websites within regions.
- Testing and implementation of protocols for the use of tools to monitor and evaluate Internet traffic, and for "virtual" communications and collaborative work amongst network members.
- Hosting of two annual meetings, one to establish principles for knowledge networking; the second to review network operations, experiences and best practices.
- Communication of research results and best practices to other international networking initiatives.
- Co-ordination of the network activities by the Spinning the Web Officer based at IISD.

An investment in Spinning the Web over the next 2 years will establish it as a model for global knowledge networking. It will also ensure that knowledge for sustainable development, reflecting the views of South and North, public and private sector, policy and grassroots experience, will be put into the hands of decision makers throughout the world.

## **METHODOLOGY AND RESULTS**

As an action research project, Spinning the Web Phase II will require Network members and the Network Co-ordination Unit to strike a balance between implementation of specific tasks, reflection and documentation on what does and does not work, and the communication of research results to other international networking initiatives.

**Objective 1: Strengthen the current Spinning the Web network and other international networks through the establishment of principles, protocols, and best practices of knowledge networking for sustainable development**

**Task 1.1:** Establish principles and protocols of knowledge networking.

### **Rationale**

While many organisations around the world are exploring the concepts of knowledge networks and knowledge networking, there are still few clear statements on what it takes to make such initiatives successful. As one of the first global sustainable development knowledge networks, Spinning the Web is well positioned to document the principles and protocols of knowledge networking. Such principles will serve as guidelines and evaluation tools for the whole of the knowledge networking process, not only for Spinning the Web, but for IDRC's major networking initiative, PAN, and for other networking initiatives around the world, such as the UNDP-SDNP, One World, MIT's Cyber-Partnership and TogetherNet. These principles will be an important contribution to the work of the Global Knowledge Partnership and its upcoming meeting in 1999 in Malaysia.

### **Implementation**

Spinning the Web will be examined in comparison with recent knowledge network studies and other networking initiatives undertaken by both the member organisations and other groups involved with knowledge networking for sustainable development. Similar to the process by which IISD developed the Trade Principles for Sustainable Development, and the Bellagio Principles for measuring progress to sustainability, the Network Co-ordination Unit will initiate electronic consultations with the Network Associates and with a limited number of other experts. At the end of 1998/beginning of 1999, a meeting of the Associates and other experts will be convened. Through the "virtual" and "live" process, participants will discuss networking experience across regions, review progress to date, and will synthesise insights from practical ongoing efforts. Overarching principles will be sought which will provide the link between current theories of knowledge networks and their practical application in international development. These principles should also provide some insight on how the knowledge-networking model may help to facilitate the participation of women in sustainable development. While Information and Communication Technologies (ICTs) have traditionally been considered a male-dominated field, information sharing has long been



considered a particular skill of women. Thus, knowledge networking may require the participation of both men and women in order to be most effective.

## **Results**

- Publication of "Principles for Sustainable Development Knowledge Networking".
- A model for network development and governance that can be emulated by others.
- Understanding of women's contribution to and participation in knowledge networking
- Clarity for organisations which wish to establish or join networks as to how networks operate; better defined expectations and obligations among members.
- Clarity for the donor community on types of networks and levels of support required.
- Strengthening of the Spinning the Web Network itself.

**Task 1.2:** Improve tools for measuring the success of knowledge networking.

## **Rationale**

During Phase I, we found it challenging to assess the reach of information presented on the World Wide Web. Improved server log analyses packages are slowly becoming commercially available. However, there are still few standards, and less understanding, about what the resulting statistics mean or how to use them. We would like to be able to:

- determine whether there is one group of users we are all reaching i.e., a common global audience of users of sustainable development information;
- develop more targeted strategies for reaching our common and diverse audiences; and
- expand the audience for sustainable development information

## **Implementation**

- Review current methods of assessing traffic on web sites and provide advice / assistance to member organisations on how to analyse their server log statistics.
- Develop common protocols for measuring and analysing traffic (e.g.: common understanding of hits/visits/users; techniques for filtering "noise" from search engines, for identifying traffic from the South, etc.)
- Develop protocols for mapping the ways users interact with information on network sites, including common search terms used
- Based on analysis of Internet addresses (IP connections), target specific users with user surveys for qualitative assessment of network
- Document case studies from members on the use of site statistics, criteria and other mechanisms.

## **Results**

- Improved ability of member organisations to identify gaps, improve navigation, and meet the needs of users more effectively.
- Publication of "Evaluation Techniques for Knowledge Networking" including specific guidelines on how to collect quantitative and qualitative data on web site users.

**Task 1.3:** Test "virtual" communications and collaborative work tools.

### **Rationale**

Spinning the Web members have proven to be extremely interested in using Internet technologies not only to improve their ability to communicate with their external audiences, but also to improve the functioning of the Network. With a distributed global network of organisations, we are seeking ways to reduce the financial and opportunity costs of collaborative work and knowledge sharing. Of particular importance is the need to engage the research staff of the member organisations effectively. To be successful as a knowledge network, Spinning the Web must be used by the research staff of the member organisations not only to deliver the results of their work, but to exchange information about research in progress, solicit input and advice to research work, and identify areas of collaboration.

### **Implementation**

- Continue our current experiments with electronic conferencing and Internet video conferencing. This will include holding at least 2 virtual meetings of the network members.
- Develop an Extranet for private exchange of information amongst the member organisations on SD research in progress, projects in development, and funding.
- Document best practices

### **Results**

- Increased co-operation among the research staff of member organisations.
- Emergence of new knowledge networks focused on specific research issues such as climate change, economic instruments and so forth, as a result of research staff exposure to the Spinning the Web model.
- Document "Best Practices for Sustainable Development Knowledge Networking"

**Objective 2: Exchange technology and SD knowledge across the network through specific demonstration projects**

**Task 2.1:** Facilitate South-South collaboration on Internet content development

## **Rationale**

We anticipated in Phase I that, by the end of two years, project partners would take ownership of the Spinning the Web network. This has occurred and Network members have expressed strong interest in moving beyond bilateral capacity building efforts with IISD, towards working on joint projects with individual members across the network. At the May 1998 meeting of the members, a number of projects were identified, which could be supported in Phase II with minimal investment.

## **Implementation**

- Each Phase I member will identify two joint projects for completion during Phase II.
- The Network Co-ordination Unit (NCU) will facilitate the development of workplans and schedules. This will include details on how members will collaborate (virtual and/or face-to-face) and whether supplementary funding will be necessary for the joint project.
- Members will implement workplans.
- NCU will assist members with marketing of resulting Internet products.
- Members and NCU will evaluate the process of collaboration and document learnings

<b>Proposed Project</b>	<b>Members involved</b>	<b>Implementation</b>
Improved access to environmental legal information from developing regions/emerging economies	REC; FARN	Develop common interface to link REC's database of Central and Eastern Europe legislation and FARN's database of Southern Cone/other legislation
GIS trials on the Internet	REC; Development Alternatives with possible advice/input from SEI, IDRC	Using REC's hardware/software; and Development Alternatives' datasets, experiment with graphic representation of data on the Internet
Multimedia module integrating popular / community voices and policy options: suggested topic Sustainable livelihoods	ENDA; Development Alternatives; With input from IISD.	ENDA and Development Alternatives are involved with identifying and promoting sustainable livelihood options among the poor. They will work together to establish an online introduction which highlights the diverse voices, stories, and strategies of households struggling to make sustainable livelihoods a reality. This will include a special focus on the livelihood strategies of women and youth.
Reporting/Internet broadcasting of forums and colloquia	FARN; ENDA; with possible input from Earth Council/IISD	FARN plays a major role in convening speakers in their region; ENDA also relies on meetings to communicate SD knowledge. FARN and ENDA to work together on electronic methods to capture and broadcast such events.

## Results

- At least four joint Internet modules on sustainable development topics
- Improved capacity of organisations to deliver high quality Internet content
- Improved communication between researchers, and Internet teams, at member organisations
- Publication of "How Knowledge Networks Can Expand the Knowledge Base for SD"

**Task 2.2:** Increase Internet functionality and interoperability of member databases.

## Rationale

At least 5 core STW members are currently using CDS-ISIS software for library and other databases. The release of the latest version of MINISIS, with its WWW interface, gives us

an opportunity to test and implement interfaces across a variety of databases hosted by members. These databases range from environmental laws to library abstracts and publications catalogues.

### **Implementation**

- Install MINISIS software at up to six member sites
- Test MINISIS software for ability to enable joint searching of databases through the SD Gateway and member sites.

### **Results**

- Improved capacity of member organisations to manage large, distributed databases
- Decision-makers will have improved access to full range of information sources available on member web sites

**Task 2.3:** Expand delivery of Spinning the Web products within the regions of current members.

### **Rationale**

During Phase I, we found that, despite the rapid growth of Internet connectivity world-wide, a large community of low-bandwidth connected users will continue to exist for many years. Since this community includes a large number of small civil society organisations working to promote sustainable development at the sub-national level, we feel it is essential to make our Internet content more accessible to them. In Phase I, REC has prepared a trial CD-ROM that includes the content from REC's web site and the SD Gateway interface. In Phase I, we have also tested a mirror for the SD Gateway on REC's server, to improve connection speeds within Central and Eastern Europe. We may also be able to mirror the Gateway on ENDA's server by the end of Phase I.

### **Implementation**

- Develop and promote a CD-ROM that includes the content of all of the network members and the SD Gateway
- Provide SD Gateway mirrors at Development Alternatives (who anticipate having the capacity to do this in 1999) and the Earth Council.
- Test and improve partners' web sites for accessibility via GetWeb (Web to Email) servers.

### **Results**

- Increased regional access to sustainable development information

## **Task 2.4: Place Canadian interns with Spinning the Web members**

### **Rationale**

IISD secured funding in 1997/98, and again in 1998/99 from DFAIT and CIDA to place interns with Spinning the Web members, to provide support for capacity building and Internet communications of the SD research of the members. The 1998/99 interns will begin their placements in August 1998; they will support activities of the network members in Phase II. It has been interesting to find that an overwhelming percentage of applicants for this program have come from young Canadian women. Five out of the seven interns placed with Spinning the Web members will be women, four of whom will be in developing countries. Documenting their perspectives and observations will provide useful insights for studying the effects of gender on participation in knowledge networking.

### **Implementation**

- Members and the Network Co-ordination Unit jointly develop workplans for the interns. The Network Co-ordination Unit provides orientation materials and training for interns on Spinning the Web and knowledge networking.
- Members provide supervision of interns
- The NCU will integrate the work of the interns into the SD Gateway and will facilitate sharing of experiences between them in support of the Network

### **Results**

- Young Canadian development professionals familiar with knowledge networking principles and practices
- Increased sustainable development content development and application of innovative technologies among members

## **Objective 3: Transfer the Spinning the Web knowledge networking model within regions and to other international networking initiatives**

**Task 3.1:** Establish associate member organisations in the regions of each Phase I member.

### **Rationale**

The core members of the Network have agreed that it is important to have "associate member" organisations within the regions of the core members who have Internet capabilities and significant SD knowledge bases. In Phase II, we propose that each core member invite

an associate member to join Spinning the Web, to increase the SD content on the Internet from each region. Again, a minimal investment in associate members will have significant positive impact on the quality and depth of information accessed through the Network's SD Gateway.

### **Implementation**

- Core members identify potential associate member organisations and present supporting documentation to the Network for approval
- Potential associate members are invited to join the Network and participate in the project
- Associate members develop substantive Internet content on sustainable development
- NCU assists associate members in linking their information to the SD Gateway

### **Results**

- Increased capacity of southern NGOs to utilise the World Wide Web for communication of SD knowledge
- Increased access to SD information from the South and emerging economies
- Understanding of the strengths and limitations of the STW knowledge networking model

**Task 3. 2:** Transfer knowledge to other international knowledge networking initiatives, including the Global Knowledge Partnership.

### **Rationale**

There is a growing interest in knowledge networking as the new approach to international development, based on the sharing of information and experience across regions and throughout the world, replacing the more conventional transfers from North to South. In order to promote knowledge networking and to learn from the experiences of others who are also testing this approach, Spinning the Web must develop and implement a broadbased communication strategy.

### **Implementation**

- Publish and market knowledge networking research findings
- Continue dialogues with other initiatives such as PAN; OneWorld; MIT Cyber-Partnership; and UNDP SDNP
- Present Spinning the Web Workshop at GK'99 in Kuala Lumpur

### **Results**

- Learnings from the Spinning the Web experience will be broadly circulated; and other similar networking initiatives will be strengthened.

- Input to the Global Knowledge Partnership will support the shift within the development assistance community towards this new paradigm for international development
- Spinning the Web Network will itself be strengthened

## **SUMMARY OF ANTICIPATED RESULTS**

By September 2000, Spinning the Web will have put into full operation for the long term an institutional network with protocols to reliably produce and exchange high value sustainable development information. This will provide worldwide access to useful, timely, authoritative, regionally balanced knowledge about sustainable development. Specific results will include:

- The Spinning the Web Network will be well established, with future activities supported directly by current core members in the network.
- The Network will have been expanded further into the regions of the members.
- The role of the Spinning the Web Officer at IISD will be reduced as Network Core Associates assume responsibility for working together.
- We will have developed a set of general principles governing the establishment and operation of knowledge networks.
- We will have achieved international recognition for Spinning the Web as a model for knowledge networking; we anticipate adoption of the model by other networking initiatives.
- There will be a significantly expanded SD knowledge base on the Internet which includes products developed jointly by members in the Network.
- Finally, in accordance with the proposed methodology, the Network will have produced concrete actions and outputs from its meetings and demonstration projects, with a series of research products from this work documenting the approaches taken and results.



<b>Actions and Outputs</b>	<b>Research Products</b>
Engagement of Spinning the Web members and other experts in examining knowledge networking as a new approach to international development	Principles for Sustainable Development Knowledge Networking
Capacity building with both North and South members in analysing Internet traffic	Evaluation Techniques for Knowledge Networking
Implementation of new, cost-effective, "virtual" work tools, such as Internet videoconferencing, and an Extranet for Spinning the Web, to support exchange of research in progress among members	Best Practices for Sustainable Development Knowledge Networking
CD-ROM of the SD Gateway; and up to 3 Gateway mirror sites Knowledge bases of 4 Associate members integrated into the SD Gateway; A suite of member in-house databases made accessible on the Internet using MINISIS A demonstration multimedia module which integrates popular voices and policy strategies for sustainable development A suite of Internet broadcasts from SD events hosted by member organisations A demonstration GIS application on the Internet	How Knowledge Networks Can Expand the Knowledge Base for Sustainable Development

## **SUSTAINABILITY OF SPINNING THE WEB NETWORK**

Spinning the Web is being built within a 7- 10 year time frame:

- Phase I: Pilot phase (1996-98)
- Phase II: Development phase (1998-2001)
- Phase III: Consolidation phase (2001-2005)

By the end of Phase II, Spinning the Web will have put into full operation, for the longer term, an institutional network with protocols to reliably produce and exchange high value sustainable development information. This will provide worldwide access to useful, timely, authoritative, regionally balanced knowledge about sustainable development. We see two opportunities for longer term support for Spinning the Web. First, following the model of IISD's Earth Negotiations Bulletin, the Network Co-Ordination Unit will work to attract a target audience of government departments and private sector corporations who will contribute annual grants to support the services of the network. Second, network members will use the reputation of the Spinning the Web Network to attract donor funding for the creation of additional new joint Internet products and services.

## LONGER TERM IMPACTS OF SPINNING THE WEB

Spinning the Web has the potential to have a positive and substantial impact on three major audiences:

- **Participating institutions:** The world's key sustainable development institutions will benefit from the opening of doors to collaboration, brought about by the rapid sharing of knowledge and expertise within the network. Already we are seeing a shift from working independently, to working collaboratively on issues of mutual concern, from policy research to grassroots applications. This work will be enriched by greater information flowing in from the institutions in developing countries and emerging economies. Members will in turn be able to support their own networks more effectively, by disseminating information from Spinning the Web within those networks. And all members, in both the North and South, will have improved technical capacity to use the full potential of the Internet.
- **Decision makers:** Each member works to influence key decision makers across all sectors in their regions. Spinning the Web will provide an expanded base of useful information for the audiences of each member, in languages useful and appropriate for those audiences, including English, French and Spanish. And decision makers worldwide will have access to a better balance of information, informed by both North and South perspectives. The network as a whole will have more effective influence on decision makers through the reputation of network members and the quality of collaborative work.
- **Sustainable development education:** Students, academics, citizens, business people, media and others interested in learning more about sustainability, and how to implement it, will gain improved access to some of the best information and knowledge in the world.

Our work in Spinning the Web directly addresses a number of challenges facing development in the 21st century. It will contribute to the implementation of Chapter 40 of Agenda 21, by significantly improving access to and increasing flows of information within the South. Both the Global Knowledge Partnership and the forthcoming World Bank report on Knowledge for Development highlight the shift from traditional patterns of financial aid and technology transfer to the critical exchange of knowledge and information. Spinning the Web is demonstrating how that shift can and should take place. Finally, within Canada, Spinning the Web responds to the Strong Task Force Report: we are showing how Canadians, including Canadian youth, can contribute our expertise to the global community in building the new knowledge networks for sustainable development.

## **SPINNING THE WEB NETWORK MEMBERS**

### **Development Alternatives**

New Delhi, India (Regional influence - South Asia)

The Development Alternatives family of organisations brings together traditional knowledge and modern science. It designs appropriate technologies and institutions for the creation of sustainable livelihoods. Its activities focus on basic human needs: water, shelter, energy, sanitation, environmental resources and employment.

### **Earth Council• Earth Council**

San Jose, Costa Rica

The Earth Council is an international non-governmental organisation (NGO) that was created in September 1992 to promote and advance the implementation of the Earth Summit agreements. Its main activities include: economics and sustainable development, governance, mediation and conflict resolution, and public participation.

### **Environmental Development Action in the Third World (ENDA)**

Dakar, Senegal (Regional influence - West Africa)

ENDA is a non-profit international organisation with branches around the world which seeks to promote sustainable development in the developing world. Through its projects against poverty, and its research, training and exchange programs, it strives to integrate the environmental, economic and cultural relationship in activities to meet the needs and objectives of grassroots groups.

### **Fundación Ambiente y Recursos Naturales (FARN)**

Buenos Aires, Argentina (Regional influence - Southern Cone)

FARN (The Environment and Natural Resources Foundation) was established in 1985 as a non-governmental, non-partisan, non-profit organisation whose mission is the promotion of sustainable development policies, laws, economic activities and institutional arrangements. Its target audience is decision-makers in the public and private sectors.

### **International Development Research Centre (IDRC)**

Ottawa, Canada

IDRC is a public corporation created by the Canadian government to help communities in the developing world find solutions to social, economic, and environmental problems through research. IDRC connects people, institutions, and ideas to ensure that the results of the research it supports and the knowledge that research generates, are shared equitably among all its partners, North and South.

### **International Institute for Sustainable Development (IISD)**

Winnipeg, Canada

IISD's mission is to promote sustainable development in decision making internationally and within Canada. It contributes new knowledge and concepts, analyses policies, identifies and disseminates information about best practices, demonstrates how to measure progress, and

builds partnerships to amplify these messages.

**Regional Environmental Center for Central and Eastern Europe (REC)**

Szentendre, Hungary (Regional influence - Central and Eastern Europe)

REC is a non-partisan, non-advocacy, not-for-profit organisation with a mission to assist in solving environmental problems in Central and Eastern Europe (CEE). It encourages co-operation among non-governmental organisations, governments, businesses and other environmental stakeholders by supporting the free exchange of information and by promoting public participation in decision-making.

**Stockholm Environment Institute (SEI)**

Stockholm, Sweden

SEI is an independent, international policy research institute specialising in sustainable development and environment issues. SEI conducts a comprehensive research, consulting and training program that focuses on the links between ecological, social and economic systems at global, regional, national and local levels. It works out of four centres and has a network of associates in some 25 countries.

<b>TIMELINE</b>	
Establish principles and protocols of knowledge networking	<p><b>October – December 1998</b> Each member to examine networking activities of their organisation, compare with recent studies, STW and other international initiatives Initiate “virtual” consultations in preparation for “live” meeting</p> <p><b>December/January 1999</b> Convene network meeting; invite selected representatives of other networks; evolve set of Knowledge Networking Principles</p> <p><b>January - April 1999</b> Document and communicate findings; present findings at GK’99.</p>
Improve tools for measuring the success of knowledge networking	<p><b>October - December 1998</b> Develop common protocols for measuring and analysing traffic; and means of calculating volume of information from the South and transitional economies</p> <p><b>October 1998 – September 2000</b> Monitoring and analysis of traffic</p> <p><b>August - December 1999</b> Develop protocols for mapping user interaction with information on network sites</p> <p><b>January - April 2000</b> Document and communicate findings</p>
Test "virtual" communications and collaborative work tools	<p><b>October 1998 - May 2000</b> Continue experimentation with electronic conferencing and Internet video conferencing, including 2 virtual Network meetings and the virtual consultations on Principles</p>
Facilitate South-South collaboration on Internet content development	<p><b>October 1998 - September 1999</b> 2-3 joint projects developed and implemented: REC and FARN; ENDA and Development Alternatives; FARN and ENDA</p> <p><b>September 1999 - September 2000</b> Continuation of joint projects; plus REC/DA GIS project.</p> <p><b>May - July 2000</b> Report on methods of collaboration in developing SD content</p>
Increase Internet functionality and interoperability of member databases	<p><b>January - December 1999</b> Install MINISIS software at up to six member sites; test interfaces to access similar databases</p>
Expand delivery of Spinning the Web products within the regions of current members	<p><b>October - December 1998; January - June 1999; July - December 1999</b> Mirror sites at ENDA; Earth Council; Development Alternatives</p> <p><b>January – June 1999</b> Develop full CD-ROM of member sites and SD Gateway interface.</p> <p><b>July 1999 - September 2000</b> Update and distribute CD: include sites from Associate members</p>
Supervise workplans of Canadian interns placed with Spinning the Web members	<p><b>October 1998 – March 1999</b> Develop workplans and supervise interns in their placements</p>
Establish associate member organisations in the regions of each Phase I member	<p><b>January – March 1999</b> Selection of associate members</p> <p><b>April 1999 - September 2000</b> Workplans established and implemented for associate members</p>
Transfer experience to other international knowledge networking initiatives	<p><b>October 1998 - September 2000</b> Establish and implement a communications strategy for research results, including print, electronic, and conference venues</p>

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**Spinning the Web:**  
**Building a Global Knowledge Network for Sustainable Development**  
**A Proposal submitted to the**  
**Canadian International Development Agency**  
**by the International Institute for Sustainable Development**  
**March 1998**

**Project Overview**

**Introduction**

A fundamentally new development paradigm – knowledge networking -- is emerging rapidly through the evolution of the new information and communications technologies. We are facing an unprecedented opportunity to bring institutions and people together from all regions of the world and all sectors of society, to exchange information, share views and experience, and create new knowledge together. Recent events such as Global Knowledge '97 and the forthcoming World Development Report on Knowledge for Development demonstrate the shift to this new approach. There is clear agreement amongst development agencies and institutes that sustainable development action should be the goal.

Knowledge networking has the potential to change the dynamics of development:

- by supporting direct flows of information from the South to better inform Northern and global institutions;
- by flowing rapid and reliable information to the South so people there can customize solutions for their own needs;
- by sharing knowledge between the North and the South for mutual benefit.

**Key to knowledge networking is the recognition that we need to learn from each other, and that institutions around the world need to build the capacity to work with the new technologies for rapid and effective knowledge creation, aggregation and exchange.**

From its beginning in 1990, IISD has dedicated 50% of its program work to communications, to engage people of all backgrounds in producing and sharing knowledge about sustainable development. We are recognized for our cost-effective and opportune uses of new information technologies, our delivery of timely, relevant and authoritative information to decision makers and our ability to build strategic partnerships. Our flagship reporting service on international negotiations on environment and development, the *Earth Negotiations Bulletin*, is setting a standard for openness, transparency and diplomacy in the delivery of sustainable development knowledge. IISDnet, our award winning Internet server, offers users a roadmap to sustainable development: we take the user from the principles and frameworks for sustainability, through IISD's contributions to policy and practice, to forums for participation in debate and decisionmaking. For the past 6 years, IISD has been building a position of strength in knowledge networking. A brief statement of our efforts, and of our understanding of knowledge networks, is appended to this proposal.

## **Spinning the Web**

**Spinning the Web is a prototype Knowledge Network, initiated and coordinated by IISD, in which eight of the world's leading Sustainable Development Institutes are using Internet technologies to communicate our collective research and experience in sustainable development to the world. Five of these institutes are based in developing regions.**

Phase I, from August 1996 to August 1998, is being supported by IISD and IDRC. This is very much a pilot phase, in which the network is exploring approaches to using information technologies as transformers in the sustainable development process. Initial experiments with building capacity within the institutes in the South to participate in knowledge networking, placing young Canadian interns to assist these institutes, and developing collaborative Internet interfaces and products to draw attention to both North and South perspectives, have proven fruitful. A major output of our work can be accessed at <http://sdgateway.net>.

## **Proposal to CIDA**

**This proposal to CIDA requests support for building Spinning the Web as a global knowledge network for sustainable development policy and practice. This network will improve governance and decision-making by significantly increasing the exposure of Southern organizations' knowledge on how to address the linkages among environmental, social, economic and security issues. Since the network also includes a number of Northern institutes, this project will contribute to the creation of a new model of international co-operation and development based on knowledge sharing. IISD proposes to enter a second phase of Spinning the Web, to strengthen and expand this network over the next three years.**

The objectives are to:

- Operationalize knowledge networking, in support of improved environmental and economic management, better governance and decision-making, and basic human needs.
- Deliver high quality, relevant and timely content on the Internet about sustainable development efforts, in particular content derived from Southern experiences and points of view, including those of women and indigenous peoples; in multiple languages.
- Build the capacity within organizations around the world to work with the new technologies for rapid and effective knowledge creation, aggregation and exchange, with special attention to the empowerment of women in this field.
- Strengthen knowledge sharing within regions: due to the low quality of Internet access currently available in many parts of the world, the Network will build capacity within member organizations to act as knowledge brokers, providing seamless links between the Internet and traditional communications channels in their regions.
- Deliver combined knowledge bases effectively to decision-makers, and engage broader audiences for sustainable development action.

## **Project Outline: Phase II, August 1998 – July 2001**

At present, Network members represent five developing regions and three institutions based in the North. We propose an expansion of the Network to ensure representation from ten regions in the South. Between five and ten Northern institutions will be invited to collaborate in Network activities, using their own resources. These organizations will provide the world with a broad spectrum of sustainable development concerns, and a good representation of regional views.

Five general tasks will be undertaken by the network as a whole:

- **Create a fully operational knowledge network**, establishing principles and protocols of operation, reviewing and evaluating the role which knowledge networking has to play in the implementation of sustainable development.
- **Deliver each organization's knowledge base on the Internet** in ways that can be better accessed and connected with the knowledge bases of other members, and the rest of the world. A dual strategy will be utilized:
  - Provide developing country members with the resources necessary to design and deliver their information in their working languages on their own web sites.
  - Create and maintain an Internet gateway, in English, French and Spanish, which brings the web sites of each member into a common interface, providing a single entry point and higher profile to the sustainable development understandings of developing countries (the prototype SD Gateway is at: <http://sdgateway.net>).
- **Build the capacity to work with the Internet:** Spinning the Web is not designed to put new Internet nodes in place or to host web sites for organizations, but rather to strengthen each member's capacity to use the Internet as an effective communications tool. This will include evaluation of current Internet infrastructures; upgrading systems and finding innovative solutions to technical and cost concerns, and training in web site architecture and design. Wherever possible, young Canadian interns will be placed with members for effective transfer of skills.
- **Strengthen regional information flows:**
  - to improve access to information throughout the South;
  - to ensure that those organizations and individuals who are not on the Internet are visible to those decision makers who use the Internet as a principal research tool.Each member will build a two-way information flow element into their workplans, to test how information can flow out of regional networks onto the Internet, as well as flow into the regions. Appropriate models will be developed for use by other networks.
- **Find ways to effectively engage decision makers** in accessing and interacting with the network's collective understanding of sustainable development. This work will necessitate developing appropriate marketing and promotion strategies for the network, and will include other innovative approaches:
  - Creating customized information reports from the network for target audiences
  - Hosting series of electronic conferences on critical and timely issues
  - Implementing new multimedia approaches to attract broader audiences using audio, video, graphical and interactive elements to engage their attention and stimulate understanding of complex issues and views

**We believe that our efforts in creating Spinning the Web are unique. The project is moving through all aspects of knowledge networking, from building the technical infrastructure and helping institutions to use it effectively, to combining their messages within a common context, to creating new understanding out of those messages, and finally, engaging wider audiences for action through the new broadcast media.**

### **Proposed CIDA-supported project participants**

In addition to the participation of current members in a second phase, five new members from developing countries will be selected according to criteria established by current Network members. For the purposes of this proposal, IISD has identified several organizations from regions not yet represented in the Network, which have the potential to benefit from and contribute actively to Spinning the Web. When funding commitments are in place, these organizations will be proposed to the Network for nomination to Spinning the Web.

<b>Current Network Members: Regional representation</b>	<b>Proposed Expansion</b>
Central and Eastern Europe: Regional Environment Centre Atlantic West Africa: ENDA, Senegal South Asia – India: Development Alternatives South America - Southern Cone: Fundacion Ambiente y Recursos Naturales Central America: Earth Council	South America - Andean region [member to be proposed: Fundacion Futuro Latinoamericano] South Pacific/Small Island States [member to be proposed: South Pacific Regional Environment Programme and/or the South Pacific Forum Secretariat] Southeast Asia [member to be proposed: Asian Institute for Technology: School of Environment, Resources and Development or the Environment Research Institute, Chulalongkorn University] South Asia – Pakistan [member to be proposed: IUCN Pakistan or the Sustainable Development Policy Institute] Southern Africa [member to be proposed: Zimbabwe Regional Environment Organization]
<b>Current International Collaborators</b>	
International Institute for Sustainable Development (IISD) International Development Research Centre (IDRC) Stockholm Environment Institute (SEI)	

### **Audiences for Spinning the Web**

Spinning the Web has the potential to have a positive and substantial impact on three major audiences:

- **Participating institutions:** The world's key sustainable development institutions will benefit from significant institutional changes brought about by the rapid sharing of knowledge and expertise within the network. Already we are seeing a shift from working independently, to working collaboratively on issues of mutual concern, from policy research to grassroots applications. This work will be enriched and validated by greater information flowing in from developing country institutions. Members will in turn be

able to support their own networks more effectively, by disseminating information from Spinning the Web within those networks. And all members, in both the North and South, will have improved technical capacity to use the full potential of the Internet.

- **Decision makers:** Each member works to influence key decision makers across all sectors in their regions. Spinning the Web will provide an expanded base of useful information for the audiences of each member, in languages useful and appropriate for those audiences, including English, French and Spanish. And decision makers worldwide will have access to a better balance of information, informed by both North and South perspectives. The network as a whole will have more effective influence on decision makers through the reputation of network members and the quality of collaborative work.
- **Sustainable development education:** Students, academics, citizens, business people, media and others interested in learning more about sustainability, and how to implement it, will gain improved access to some of the best information and knowledge in the world.

## **Broader impacts**

By the end of Phase II, Spinning the Web will have put into full operation for the long term an institutional network with protocols to reliably produce and exchange high value sustainable development information. This will provide worldwide access to useful, timely, authoritative, regionally balanced knowledge about sustainable development.

Our work in Spinning the Web directly addresses a number of challenges facing development in the 21<sup>st</sup> century. It will contribute to the implementation of Chapter 40 of Agenda 21, by significantly improving access to and flows of information within the South. Both Global Knowledge 97 and the forthcoming World Bank report on Knowledge for Development highlight the shift from traditional patterns of financial aid and technology transfer to the critical exchange of knowledge and information. Spinning the Web is demonstrating how that shift can and should take place. Finally, within Canada, Spinning the Web responds to the Strong Task Force Report and the emerging CIIS, Canada's International Information Strategy: we are showing how Canadians, including Canadian youth, can take world leadership in building the new knowledge networks for sustainable development.

## **Women and Knowledge Networking**

Spinning the Web Phase II will build on learnings brought forward from our partners in Phase I about gender considerations in information and communications projects. Several women have worked on the pilot phase in various capacities, two from developing countries and two at IISD. This has led to a review of the role of women in all project tasks within Phase II. A greater representation of women representing the member organizations at Network meetings will help us to develop a knowledge networking model which reflects the full range of collaboration styles. In developing the workplan for new Internet content development, all members must take into consideration the information needs of women in their region. In Phase II, we will encourage members to recruit women to fill staff positions funded through the project. In addition, we will encourage all members to provide basic Internet training to their staffs, including administrative positions usually held by women. We will encourage member

organizations to interact with regional women's networks. This will facilitate the flow of sustainable development information between women in many parts of the world. Finally, Spinning the Web members must experiment with methods of repackaging Internet information into culturally and gender-sensitive formats. One of the critical outcomes of GK'97 was an increased respect for the role that radio plays in providing information to busy women decision-makers. We will explore ways to merge community radio with the new Internet broadcast technologies.

## **Evaluation**

Emphasis will be placed on “results-based management” to the extent appropriate and practical. Doing so will involve the definition of clear, measurable objectives for all project components at the outset of the project, and as part of each member’s individual workplans, and linking financial disbursements to progress in achieving them.

In planning for a results-based management approach, we have prepared and attached to this Project Overview a preliminary Logical Framework Analysis for Spinning the Web. This analysis focuses on broad goals, purposes and inputs of the project. Upon the initial commitment of support from CIDA, a logical framework analysis will be prepared for each of the members in the network, detailing more specifically the convergence of goals and purposes of participation in Spinning the Web with CIDA country/regional strategies and with the network as a whole.

## **CIDA Support**

Building this type of network requires substantial time and institutional change within each member organization. Nevertheless, all of our current members have recognized the value of the approach and are enthusiastic about moving into a second phase of development. IDRC has expressed interest in supporting a second phase, to transfer knowledge and experience between the Spinning the Web network and IDRC’s major Internet projects in Asia, Latin America and Africa. One other international partner has expressed willingness to source funding to expand its activities within the network.

We are seeking support from CIDA for Phase II of Spinning the Web, in recognition of CIDA’s express interest in the knowledge paradigm for development, and in its commitment to sustainable development.

**It is our proposal that CIDA support the Spinning the Web project at a level of Cdn \$1.6 million per year over three years for a total contribution of Cdn \$4.8 million. Funding will support participation of 10 member organizations from developing countries, activities of the Network Co-ordination Unit based at IISD and overall project management by IISD.**

**An investment in Spinning the Web over the next 3 years will establish it as the model for global knowledge networking. It will also ensure that knowledge for sustainable development, reflecting the views of South and North, public and private sector, policy and grassroots experience, will be put into action throughout the world.**

## Preliminary Logical Framework Analysis for Spinning the Web Phase II

NARRATIVE SUMMARY	EXPECTED RESULTS	PERFORMANCE MEASUREMENT	ASSUMPTIONS
<p><b>Goal</b></p> <p>The Spinning the Web project will create a formal knowledge network on sustainable development policy and practice. This network will improve governance and decision-making by significantly increasing the exposure of Southern member organizations' knowledge about how to address the linkages among environmental, social, economic and security issues. Since the network also includes a number of Northern institutes, this project will contribute to the creation of a new model of international co-operation and development based on knowledge sharing.</p>	<p><b>Impact</b></p> <p>Improved decision-making for sustainable development via:</p> <ul style="list-style-type: none"> <li>• direct flows of information from the South improving Northern and global institutions affecting the South;</li> <li>• rapid access to reliable information throughout the South, enabling people there to customize solutions for their own needs;</li> <li>• member organizations undergoing a culture shift which reduces barriers to collaborative modes of operation; and</li> <li>• broader popular audiences becoming engaged in sustainable development.</li> </ul>	<ul style="list-style-type: none"> <li>• Decision-makers are aware of and utilize the Network's Internet products</li> <li>• Analysis of network Internet traffic indicates significant North-South and South-South exchanges of information</li> <li>• Member organizations develop additional collaborative research and/or communications projects</li> <li>• The knowledge networking model is adopted by other organizations</li> </ul>	<ul style="list-style-type: none"> <li>• Knowledge networks foster creativity and produce results at a faster rate than otherwise possible.</li> <li>• Networks have more effective influence on decision-makers based on the size of network, the reputation of members and the quality of collaborative work.</li> <li>• Decision-makers (and/or their research staffs) in the North and South have access to ICTs and are using the Internet to gather information.</li> <li>• National and community level organizations exist that can "interpret" information flowing from the regional level down and back up again so that it is meaningful to local circumstances.</li> </ul>
<p><b>Purpose</b></p> <p>Spinning the Web will develop the capacity of member organizations from developing regions to work with new Internet technologies for rapid and effective creation, aggregation and exchange of sustainable development knowledge.</p> <p>While many excellent SD policies and practices have been developed around the world, it is still difficult for</p>	<p><b>Outcomes</b></p> <ul style="list-style-type: none"> <li>• A well structured, efficient and durable knowledge network with solid representation from developing regions</li> <li>• Increased visibility of Southern perspectives of sustainable development on the World Wide Web</li> <li>• Increased institutional and human capacity to work with the Internet in key regional organizations</li> </ul>	<ul style="list-style-type: none"> <li>• Member organizations see enough benefits from participating in the knowledge network that it becomes self-sustaining.</li> <li>• There is an increased proportion of content from the South accessible through the SD Gateway</li> <li>• Women within member organizations have an increased capacity to utilize the Internet for research and</li> </ul>	<ul style="list-style-type: none"> <li>• Identification of an organization in each designated region which meets Network membership criteria (e.g. sustainable development focus, Internet connectivity, involved in regional networks)</li> <li>• Institutional policies are supportive of Internet use among staff.</li> <li>• Member organizations support participation in the Spinning the Web Network; they are willing</li> </ul>

<p>organizations in the South to communicate their contributions and perspectives. They need to be able to utilize the Internet to provide decision-makers with high quality, relevant and timely content in multiple languages. There is also a need to engage wider portions of society, with and without direct access to the Internet, in these dialogues.</p>	<ul style="list-style-type: none"> <li>• Strengthened sustainable development information flows within each designated region</li> <li>• Strengthened sustainable development information flows between regions</li> <li>• Increased number of decision makers engaged with sustainable development concerns</li> </ul>	<p>communications</p> <ul style="list-style-type: none"> <li>• Members have successfully implemented models of two-way regional information flows</li> </ul>	<p>to sign and to abide by a formal network agreement.</p>
<p><b>Resources/Activities</b></p> <p>Resources for Spinning the Web will be utilized for:</p> <ul style="list-style-type: none"> <li>• delivery of sustainable development research and experience on the Internet (50%);</li> <li>• capacity building to work with new Internet technologies (25%);</li> <li>• strengthening information delivery mechanisms within developing regions (25%)</li> </ul> <p>Activities can be grouped into five general tasks:</p> <ul style="list-style-type: none"> <li>• Strengthening and expanding the Spinning the Web Knowledge Network</li> <li>• Delivering sustainable development research and experience via the WWW</li> <li>• Building capacity of member organizations</li> <li>• Strengthening regional information flows</li> <li>• Ensuring SD content reaches decision makers</li> </ul>	<p><b>Outputs</b></p> <ul style="list-style-type: none"> <li>• Ten organizations from developing countries members in the Network</li> <li>• Individual protocols and policies to ensure long term delivery of member information on the Internet</li> <li>• Ten well established, stable, reliable Internet sites in developing regions containing a rich collection of high quality sustainable development knowledge (including multimedia and customized services)</li> <li>• Series of electronic conferences on critical and timely issues</li> <li>• Improved SD Gateway knowledge navigation tools for integrating work of members</li> <li>• Member organization staff trained in web site architecture and design</li> <li>• Member organizations have strengthened capacity to act as knowledge brokers within their regions</li> </ul> <p>Models of two-way information flows between the Internet and traditional channels of communications.</p>	<ul style="list-style-type: none"> <li>• Ten organizations from developing countries have signed the formal Network agreement</li> <li>• Each member has an Internet communications strategy and policies</li> <li>• Each member has an up-to-date web site containing high quality sustainable development information</li> <li>• Electronic conferences have been held</li> <li>• SD Gateway contains new tools and briefs for decision-makers and researchers</li> <li>• Members' staff has received training in Internet research and communications.</li> <li>• Member organizations have procedures for knowledge brokering</li> <li>• Models of regional information flow have been developed and shared within the Network</li> </ul>	<ul style="list-style-type: none"> <li>• Network members develop and implement workplans collaboratively with Network Co-ordinating Unit staff.</li> <li>• Members establish communications strategies that designate significant portions of their knowledge bases for international public access on the Internet.</li> <li>• Members are willing to act upon synergies in research areas and work collaboratively across institutional boundaries.</li> <li>• Startup times are contingent upon the level of Internet infrastructure and experience currently in place. Some members will be further ahead than others.</li> </ul>



**Spinning the Web:  
Building a Global Knowledge Network for Sustainable Development**  
A Proposal submitted to the  
**Canadian International Development Agency**  
by the **International Institute for Sustainable Development**  
**March 1998**

**Project Description**

**A. Spinning the Web: Development Phases**

In 1996/97, in partnership with IDRC, IISD initiated Spinning the Web, which has become our prototype for bringing together a network of well-established, highly skilled institutions working on sustainable development. Members have been carefully selected to capture a broad range of policy level and grassroots work as well as regional views. This network is designed to draw an even broader range of people into the web of information required for sustainable development action. It focuses on expanding the available knowledge base with input from regions throughout the world. And by bringing together a number of the world's key institutions and centres, the network will support the rapid co-creation of new knowledge and solutions for the world – tangible advancements for sustainable development.

Spinning the Web is being built within a 7- 10 year time frame:

- Phase I: Pilot phase (1996-98)
- Phase II: Development phase (1998-2001)
- Phase III: Consolidation phase (2001-2005)

**Phase I: Activities and accomplishments, 1996-1998**

Phase I is very much a pilot phase, in which the network is exploring approaches to using information technologies as transformers in the sustainable development process. This is still a young network (18 months in operation), but we can demonstrate some significant results to date:

- **Network development:** We have established a core group of 8 key organizations working in sustainable development around the world: the Regional Environment Center for Central and Eastern Europe (Hungary), Fundacion Ambiente y Recursos Naturales (Argentina), ENDA (Senegal), Development Alternatives (India) and the Earth Council represent developing regions; Stockholm Environment Institute, IISD and IDRC participate as international collaborators. We are currently building the infrastructure and protocols to support network operations, including setting up the network hub and search engine, implementation of listservs and network meetings for communications, and development of network membership agreements, and workplans,.
- **Capacity building:** Regional members are now upgrading their Internet infrastructures with financial and technical support from the network. CIDA and DFAIT Youth International

Interns have been placed with each member to assist them in using the Internet creatively and effectively, with great success.

- **Knowledge navigation:** We have designed a multilingual Internet interface (English-French-Spanish) which brings together the research of the members under a common framework: the SD Gateway (<http://sdgateway.net>)
- **Knowledge creation:** Drawing from the information in the Gateway, we are creating a Primer on Sustainable Development, which identifies critical issues and solutions being brought forward by the members. We are also linking to high quality research from other institutions. We have demonstrated how modules of information can be created jointly by members through the Earth Council/IISD collaboration on the Rio+5 web site and Internet broadcast and by delivering the Spinning the Web workshop at Global Knowledge 97.

## **Phase II: Component activities from 1998/99 – 2000/2001**

Phase II is the critical growth phase for Spinning the Web. In effect, this phase will build the backbone for a global network of institutes and centres. The strength of the network lies in the strong commitment:

- a) to delivering high quality, timely sustainable development research and practice,
- b) in balancing voices from both north and south,
- c) its support for capacity building, and
- d) in IISD's role as mediator of network development.

In Phase II, a major focus of this network will be on bringing forward the knowledge and experience of developing countries onto the Internet. We have several major tasks ahead in the next three years:

- Ensure that the fledgling network is well established and durable.
- Expand the network to include regions not yet covered (eg, Southeast Asia; Andean region of South America).
- Provide increased access to multilingual content on sustainable development issues.
- Bring in the knowledge of the subnetworks of each member, and in turn, develop mechanisms to flow information from Spinning the Web as far and deeply as possible into member regions.
- Ensure that decision makers know how to access and use the knowledge bases created and made accessible by the network.

## **B. Proposed Work Program, 1998-2001: Phase II**

**It is our proposal that funding from CIDA supports a Spinning the Web network member in each of ten developing regions and emerging economies, and related activities of the Network Co-ordination Unit based at IISD.**

At present, Network members represent five developing regions and three institutions based in the North. We propose an expansion of the Network to ensure representation from ten developing regions, with between five and ten Northern institutions collaborating in Network activities. **A total of ten organizations from developing countries in the network will**

**provide the world with a broad spectrum of sustainable development concerns, and good representation of regional views, as summarized below.**

<b>Region</b>	<b>Member organization</b>
Central and Eastern Europe	Regional Environment Centre for Central and Eastern Europe [Phase I member]
Atlantic West Africa	ENDA-Dakar, Senegal [Phase I member]
South Asia - India	Development Alternatives [Phase I member]
South America - Southern Cone	Fundacion Ambiente y Recursos Naturales [Phase I member]
Central America	Earth Council [Phase I member]
South America - Andean region	Fundacion Futuro Latinoamericano [Member to be proposed]
South Pacific/Small Island States	South Pacific Regional Environment Programme or Forum Secretariat [Member to be proposed to network]
Southeast Asia	Asian Institute of Technology School of Environment, Resources and Development or Environment Research Institute, Chulalongkorn University [Member to be proposed to network]
South Asia - Pakistan	IUCN-Pakistan or Sustainable Development Policy Institute [Member to be proposed to network]
Southern Africa	Zimbabwe Regional Environment Organization [Member to be proposed to network]

The five members currently representing developing regions will continue to do so in Phase II. In Phase I, these members were identified through a lengthy consultative process with regional experts and the organizations themselves. In Phase II, new members will be identified according to criteria established by current network members. For the purposes of this proposal, we have identified several organizations from other regions, which have the potential to participate in, benefit from and contribute actively to Spinning the Web. If funding is secured, current members will discuss the nomination of these organizations to the network.

The funds required for each member's participation in the network are approximately \$160,000 Cdn per year for three years (including indirect project costs related to accounting and administration). Of the direct project costs, approximately 75% will be allocated for expenses incurred directly by the member organization in executing their workplans. The remaining 25% will be allocated for activities of the Network Coordination Unit at IISD, which will include advice, training and technical support to member organization staff, making the linkages between the member's knowledge bases and that of other members in the network, and support for the Network hub/gateway (the navigational tools and communications infrastructure required to support the network), and finally, promotion of the network.

Each member organization will have a separate agreement with IISD setting out the workplan and budget for their participation in the network. These workplans will reflect the objectives of the project, with the following distribution of work:

- 50% to the delivery of the member organization's sustainable development research and experience on the Internet. This will include the expansion of web sites, the building of databases and the creation of online forums, and the integration of their information with that of other members in the Network;

- 25% to capacity building within the organization to work with the new technologies for rapid and effective knowledge creation, aggregation and exchange;
- 25% on strengthening delivery mechanisms within their regions, providing seamless links between the Internet and traditional communications channels in their regions.

The following section describes the five major tasks for Phase II, to be undertaken by all participants in the project. The last section of this proposal provides a more detailed description of the regional priorities, benefits to and contributions from each of the proposed 10 developing country participants.

### **C. Major Tasks for Spinning the Web Participants**

#### **Task 1: The Knowledge Network Model: Strengthening and Expanding Spinning the Web**

Based on our experience in Phase I, we are evolving a formal network for Spinning the Web. In Phase II, we will focus on strengthening the governance agreement outlining the roles, responsibilities and decision making processes of the network. The basic structure of the formal Knowledge Network will consist of the member organizations, with a Network Associate representing each member organization; and a Network Co-ordination Unit (NCU) based at IISD. Each member will have a “bilateral” relationship with the NCU at IISD, with respect to the establishment of workplans for content delivery, capacity building and dissemination of information within its region of influence, and for disbursement of funds. Each member will also have a relationship with the full Network, to facilitate the integration of its work with that of other members, to cooperate on joint projects, and to engage decision makers in working with the collective knowledge bases.

For consideration as a member of the Spinning the Web Network, an organization must possess the following characteristics:

- Have substantial work/experience on the issue of sustainable development
- Have published and disseminated research on a regional level about sustainable development issues
- Maintain a balance in its work between sustainable development policy analysis and on-the-ground implementation.
- Possess a clear commitment to communications as an integral part of its work, to catalyze and support action among decision makers and multistakeholder networks.
- Have the computer and telecommunications infrastructure required for Internet/World Wide Web; or have access to and ability to set up the required infrastructure
- Be well established, with some level of stability in terms of funding and long-term viability.

The Network Associate will be a senior person within the organization, familiar with the research results of the program, and with a commitment to and responsibility for innovation in communicating sustainable development.

In our discussions with IDRC on their contribution to Phase II, we will be exploring how to create a set of principles and protocols for knowledge networking, testing them with each member. Similar to the process by which IISD developed our Trade Principles for Sustainable

Development, and our Bellagio Principles for measuring progress to sustainability, we propose to convene our Network Associates, both virtually and through annual meetings, to discuss networking experience across regions, to review progress to date, and to synthesize insights from practical ongoing efforts. Overarching principles will be sought which will provide the link between current theories of knowledge networks and their practical application in international development. Such principles will serve as guidelines and evaluation tools for the whole of the knowledge networking process, not only for Spinning the Web, but for all networks.

#### **Workplan:**

- Implement formal network agreement with current members
- Expand the network to include 5 additional members from developing regions
- Develop individual workplans for Phase II with each member, within the guidelines of this proposal.
- With the support of IDRC, work with Network Associates to draft principles and protocols for knowledge networking
- Hold 6 semi-annual meetings over three years of the Spinning the Web network members to:
  - Review, test and revise the principles
  - Review individual member workplans
  - Review overall operations of the Network, and the activities of the Network Co-ordinating Unit
  - Convene three of these meetings as electronic conferences, using Internet meeting technology; convene three meetings of the Associates in person.

#### **Anticipated Results:**

- A well structured, efficient and durable knowledge network
- Solid representation from developing regions
- Clear administrative structures for workplan development, review and evaluation, according to principles agreed upon by the Associates
- A model for network development and governance which can be emulated by others.

#### **Task 2: Delivery of Sustainable Development Research and Experience**

**Fundamentally, Spinning the Web is about the delivery of knowledge needed for sustainable development.** Through our work in Phase I, we have verified the need for high quality, relevant and timely content on the Internet about sustainable development efforts, particularly content derived from Southern experiences and points of view, in multiple languages. Our developing country members have emphasized that organizations in the South are now concerned with getting their voices heard and their messages out.

An emerging fear is that even with the growth of Internet access in the South, the major Internet search engines in the North will neither find, nor provide adequate visibility for, the many fledgling web sites of the South. Spinning the Web has a dual strategy to address these needs:

- Provide members with the resources necessary to design and deliver their information on their own web sites;

- Create and maintain an Internet gateway (the SD Gateway) which brings the web sites of each member into a common interface, providing a single entry point and a higher profile to the sustainable development contributions of developing countries.

In building the network, we are looking carefully at synergies between research programs of the member institutes, and also at unique areas of expertise, in order to ensure that the broad spectrum of sustainable development policy and practice is covered. The matrix below illustrates the importance of support for a full ten members from developing regions. Each member brings both a unique regional perspective, and expertise in areas of sustainable development research and practice which complements the expertise of the other members.

We have added to this matrix the knowledge areas of the Northern-based collaborating institutions, to illustrate the balance we can achieve between North and South perspectives with this network.

## Matrix of Organizations, Regions and Knowledge Bases

Network Member		Areas of key sustainable development information and expertise to contribute to the Network		
		Environment management / Resource management	Fostering healthy economies	Building democratic societies
Regional Environment Center	Central, Eastern Europe	<ul style="list-style-type: none"> <li>Pollution prevention</li> </ul>	<ul style="list-style-type: none"> <li>Economic instruments, law, policy</li> <li>Private sector capacity enhancement</li> </ul>	
ENDA-Dakar	Atlantic West Africa	<ul style="list-style-type: none"> <li>Desertification</li> <li>Energy</li> </ul>	<ul style="list-style-type: none"> <li>Urban Informal Economy</li> </ul>	<ul style="list-style-type: none"> <li>Women</li> </ul>
Development Alternatives	South Asia - India	<ul style="list-style-type: none"> <li>Environmental management</li> </ul>	<ul style="list-style-type: none"> <li>Local enterprise development</li> <li>Appropriate technology</li> </ul>	<ul style="list-style-type: none"> <li>Civil society involvement in good governance</li> </ul>
FARN	South America -- Southern Cone		<ul style="list-style-type: none"> <li>Environmental law and policy</li> </ul>	
Earth Council	Central America		<ul style="list-style-type: none"> <li>SD planning: National Councils</li> <li>Economic Instruments</li> </ul>	<ul style="list-style-type: none"> <li>Consolidating civil society</li> </ul>
* FFLA	South America -- Andean region	<ul style="list-style-type: none"> <li>Oil</li> <li>Mining</li> <li>Forestry</li> </ul>	<ul style="list-style-type: none"> <li>Trade</li> </ul>	<ul style="list-style-type: none"> <li>Conflict resolution</li> <li>Indigenous Peoples</li> </ul>
*SPREP / Forum Secretariat	South Pacific/Small Island States	<ul style="list-style-type: none"> <li>Biodiversity</li> <li>Coastal Zone Management</li> <li>Climate Change</li> </ul>	<ul style="list-style-type: none"> <li>Economic development policy</li> </ul>	
*Asian Institute of Technology SERD / ERI, Chulalongkorn	Southeast Asia	<ul style="list-style-type: none"> <li>Water; Sanitation</li> <li>Urban environment</li> </ul>	<ul style="list-style-type: none"> <li>SD Planning process</li> </ul>	
*IUCN Pakistan / SDPI	South Asia -- Pakistan	<ul style="list-style-type: none"> <li>Environmental Analysis and Management</li> </ul>	<ul style="list-style-type: none"> <li>SD planning, strategies</li> </ul>	<ul style="list-style-type: none"> <li>Indigenous Peoples</li> </ul>
* ZERO	Southern Africa	<ul style="list-style-type: none"> <li>Food Security</li> <li>Land Use</li> </ul>	<ul style="list-style-type: none"> <li>Policy instruments</li> </ul>	<ul style="list-style-type: none"> <li>Women</li> </ul>
<b>Northern based members</b>				
IISD		<ul style="list-style-type: none"> <li>Agriculture</li> <li>Forestry</li> <li>Measurement and Indicators</li> </ul>	<ul style="list-style-type: none"> <li>Trade regimes</li> <li>Economic Instruments</li> <li>Business solutions</li> </ul>	<ul style="list-style-type: none"> <li>Participatory processes</li> </ul>
IDRC		<ul style="list-style-type: none"> <li>Resource development (agriculture, forestry; mining, etc.)</li> <li>Environmental management</li> </ul>	<ul style="list-style-type: none"> <li>Trade regimes</li> <li>Business, microenterprise</li> </ul>	<ul style="list-style-type: none"> <li>Women</li> <li>Indigenous peoples</li> </ul>
Stockholm Environment Institute		<ul style="list-style-type: none"> <li>Water</li> <li>Environmental impacts</li> <li>Measurement and Indicators</li> </ul>		<ul style="list-style-type: none"> <li>Global scenarios</li> </ul>

**\* Member to be proposed: not yet nominated**

### **Workplan for each developing country member:**

- Develop Internet communications policies with each member, outlining what they wish to deliver from their Internet server, in keeping with the mandate of their organization (full text of documents or summaries, project updates or final results only, specific content emphasis, databases and directories, and so forth.)
- Within the scope of these policies, convert existing information and tools to Internet formats for faster delivery to decision makers, within the region and internationally.
- Register that information within the framework of the SD Gateway; develop the connections to the work of other members in areas of common research.
- Work with the Network Coordinating Unit to automate SD Gateway functions, for regular scanning of member web sites to update the joint interface.
- Prepare regular information “briefs”, which identify critical issues and new solutions emerging from each region.
- Implement new Internet “broadcast” technologies: through digital audio and video recording methods, collect the views and concerns of communities within regions to broadcast internationally – and cost effectively.
- Contribute to joint databases to be built by the members in the network, including databases of success stories and best practices, compendiums of policy instruments, and directories of organizations and expertise.
- Develop collaborative Internet modules with other members where synergies are possible: for example, both REC and FARN are working on issues of harmonization of environmental laws within their regions. One such module could deliver information on the harmonization process, as experienced by both organizations.
- Create new databases and tools for sustainable development research (including mapping and geomatics applications) on members' sites.

### **Anticipated Results:**

- The creation of a rich, distributed collection of high quality knowledge bases around the world, integrated by a common, multilingual interface for rapid, global access by decision makers.
- Direct flows of information from the South to better inform Northern and global institutions; and access to rapid and reliable information by the South so people there can customize solutions for their own needs.
- Rapid and effective knowledge creation, aggregation and exchange.
- Decision makers worldwide will have access to a better balance of information, informed by both North and South perspectives.

### **Task 3: Capacity Building**

Spinning the Web requires that all member organizations have already made a commitment to Internet communications and see the Internet as a valuable vehicle to get messages out and information into their regions. Unlike other Internet networking projects, such as the UNDP Sustainable Development Networking Project, and IDRC’s PAN-Asia and PAN-Global approaches, **Spinning the Web is not designed to put Internet nodes in place or to host web**



**sites for organizations; but rather to strengthen each member's capacity to use the Internet as an effective communications tool.**

Some basic infrastructure costs may be incurred by members to upgrade systems in order to use emerging technologies for remote database administration, interactivity and Internet broadcasting. For most members, one significant "capacity building" challenge and expense in Phase II of Spinning the Web will be the cost of telecommunications. This is a transitional situation for most countries, and we anticipate that by the end of Phase II of Spinning the Web, the capital cost of telecommunications will have significantly decreased for most members. Also, Spinning the Web will demonstrate how communications costs can be reduced even now through effective use of basic Internet applications, such as email, and alternatives to telephone lines.

During Phase I of Spinning the Web, Development Alternatives identified the use of radio modems as a lower cost and more reliable means of transmitting email among its grassroots networks. The African Housing Fund, with which IISD has worked on another Internet project, estimates that its telephone and fax communications costs will be reduced by 50% to 75% through the transfer to email as principal communications vehicle with its country offices. In Phase II, more of these lessons will be identified and shared with members in the network, to facilitate all members in building and using their Internet connections in cost effective ways.

The second challenge of capacity building lies in working with members on finding appropriate architectures and designs for delivering their information on the World Wide Web. Traditional western hierarchies of information may not always be appropriate for delivering the knowledge bases of the South. At the same time, the information must be in formats which will allow users in both the North and the South to find the members' contributions to sustainable development easily and quickly. In Phase II, we will work with each member to develop protocols for web site structure and design which will meet the needs of each member organization and its audiences, and will also be usable by other members, and by global audiences. This may include developing more audio and video elements than are currently used on Southern Internet sites.

**One of the most effective means we have identified for capacity building is the placing of young Canadian interns within the communications groups of Spinning the Web member organizations.** Through the Youth International Internships program, CIDA has provided funding for IISD to recruit recent graduates with backgrounds in sustainable development policy and practice, who also have strong Internet research, design and technology implementation skills. These interns have worked with our Phase I Spinning the Web members, with great results, transferring skills and training others within the organizations. A sample of the results of this program is noted here:

<b>Intern placement</b>	<b>Contributions to Internet activities</b>
<b>Development Alternatives</b>	Participated in design of an Internet communications system for NGOs in India, moving information from Development Alternatives into local networks
<b>Earth Council</b>	Design of a Web interface for the National Councils for Sustainable Development (NCSD), and building/updating the NCDS database
<b>ENDA-TM, Senegal</b>	Upgrading of Internet system capacity, and participation in the revision of ENDA's Internet communications strategy
<b>Regional Environment Centre for Central and Eastern Europe</b>	Building online databases on regional Agenda 21 implementation and on local environmental technology expertise
<b>FARN</b>	Upgrading of Internet capacity; design of web site to handle regional environmental law databases

For the capacity building component of Phase II, the Network Coordination Unit at IISD will work with the members both directly and through the placement of skilled interns, on the following range of tasks.

### **Workplan:**

- Evaluate current capacity and use of the Internet by each member.
- Assist with the upgrading of Internet systems and services within member organizations, including equipment purchases and telecommunications solutions.
- Assist members to establish protocols, and integrate electronic delivery of research into regular communications practices.
- Identify alternative structures, designs and products appropriate for the communication of the members' knowledge on the Internet.
- Promote the training of trainers (TOT) on Internet research and communications.

### **Anticipated Results:**

- Members will have improved technical capacity to use the full potential of the Internet.
- Members will have well established, stable, reliable Internet sites which can support traffic from around the world; and can also interface with lower end delivery mechanisms within their regions.
- Individual protocols for Web site structure and design will be in place, ensuring long term delivery of member information on the Internet, thereby supporting the long term viability of the Spinning the Web network as a whole.

### **Task 4: Strengthening Regional Information Flows**

The need for strengthening knowledge sharing within regions is another important factor behind Spinning the Web, for two reasons: **to improve access to information throughout the South;** and, equally important, **to ensure that those organizations and individuals who are not on the Internet are not lost or invisible to those decision makers who use the Internet as a principal research tool.** In Phase I, several developing country members have been exploring how to provide seamless links between the Internet and traditional communications channels. Much more work needs to be done in this field. This is an area where we see a number of members in the network taking the leadership and initiative in Phase II, rather than the Network

Coordinating Unit itself. Resources provided directly to the members will facilitate their ability to explore and test alternative delivery systems, and share what works with the rest of the network. Projects which are currently underway, but which need further evaluation, testing and reporting of results include:

<b>Member</b>	<b>Extending information access and delivery</b>
<b>Regional Environment Centre for Central and Eastern Europe</b>	CD-ROM production and distribution of full websites, to national offices of REC throughout the CEE; putting national office information on central REC website
<b>Development Alternatives</b>	DAInet: Setting up local electronic email nodes with grassroots NGOs in India; programming email query systems for grassroots NGOs (systems which email questions to Web search engines, and capture and return via email documents which meet the terms of the query)
<b>Earth Council</b>	Hosting web sites for NGOs without the internal capacity to do so
<b>ENDA-TM, Senegal</b>	Examining procedures for printing information from the Internet for regular distribution amongst its grassroots networks.

In Phase II, these members will be tasked with reviewing their progress on these approaches to date, and to develop workplans which will compare and contrast experiences across regions. Emphasis will be placed on efforts which focus on two-way information flows, not just “downloading”. Results from their work will help other members to strengthen information flows between the Internet and other communications systems within their own regions.

The following chart shows the multiplier effect of Spinning the Web. Each member already has extensive networks in place within their region; by finding ways to move information easily back and forth throughout the regions, more Southern organizations will benefit from access to other Southern experience, and more decision makers in the North will be informed by the views of the South. The support for a full ten members from developing regions will ensure that these two-way information flows have real impact across regions worldwide and between the North and the South.

<b>Member/Potential Member</b>	<b>Regional networks or “multipliers”</b>
Regional Environment Centre for Central and Eastern Europe	<ul style="list-style-type: none"> <li>• Environmental Management Training Center Network</li> <li>• REC country offices in 15 CEE countries</li> </ul>
ENDA-TM, Senegal: Atlantic East Africa	<ul style="list-style-type: none"> <li>• RIOD - Réseau International des ONG sur la Désertification</li> <li>• International Network FOR Renewable Sources of Energy (INFORSE)</li> <li>• Initiative Energétique pour l'Afrique (IEA)</li> <li>• Network for Environmentally Sustainable Development in Africa (NESDA)</li> </ul>
Development Alternatives: South Asia - India	<ul style="list-style-type: none"> <li>• Development Alternatives Group</li> <li>• DAInet</li> <li>• PAN Asia</li> <li>• Delhi Environmental Action Network</li> <li>• Indian Environmental Information System (ENVIS) Network</li> </ul>
FARN: South America - Southern Cone	<ul style="list-style-type: none"> <li>• El Centro Regional de Investigación y Capacitación para la Sustentabilidad (SUSTENTAR)</li> <li>• Facultad Latinoamericana de Ciencias Sociales (FLACSO)</li> <li>• UNIRED</li> </ul>
Earth Council: Central America	<ul style="list-style-type: none"> <li>• Central American Alliance for Sustainable Development (ALIDES)</li> <li>• Central American Council for Sustainable Development</li> <li>• Central American Commission on Environment and Development (CCAD)</li> <li>• Permanent Forum of Regional Parliaments for Sustainable Development and the Environment</li> </ul>
* Fundacion Futuro LatinAmericano, Ecuador South America - Andean region	<ul style="list-style-type: none"> <li>• Liga de Defensa del Medio Ambiente (LIDEMA), Bolivia</li> <li>• Organization of American States</li> <li>• Sustainable Development Networking Program nodes in South and Central America</li> </ul>
*SPREP / Forum Secretariat South Pacific/Small Island States	<ul style="list-style-type: none"> <li>• South Pacific Forum's related regional agencies (Forum Fisheries Agency and so forth)</li> <li>• Pacific Environmental and Assessment Information System (PEAMIS)</li> <li>• Pacific Sustainable Development Network</li> </ul>
* Asian Institute of Technology School of Environment, Resources and Development or Environment Research Institute, Chulalongkorn University: Southeast Asia	<ul style="list-style-type: none"> <li>• United Nations University (Japan)</li> </ul>
*IUCN Pakistan or SDPI South Asia – Pakistan	<ul style="list-style-type: none"> <li>• Sustainable Development Networking Programme in Asia</li> <li>• PAN Asia</li> </ul>
* Zimbabwe Regional Environment Organization: Southern Africa	<ul style="list-style-type: none"> <li>• Environmental Documentation Resource Centre Network (EDRCN)</li> <li>• Network for Environmentally Sustainable Development in Africa (NESDA)</li> </ul>

\* Member to be proposed: not yet nominated

**Workplan:**

- Members with regional information flow projects to review, evaluate findings to date. Special attention to be paid to two-way elements within those projects, ensuring that information is flowing out of the region as well as into the region.
- Upon review of two-way projects, analyze findings and make recommendations to the network.
- Those members who have not attempted regional information flow projects, select models most appropriate to their region, and implement on a trial basis.
- Assess results of trial project; implement successful approaches.

**Anticipated Results:**

- Member organizations with strengthened capacity will act as knowledge brokers within their regions; and with solid expertise which can be shared across regions.
- Successful models of two-way information flows between the Internet and more traditional channels of communications.
- A significant increase in the amount of high quality, relevant and timely content on the Internet about sustainable development efforts derived from Southern experiences and points of view; in multiple languages.

**Task 5: Reaching decision makers**

**The challenge of Spinning the Web is to develop Internet content about sustainable development efforts and to deliver that knowledge effectively to mid-level decision makers.** These decision makers include individuals and organizations which:

- **Create or influence policies** to promote sustainable development
- **Research or implement practices** supportive of sustainable development in communities, governments, and businesses
- **Educate** youth and marginalised populations about sustainable development

**We are facing an unprecedented opportunity to bring institutions and people together from all regions of the world and all sectors of society**, to exchange information, share views and experience, and to create new knowledge together. Through Spinning the Web we can build audiences across regions; we can focus the attention of students, citizens, and media on sustainable development and how to implement it; and we can provide decision makers in both the North and the South with timely, reliable research and experience, well-informed by the views of the South. The network as a whole will have more effective influence on decision makers through the reputation of network members and the quality of collaborative work.

Nevertheless, proactive approaches will need to be taken in order to ensure that decision-makers and broader audiences are aware of Spinning the Web and the extensive knowledge bases which are being made available through its network. Many members already have useful mechanisms in place to promote their Internet work. The network will provide a useful forum to exchange ideas on what works in our collective efforts to influence public and private sector audiences.

We will be informed by the experience of other organizations who have had some success in this area; for example, the International Centre for Trade and Sustainable Development, established

by IISD in Geneva, has successfully attracted an audience of 70,000 researchers and bureaucrats who need weekly information on trade and environment linkages. Also, IISD has developed significant expertise in new electronically facilitated dialogues, through Internet “webcasting” of conferences, through the use of Internet “videoconferencing” for member meetings, and through the hosting of virtual policy conferences in many areas, including climate change and sustainable production and consumption.

Proactive approaches will include customizing information products for target audiences, broadcasting current events on the Internet of immediate interest to audiences, and creating suites of electronic conferences to exchange ideas and information about what works in sustainable development. New, sophisticated software packages will help members record and analyze Internet server use, which will be a principal measure of our success.

**Workplan:**

- Review current marketing and promotion strategies for each member’s Internet site; assist members with putting effective strategies in place
- Develop appropriate marketing and promotion strategies for Spinning the Web as a whole; and for the SD Gateway interface which integrates the network.
- Explore use of vehicles such as push technologies (like PointCast) to deliver customized information reports from the network to targeted audiences.
- Implement new multimedia approaches to attract broader audiences using audio, video, graphical and interactive elements to engage their attention and stimulate understanding of complex issues and views.
- Create electronic conferences on issues of immediate concern to decision makers, providing access to Southern perspectives through member participation

**Anticipated Results:**

- Awareness of, and use by, target audiences within each region of the Internet site of each member.
- Awareness of, and use by, target audiences of the SD Gateway interface which connects the network Internet sites, and integrates the network research and experience of sustainable development
- A suite of information products customized from the knowledge bases and networks of the members, delivered electronically to the computer workstations of decision makers
- Engagement of audiences in electronic discussions on key issues

**D. Women in Knowledge Networking**

Spinning the Web Phase II will build on learnings brought forward from our partners in Phase I about gender considerations in information and communications projects. During the Pilot Phase, we were fortunate to have a woman acting as FARN's Network Associate, women in the positions of Spinning the Web Network coordinator and Project Director, as well as a woman active in promoting Internet technology among West African women representing ENDA-TM at the June 1997 network meeting. The involvement of these members provided the basis for many dialogues on how to improve the status of women through information projects. This has

evolved into an understanding that we must consider gender in accomplishing all project tasks within Phase II of Spinning the Web.

- **Create a fully operational knowledge network** – Spinning the Web member organizations will be encouraged to nominate women to act as the Network Associate responsible for decision-making in all network discussions and meetings. This individual will also assist with on-going research about the principles of good knowledge networking. A greater representation of women will help us to develop a knowledge networking model which reflects the full range of collaboration styles.
- **Deliver sustainable development knowledge bases on the Internet** – In developing the workplan for new Internet content development, all members must take into consideration the needs of women in their region. Information on issues affecting women in each region should be given priority. Members should also make a special effort to deliver information about successful sustainable development initiatives which have been spearheaded by women or women's organizations.
- **Build the capacity to work with the Internet** – Spinning the Web acknowledges that in a globalised world, all staff within an organization must be empowered with ICT skills. In Phase II, we will encourage members to recruit women to fill staff positions funded through the project. These jobs may range from writing and graphic design to HTML and database programming. These staff would be expected to undergo training and skills upgrading as a part of their individual capacity building within the project. In addition, we will encourage all members to provide basic Internet training to their staffs, including administrative positions usually held by women within the organization. To reinforce our efforts to profile the role of women in knowledge networking, we will, whenever possible, place young Canadian women as interns with Spinning the Web members.
- **Strengthen regional information flows** – We will encourage Spinning the Web member organizations to interact with regional women's networks. This will facilitate the flow of sustainable development information between women in many parts of the world.
- **Find ways to effectively engage decision makers** – In many regions of the world, women have strong voices at the community level. But these decision-makers within communities do not yet have access to the Internet. Spinning the Web members must therefore experiment with methods of repackaging Internet information into culturally and gender-sensitive formats. This will undoubtedly build on the experience of ENDA-TM and Development Alternatives in working with mass media and community radio organizations. One of the critical outcomes of GK'97 was an increased respect for the role that radio plays in providing information to busy women decision-makers. As part of Phase II, we will explore ways to merge community radio with the new Internet broadcast technologies.

## **E. Regional Priorities in Phase II**

At the heart of Spinning the Web is the emphasis on regional representation. A more detailed analysis of each region covering sustainable development concerns, the use of Internet communications in regional development, and the potential contributions to and benefits from participating in Spinning the Web is annexed to this proposal.

## F. Evaluation of Spinning the Web Phase II

Emphasis will be placed on “results-based management” to the extent appropriate and practical. Doing so will involve the definition of clear, measurable objectives for all project components at the outset of the project, and as part of each member’s individual workplans, and linking financial disbursements to progress in achieving them. IISD will assist the members to define and quantify the results expected from their activities. Procedures in this regard will be incorporated into the agreements between IISD and the member organizations.

In planning for a results-based management approach, we have prepared and attached to the Project Overview a preliminary Logical Framework Analysis for Spinning the Web. This analysis focuses on the broad goals, purposes and inputs of the project. Upon the initial commitment of support from CIDA, a logical framework analysis will be prepared for each of members in the network, detailing more specifically the convergence of goals and purposes of participation in Spinning the Web with CIDA country/regional strategies and with the network as a whole.

In accordance with the results based management approach, the project will be managed at two levels and in several stages, with advancement to the next stage dependent upon the satisfactory achievement of objectives and expected results. On one level, IISD will work with each member organization to undertake the logical framework analysis and set realistic annual workplans with measurable results. On the second level, the Network as a whole will examine the overall project and will monitor the convergence of objectives and implemented workplans to achieve measurable results for Spinning the Web Phase II. The stages of the project are as follows:

August 1998- December 1998:	Expansion of the Network
1999	Network protocols, capacity building and basic content delivery for all members
2000	Development of specialized products and services for target markets
2001	Two way information flows within regional subnetworks

A more detailed timeline with benchmarks follows in Section G.

The Network Co-ordination Unit at IISD will be responsible for managing the project, including monitoring of individual workplans, budgets and expenditures. The Network Associates, representing each member organization, will provide overall direction and co-ordination to Spinning the Web. The Associates will review and approve workplans and reports and provide overall strategic guidance to the project.



## G. Timelines and Budget

The following chart lays out the general timelines for Phase II. Individual workplans for members will be developed with these benchmarks for the project as a whole in mind. The dates are not hard deadlines: as work proceeds these dates will be reviewed and revised according to the implementation of the individual workplans for each member.

Date	Benchmarks
May 20	<ul style="list-style-type: none"> <li>Spinning the Web Members Meeting: Discussion of Phase II proposals;</li> <li>Discussion of members to join network in Phase II</li> </ul>
June 1998 – March 1999	Canadian Youth Interns placed with Phase I & potential Phase II members
August 15 1998	Phase I ends; Phase II begins.
<i>Stage 1, to end of 1998</i>	<i>Network expansion</i>
August – December 1998	<ul style="list-style-type: none"> <li>Draft workplans and budgets for each of 5 Phase I members;</li> <li>Selection of 5 new members and draft workplans, budgets</li> <li>Evaluation of current capacity and use of Internet by each member</li> <li>Internet communications policies drafted by all members</li> <li>Develop appropriate marketing and promotion strategies for Spinning the Web as a whole</li> </ul>
December 1998	Members' Electronic conference <ul style="list-style-type: none"> <li>Scoping discussion for principles, protocols for Knowledge Networking</li> <li>Review progress on individual member workplans</li> <li>Review communications policies</li> <li>Review current marketing, promotion strategies for member sites</li> <li>Electronic forum set up to discuss marketing, promotion techniques</li> </ul>
<i>Stage 2, 1999</i>	<i>Network protocols, capacity building and basic content delivery for all members</i>
January – June 1999	<ul style="list-style-type: none"> <li>Draft Principles, protocols for Knowledge Networking</li> <li>Begin upgrading Internet systems, and services with members, where necessary</li> <li>Design and implement training programs for Internet research, communications</li> <li>With new members, begin converting existing content to Internet formats; continue conversions with Phase I members</li> <li>With new members, begin linking Internet content to SD Gateway</li> <li>With all members, begin design of joint databases (best practices, directories of organizations, etc.)</li> <li>Phase I members to review and evaluate regional information flow projects</li> </ul>
June 1999	Members' meeting: <ul style="list-style-type: none"> <li>Review draft principles</li> <li>Review progress on individual member workplans</li> <li>Review marketing, promotion strategies for member Internet sites</li> </ul>
June 1999 – March 2000	If funding for Interns continues, Canadian Youth Interns placed with members
July –December 1999	<ul style="list-style-type: none"> <li>Test principles, protocols for Knowledge Networking</li> <li>Members continue converting content to Internet formats</li> <li>SD Gateway links all members, becomes self-sustaining</li> <li>Implement joint databases; databases to be maintained by all members</li> <li>Implement marketing, promotion strategies for individual members</li> </ul>
December 1999	Members Electronic conference <ul style="list-style-type: none"> <li>Approval of principles: Formal Publication and Launch</li> <li>Review progress on individual member workplans</li> <li>Review regional information flow project findings</li> </ul>
<i>Stage 3, 2000</i>	<i>Development of specialized products and services for target markets</i>
January-June 2000	<ul style="list-style-type: none"> <li>Members continue converting content to Internet formats</li> <li>Begin design of regular information “briefs” for target audiences, using vehicles</li> </ul>

	such as push technology <ul style="list-style-type: none"> <li>• Begin design of joint modules (guidebooks to specific issues, etc).</li> <li>• Members to design, implement trial two-way information flow projects</li> </ul>
June 2000	Members' meeting <ul style="list-style-type: none"> <li>• Review progress on individual member workplans</li> </ul>
June 2000– March 2001	If funding for Interns continues, Canadian Youth Interns placed with members
July-December 2000	<ul style="list-style-type: none"> <li>• Members continue converting existing content to Internet formats</li> <li>• Disseminate regular information “briefs”, using vehicles such as push technology</li> <li>• Release of joint modules</li> <li>• Begin design of Internet “broadcast” products, conferences on SD issues</li> </ul>
December 2000	Members' Electronic Conference <ul style="list-style-type: none"> <li>• Review progress on individual member workplans</li> <li>• Review trial information flow projects</li> </ul>
<i>Stage 4, 2001</i>	<i>Two way information flows within regional subnetworks</i>
January – June 2001	<ul style="list-style-type: none"> <li>• Members continue converting content to Internet formats</li> <li>• Implement regular Internet broadcast features</li> <li>• Implement two-way information flow projects in all regions</li> </ul>
June 2001	Members' meeting <ul style="list-style-type: none"> <li>• Review progress on individual member workplans</li> </ul>
June-August	Spinning the Web products completed <ul style="list-style-type: none"> <li>• All member websites well established and durable, with extensive sustainable development content online</li> <li>• SD Gateway functional and self sustaining</li> <li>• Suite of joint databases contributed to and maintained by all members</li> <li>• Suite of information “briefs” for target audiences</li> <li>• Suite of joint modules on specific issues</li> </ul>
	End Phase II

This model budget shows the planned allocation of funding for one member organization in Spinning the Web, including network co-ordination by IISD, over the three-year period of Phase II.

<b>Budget</b>	<b>Year 1</b>	<b>Year 2</b>	<b>Year 3</b>	<b>Total</b>
<b>Direct Project Costs</b>				
<b>Spinning the Web Member Organization</b>				
Content development: staff resources	35,000	35,000	35,000	105,000
• Minimum 1 full time staff person (local)				
• Consulting (to offset costs of experts or other staff within the organization contributing to Internet products)	20,000	20,000	20,000	60,000
Capacity Building: hardware, software, communications, training	22,500	22,500	22,500	67,500
Network participation and expansion: travel, training, promotion, development of tools and services to deliver information to subnetworks	22,500	22,500	22,500	67,500
<b>Subtotal</b>	<b>100,000</b>	<b>100,000</b>	<b>100,000</b>	<b>300,000</b>
<b>Network Coordination (IISD)</b>				
Coordination of member workplans; content integration (ie, development of joint databases, interactive modules, cross network information services): Staff resources				
• Project Manager; Web manager, project assistant: includes recruitment, relocation, equipment costs for incremental staff	20,000	17,000	17,000	54,000
• IISD Technical Support	4,000	4,000	4,000	4,000
Network Hub: includes hardware, software, communications required at IISD to maintain connectivity with network member and external networks	5,000	5,000	5,000	15,000
Capacity building: advice, training -- includes travel to do reviews of member organization capacity and performance on the project	6,000	6,000	6,000	18,000
<b>Subtotal</b>	<b>35,000</b>	<b>32,000</b>	<b>32,000</b>	<b>91,000</b>
<b>Total Direct Project Costs</b>	<b>135,000</b>	<b>132,000</b>	<b>132,000</b>	<b>399,000</b>
<b>Indirect Project Costs</b>				
<b>Accounting, administration @ 20%</b>	27,000	26,400	26,400	79,800
<b>Total for participation of one Member</b>	<b>162,000</b>	<b>158,400</b>	<b>158,400</b>	<b>478,800</b>
<b>Total for 10 Member Participants</b>				<b>4,788,000</b>

## **H. Regional Priorities Annexes**

- **Central and Eastern Europe**
- **Atlantic West Africa**
- **South Asia: India**
- **South America: Southern Cone**
- **Central America**
- **South America: Andean Region**
- **South Pacific**
- **Southeast Asia**
- **South Asia: Pakistan**
- **Southern Africa**

**CEE and Internet Communications**

The systemic transformations underway in Central and Eastern Europe have few parallels in history. Within the last eight years, a political and economic system of centralised planning has dissolved. In its place, a wide variety of new systems has evolved, seeking to find a balance between market orientation and social security. The transition has not been without its cost. Between the destruction of old systems and the birth of the new, many governments are facing economic decline and widespread poverty for the majority of citizens.

Throughout the transition, the Internet has provided a communications lifeline for the promotion of sustainable development. Within Hungary in the early 1990s, the Green Spider network assisted environmental NGOs to perform research and to engage in dialogues which were impossible via the unreliable state telephone systems. Nevertheless, it has been difficult to replicate its success in other countries. The telecommunications infrastructure (telephone lines, leased lines, Internet providers, etc) is different in each country and requires the development of unique solutions. In many countries, direct interactive Internet connections are still beyond the financial budgets of NGOs. They must continue to rely on e-mail dialup systems and traditional modes of communication until the physical communications infrastructure has improved.

**Member Organization: Regional Environment Center for Central and Eastern Europe (REC), Szentendre, Hungary** <http://www.rec.org/>

**Knowledge Networking and Regional Priorities**

The Regional Environment Center for Central and Eastern Europe (REC) has assumed a leadership role in facilitating sustainable development within the CEE region. It has utilised its experience in policy analysis, networking, training, and information and communications to assist businesses, governments, and NGOs to work together toward sustainability. In Phase I of Spinning the Web, REC has complemented its wide array of on-line environmental information with products targeted at a wider sustainable development audience. A CIDA-funded intern has been instrumental in assisting REC to develop a database tracking Agenda 21 policies throughout the region. REC also has provided invaluable advice to the network regarding the challenges which CEE decision-makers face in obtaining reliable information. These insights are guiding the network as it moves toward the development of alternate delivery systems for Internet materials, including e-mail on demand and CD-ROM products.

In Phase II of Spinning the Web, REC will continue its efforts to integrate the knowledge bases of its national offices into its Internet site and to improve its ability to act as a knowledge broker on critical issues for the region. This involvement will also provide wider benefits for the Spinning the Web Network, CEE, and other developing regions:

- **Spinning the Web Network:** REC is exploring how information and communications technologies can support decision making processes – including the development of GIS and other mapping and assessment technologies on the Internet. Both REC and Development Alternatives in India are interested in working with these applications as part of Spinning the Web, and will transfer their experiences to other members in the network.
- **CEE:** Of particular note is REC's work with the private sector in the region – promoting emerging environmental technology companies and enhancing the capacity of industry to implement pollution prevention and control measures. REC has also been closely involved with the Sofia Initiative on Economic Instruments. By fostering informed multi-sectoral dialogues on these issues within the region, Spinning the Web can further the maturation of healthy market economies and democratic societies in CEE.
- **Other developing regions:** REC's experiences in analysing economic instruments complement FARN's work on law and policy in the Southern Cone and the Earth Council's expertise in the impact of perverse subsidies. The perspectives of these Southern organizations on economic instruments will balance the more prevalent on-line research from Northern institutes and provide Southern decision-makers with a broader variety of appropriate economic policy options.

**Atlantic West Africa and Internet Communications**

West Africa's rapidly growing population of over 260 million faces both change and potential for economic development while remaining in one of the most desperately poor parts of the world. This is all occurring within the context of a rapidly changing global society and changing norms and traditions locally. The region has been constrained in achieving sustainable development partly due to the effects of its small, isolated economies. In addition to increasing regional co-operation to integrate their economies, West African countries need to improve regional communications and transportation networks. Countries must also begin to address their environmental challenges in a co-ordinated manner. Desertification problems are similar across the Sahel. Coastal wetlands and the Congo Basin are divided among more than a dozen countries, and their eco-systems can be preserved only in a regional context.

West African organizations face many difficulties in utilising Internet communications. International equipment purchases are fraught with shipping difficulties, while buying locally or seeking maintenance support can quickly double expenditures. In 1995 Ghana's Network Computer Systems (NCS) achieved the first full Internet connection in West Africa and is currently operating on a satellite gateway. This development and the creation of an Internet strategy for Senegal may lead to greater Internet access within West Africa. Nevertheless, Guinea-Bissau, Sierra Leone and Liberia have no Internet Service Providers (ISPs); the only possibility for electronic communication is via FidoNet technologies. In other countries with ISPs, subscription fees can be as high as \$170 CDN per month. If organizations are able to overcome the technological and financial obstacles, they still face human resource challenges. Lack of familiarity with computers is compounded by the fact that most software and Internet training materials are written in English. This results in a shortage of local personnel with the technical and language abilities needed to train trainers within the non-government sector.

**Member Organization: Environnement et Développement du Tiers-Monde (ENDA-TM), Dakar, Senegal** <http://www.enda.sn/>

**Knowledge Networking and Regional Priorities**

Environnement et Développement du Tiers-Monde (ENDA-TM) has assumed a leadership role in facilitating sustainable development within the West African region. It has utilised its experience in policy analysis, community mobilisation, training, and communications to assist governments, NGOs, and micro-entrepreneurs to address environment and development issues. In Phase I of Spinning the Web, with the participation of a CIDA-funded intern, ENDA has undertaken a complete internal review of its communications strategy. This has resulted in computer equipment purchases, the redesign of its web site, and the implementation of training for many staff in Internet research and communication. ENDA has also provided the network with valuable insights as to the types of information relevant to sustainable development in West Africa.

In Phase II of Spinning the Web, ENDA will continue to integrate the knowledge bases of its regional partners and to act as a knowledge broker on critical issues for the region. This involvement will also provide wider benefits for West Africa and other developing regions:

- West Africa: ENDA has special expertise in such fields as energy (especially renewable energy options), the urban informal economy, and desertification. The promotion of information about these issues is of critical importance for poverty alleviation and natural resource management efforts in the region. ENDA's crosscutting program in gender and development also ensures that the special needs and concerns of West African women in the development process will be promoted to decision-makers.
- Other developing regions: Despite the growth of the formal economy around the world, the informal economy still provides livelihoods for the majority of the world's poor. ENDA's knowledge about promoting sustainable development within the urban popular economy of Dakar complements the excellent work being done by Development Alternatives throughout India. Information sharing and joint Internet content development by these organizations could lead to significant learnings about policies and practices that promote appropriate technologies and foster sustainable livelihoods.

## **Spinning the Web Phase II: India**

### **India and Internet Communications**

Fundamental transformations are taking place in India. Despite its persistent poverty problem, India is now among the world's largest economies. Its further development is held back, not by infrastructure problems, but rather by inappropriate economic policies, poor allocation of public resources to human development, and institutional weaknesses. The country's environment and resources, in particular its forests, arable land and water, continue to be at risk.

The Internet plays an important role in promoting and monitoring sustainable development initiatives in India. Since 1994, the United Nations Development Program (UNDP) and the Ministry of Environment have implemented the Sustainable Development Networking Programme (SDNP), an initiative that created an association of environmental information users, carriers and providers by involving the government, academia, businesses and NGOs. Unfortunately, the growth in Indian Internet products and services continues to be heavily affected by political and economic uncertainties. There is a need for substantial improvements in the telecommunication infrastructure as well as regulations that provide a good framework for a widespread growth of Internet communication.

### **Member Organization: Development Alternatives, New Delhi, India**

<http://www.ecouncil.ac.cr/devalt/dagrp.htm>

### **Knowledge Networking and Regional Priorities**

Development Alternatives has assumed a leadership role in promoting sustainable livelihoods and Internet Knowledge Communications in India. It has utilised its experience in policy analysis, technology development, management, marketing, training, and information and communications to mobilise Independent Sector Organizations throughout the country. In Phase I of Spinning the Web, Development Alternatives has provided solid advice on the challenges of Internet communication within India. It has sought to overcome these obstacles through the consolidation of its DAInet electronic network and the development of a web site and databases which integrate the knowledge bases of its partners. A CIDA-funded intern contributed extensively to the conceptualisation and design of the DAInet web site.

In Phase II of Spinning the Web, Development Alternatives will continue its efforts to make Indian sustainable development expertise available on the Internet. It will also strive to act as a knowledge broker on critical issues for the region. This involvement will also provide wider benefits for the Spinning the Web Network, India, and other developing regions:

- **Spinning the Web Network:** A major concern raised by Development Alternatives relates to the intellectual property of the South, and the value it may have for Northern governments and institutes. One roadblock facing the delivery of knowledge on the Internet is the desire to generate revenue from the products made available on the Internet. Through Spinning the Web, we will explore communications strategies and technologies which will bring attention to Development Alternative's work, share that which is deemed to be for the public good, but also provide mechanisms for revenue generation from the sale of information on the Internet. What we learn from our efforts will help all network members, North and South, with the philosophical and practical tensions between freedom of knowledge and Internet commerce. Development Alternatives is also exploring how information and communications technologies can support decision making processes – including the development of GIS and other mapping and assessment technologies on the Internet. Development Alternatives and REC in Central and Eastern Europe are interested in working with these applications as part of Spinning the Web, and will transfer their experience to other members in the network.
- **India:** Development Alternatives has extensive experience in the fields of good governance (including civil society participation in decision making), local enterprise development, appropriate technologies, and environmental management. These issues are of critical importance within dialogues about India's current round of economic and social policy reforms. Access to Development Alternatives' vast knowledge base would assist decision-makers in taking a more holistic view of the country's development and lead to more informed policy-making.

- Other developing regions: Despite the growth of the formal economy around the world, the informal economy still provides livelihoods for the majority of the world's poor. Development Alternatives' knowledge about promoting sustainable development within the informal economy complements the excellent work being done by ENDA in urban areas of West Africa. Information sharing and joint Internet content development by these organizations could lead to significant learnings about policies and practices that promote appropriate technologies and foster sustainable livelihoods.



**The Southern Cone and Internet Communications**

The fast developing countries of Chile, Argentina, Uruguay and Paraguay are at the crossroads of economic growth and sustainable development. They have achieved macro-economic adjustment, which has produced significant growth. Wider societal improvements - including greater political freedom and more attuned cultural, social, and environmental policies - are now required to achieve progress towards sustainable development.

While the private sector has invested in the development of the telecommunications infrastructure, Southern Cone organizations interested in promoting sustainable development still face several difficulties in utilising Internet communication to its full extent. Local telephone charges are often high, discouraging people from connecting to anything other than the cheapest and most narrowband commercial Internet Service Providers. Connections through these services may be limited to a few hours per day. In addition, most non-government organizations employ only a limited staff which usually have other priorities and responsibilities that prevent them from having the time to experiment with new Internet technologies. Problems can be compounded if this staff is not fluent in technical English – many software help files are still not available in Spanish. Nevertheless, awareness about the usefulness of the Internet as a tool is increasing and e-mail contacts between NGOs are growing in importance. So too is their eagerness to be able to interact and learn from other institutions through the Internet. Even organizations short of funds see the importance in investing in some form of Internet connection.

**Member Organization: Fundación Ambiente y Recursos Naturales (FARN), Buenos Aires, Argentina** <http://www.farn-sustentar.org/index.html>

**Knowledge Networking and Regional Priorities**

The Fundación Ambiente y Recursos Naturales (FARN) has assumed a leadership role in facilitating sustainable development within the Southern Cone. It has utilised its experience in policy analysis, training, and communications to assist businesses, governments, and NGOs to develop appropriate environmental laws and policies. Also, el Centro Regional de Investigación y Capacitación para la Sustentabilidad (SUSTENTAR) – FARN's major regional initiative to train government bureaucrats and others in sustainable development policy making – is breaking new ground in the Southern Cone, and is addressing regional needs for wider societal improvements in environmental and social policy. In Phase I of Spinning the Web, FARN has quickly entered the world of web publishing and is making its publications available on the Internet. A CIDA-funded youth intern in 1997/98 provided capacity building for information centre staff in both technical and design aspects of the WWW and facilitated the rapid uptake of Internet technologies within the organization.

In Phase II of Spinning the Web, FARN will continue to seek ways to integrate Internet communications into the operations of its staff and to improve its ability to act as a knowledge broker on critical issues for the region. This involvement will provide wider benefits for the Spinning the Web Network, the Southern Cone, and other developing regions:

- **Spinning the Web Network:** FARN possesses extensive experience in providing training for mid-career professionals from government, business, and civil society. This will provide the network with key insights in how to develop on-line interactive training modules.
- **Southern Cone:** A high priority for FARN is making their environmental law databases accessible to their networks. Within the workplan for Phase II with FARN, we will also explore how to expand the reach of SUSTENTAR by creating online, interactive training programs in Spanish about sustainable development. FARN is also involved with environmental law and policy harmonisation initiatives within the Southern Cone. Broad discussion of this issue is of critical importance as governments and businesses work toward regional integration and public sector reform.
- **Other developing regions:** The creation of Spanish sustainable development training modules would be of great use to the Andean and Central American members of Spinning the Web. In addition, FARN's work in environmental policy harmonisation would complement the analytical work being done by the Regional Environment Centre for Central and Eastern Europe about the impacts of EU accession requirements on environmental policies within CEE.

**Central America and Internet Communications**

Central American countries have shown significant advances towards sustainable development since the 1992 Earth Summit. At the 1996 Summit of the Americas, Central American leaders affirmed their commitment to sustainable development and recognised the need to harmonise actions among their regional neighbours. However, putting their international and regional commitments into practice has been difficult due to the lack of human and financial resources, and the lack of informed participation from social actors in the decision making process.

Considerable progress has been made toward utilising the Internet as a mechanism for promoting greater inclusion of civil society views in policy-making. Internet connectivity in Central America has improved over the past five years as a result of the UNDP's Sustainable Development Networking Programme (SDNP) and the growth of private Internet Service Providers. Access to these services has enabled some NGOs within each country to share information with each other as well as with national government and business decision-makers. Unfortunately, the funding to provide necessary training and support to more organizations is still missing. Most civil society institutions lack the financial resources to hire qualified information systems support as they learn how to employ the technologies effectively within their organizations. There is also no comprehensive Internet mechanism to enable national NGOs to communicate with each other on a regional level about best practices for sustainable development.

**Member Organization: The Earth Council, San Jose, Costa Rica**

<http://www.ecouncil.ac.cr/>

**Knowledge Networking and Regional Priorities**

The Earth Council has utilised its experience in networking, training, and convening multi-stakeholder groups to consolidate civil society and to construct the necessary institutions for it to have a role in decision-making. This has been achieved primarily through the development of National Councils for Sustainable Development (NCSDs) around the world - including seven in Central America. In Phase I of Spinning the Web, the Earth Council has expanded its Internet information on the valuable work undertaken by these NCSDs. The Internet development was facilitated by the placement a CIDA-funded intern who assisted in creating the necessary information architecture for the NCSD web site. The Earth Council also has played a leading role in developing multimedia content about sustainable development. Together with IISD, the Earth Council used the Internet to broadcast Rio+5, the civil society consultations on progress since the Earth Summit. Finally, the organization has provided invaluable insights into the challenges faced by Central American civil society organizations as they attempt to co-ordinate their actions for regional impact.

In Phase II of Spinning the Web, the Earth Council will continue its efforts to integrate the knowledge bases of Central American NCSDs and to improve its own ability to act as a knowledge broker on critical issues for the region. This involvement will also provide wider benefits for the Spinning the Web network, Central America, and other developing regions:

- **Spinning the Web Network:** The Earth Council's current experimentation with Internet video conferencing will be invaluable in supporting virtual Spinning the Web network meetings over the next 3 years.
- **Central America:** By strengthening the regional approach of the on-line NCSD resources, Central American civil society organizations will have access to tools for collaboration and action. These tools will help to promote the equitable distribution of the benefits of development throughout Central America.
- **Other developing regions:** The Earth Council's knowledge base on national consultation processes will support, in particular, the proposed member from Pakistan which is working on fostering national sustainable development planning processes.

**The Andean Region and Internet Communications**

Natural resources and the environment in the Andean region are subject to significant pressures due to a combination of factors including: weaknesses in governance systems, urbanisation, exports based largely on primary goods, and extreme poverty of indigenous peoples and marginalized groups. Despite their rhetoric, a number of governments and private sector representatives still exploit natural resources and the environment without regard for longer term impacts. However, because of requirements related to NAFTA access, private sector and government perceptions are beginning to change. Pressure for change is also coming increasingly from civil society; however the latter has neither the tools nor the resources nor the political access required to have an impact on policy development at the national level. In addition, one of the critical questions facing governments in the region is how to give the poor access to the economic opportunities created through the reforms undertaken to date.

Since 1992, Internet communications technologies have become more accessible to organisations working on sustainable development in the Andean region. These advances have generally occurred at the national level and have been accomplished without regionally co-ordinated international development assistance. In addition to a few commercial Internet Service Providers, each nation has at least one non-commercial service provider (e.g. Red Científica Peruana, Ecuánex, and SDNP Bolivia) with full Internet access as well as UUCP (e-mail) service for more remote areas. The Consorcio de Redes Andinas has provided a mechanism for the many Andean networks to co-ordinate their work toward the creation of an Internet backbone for Latin America. The major obstacles to more effective use of the Internet for sustainable development are now primarily within the realm of human resource development and organisational capacity building.

**Knowledge Networking and Regional Priorities**

We would like to include a key Andean organisation, such as the Fundación Futuro Latinoamericano in Ecuador, in the Spinning the Web network in order to make regional sustainable development experience more accessible to regional and global decision-makers. Involvement in Spinning the Web will enable the selected organisation to build the human and institutional capacity to utilise the World Wide Web in promoting processes, policies and solutions supportive of sustainable resource management. Through this project, the organisation will deliver its knowledge base on the Internet about how to achieve economic recovery and poverty reduction. The member organisation will also build the capacity to act as an Internet knowledge broker for other Andean regional organisations and networks involved in these issues.

Involvement in Spinning the Web Phase II will provide wider benefits for the Andean region, and other developing regions:

- **Andean region:** Bolivia, Ecuador, and Peru have been on the forefront of international efforts to devise sound sustainable development policies and practices for natural resource management. While the Canadian government has provided extensive funding for inclusive regional mining policy dialogues through CIDA, IDRC, and NRCAN, few of the results from these dialogues have been made publicly available on Andean web sites. Spinning the Web can help a regional organisation to communicate these learnings via the Internet to a wide array of Andean decision-makers.
- **Other developing regions:** Other regions can also benefit from access to what the Andean region has learned about sustainable resource development, specifically the Southern Cone, Central America and the mineral and forest rich islands of the South Pacific. Of particular interest to all decision-makers, public and private sector alike, is the progress the Andean region has made on including the participation of indigenous peoples in multistakeholder discussions on resource development.

**The South Pacific and Internet Communications**

South Pacific Island Countries (PICs) tend to have poorly developed infrastructure and social services, and a strong reliance on natural resources for both subsistence and commercial activities. Forces placing strains on natural resources include rapid urbanisation (with an emerging urban landless class and the resulting slums and squatter settlements), growing agricultural population, and the rapid expansion of mining, fishing and forestry activities. Factors that continue to frustrate their prospects for sustainable development include the narrow perspectives of development planning and financing, a weak science and technology base, a dearth of information on sustainable development, and a poor capacity to access and share such information.

Fortunately, a number of initiatives are underway to construct the necessary information infrastructure to support a multitude of regional networks. The Island Web Consortium (an international group which emerged out of the follow-up to the UN Global Conference on the Sustainable Development of Small Island Developing States) and the Sustainable Development Networking Programme of the UNDP are both seeking to empower organizations in the South Pacific with the necessary tools to share information with each other. The establishment of the Fiji Internet backbone and PEACESAT satellite access for non-profit organizations is making the Internet a viable and comparatively inexpensive communications vehicle for the region. Nevertheless, there is still much to be done to provide World Wide Web access throughout the Islands. While it is relatively common in Fiji, most of the PEACESAT stations in other islands will need upgrades to digital satellite modems before smaller NGOs can be assured of reliable WWW service. In the meantime, many regional organizations have decided to invest in utilising the commercial telecommunications infrastructure in order to establish a presence on the Web.

**Knowledge Networking and Regional Priorities**

We would like to include a key South Pacific organization, such as the South Pacific Regional Environment Programme (SPREP) based in Western Samoa or the Forum Secretariat in Fiji, in the Network in order to make regional sustainable development experience more accessible to regional and global decision-makers. Involvement in Spinning the Web will enable the selected organization to build the human and institutional capacity to utilise the World Wide Web in promoting processes, policies and solutions supportive of island sustainability. Through this project, the organization will deliver their knowledge base on the Internet about coastal zone management, biodiversity conservation and the regional impacts of climate change. The organization will also build the capacity to act as an Internet knowledge broker for other South Pacific regional organizations and networks involved in these issues. Co-operative efforts with other agencies may be considered as part of establishing a Spinning the Web network member in the region. This would allow us to draw in additional facets of island sustainability: economic development, intergovernmental processes and transportation at the Forum Secretariat; energy management, through the Pacific Energy Program at SOPAC; and fisheries management via the Forum Fisheries Agency.

Involvement in Spinning the Web Phase II will provide wider benefits for the South Pacific and other regions:

- South Pacific: The South Pacific has been on the forefront of international efforts to devise sound policies and practices for coastal zone management and the sustainable development of small island states. The Canadian government is supporting these initiatives through the Canada-South Pacific Ocean Development (C-SPOD) project. C-SPOD II is enhancing regional economic co-operation by strengthening key regional organizations working in the area of ocean resource development and management. Nevertheless, limited information about the results of such initiatives has been made publicly available on South Pacific web sites for local consideration. Spinning the Web will enable the broader Internet promotion of the policies and practices that have developed through such initiatives.
- Other developing regions: Proposed Spinning the Web network members in Pakistan and India have programs in coastal regions and would be able to draw from the learnings of the South Pacific in the furtherance of their own work. In addition to possessing a wealth of expertise on resource management issues, the South Pacific has also provided some of the best examples of regional co-operation mechanisms through which all stakeholders can discuss and develop solutions for common problems. Learning about the functioning of such mechanisms could be of great benefit to the Central American National Councils of Sustainable Development as they establish regional alliances for co-operation between their own small states.

## **Spinning the Web Phase II: Southeast Asia**

### **Thailand and Internet Communications**

Thailand's economic progress has transformed the country into a Southeast Asian success story -- even with the recent economic setbacks amongst the Asian tigers. Progress has been achieved in a relatively stable political environment, and has given rise to significant, although uneven, social development. Thailand is still a lower middle income country that faces challenges in building its human resources in order to continue on its development path, and in distributing the economic benefits of those efforts. The key issue facing Thailand into the next century is sustainability. Concentrated growth around Bangkok is putting a strain on urban infrastructure prompting a need for economic decentralisation. In addition, urgent and effective measures for environmental management are required to counteract the economic and human costs of environmental degradation.

Thailand is home to more than 15 commercial Internet Service Providers (ISPs) and 2 academic/research providers. These options have made the Internet readily accessible to businesses, government, and the academic community within Thailand. Unfortunately, this private sector approach to ICT development has left civil society largely uninvolved in the creation of Internet content. Few non-governmental organizations have the human resources necessary to promote their views of sustainable development on the World Wide Web. Therefore we are proposing that a Spinning the Web member from Southeast Asia be selected from the academic sector, which is very well set up to work with the new Internet technologies.

### **Knowledge Networking and Regional Priorities**

We would like to include in Spinning the Web a key Southeast Asian organization, such as the Asian Institute of Technology (AIT) School of Environment, Resources and Development in Klong Luang, Thailand, or the Environmental Resources Institute at Chulalongkorn University, Bangkok. Involvement in Spinning the Web will enable the selected organization to build the human and institutional capacity to utilise the World Wide Web in promoting policies and solutions supportive of sustainable development. While other members in the network bring strength in how developing regions can build democratic societies, the Southeast Asian member will contribute its understanding of the healthy convergence of private sector development, infrastructure services, and natural resource protection in increasingly urbanised regions. As part of Spinning the Web, particular efforts will be made to build Internet resource bases on water, sanitation and urban environmental management. This knowledge base will be extremely useful for members of the donor community in Canada, Australia and elsewhere, who are actively working with Southeast Asian nations to find sustainable solutions to rapid urbanisation and the equitable distribution of economic benefits.

Involvement in Spinning the Web Phase II will also provide wider benefits for the Spinning the Web Network and Southeast Asia:

- Spinning the Web Network: AIT's School of Environment, Resources and Development has particular expertise in developing short training courses in planning for environmentally sustainable development in the Asia-Pacific Region (in co-operation with the United Nations University). This experience in training mid-career policy makers and planners will be invaluable to our Southern Cone member, FARN, as it develops its own regional training programs for decision-makers.
- Southeast Asia: Southeast Asia and APEC have been at the forefront of international efforts to devise sound sustainable development policies and practices for meeting the challenges of rapidly urbanising populations. The Canadian government has provided extensive funding for sustainable development research in Southeast Asia through CIDA, IDRC, and APEC; and IDRC's Pan Asia Networking project, which has made great inroads in developing web sites for research institutes within the region. Nevertheless, the full extent of research findings has not yet been made publicly available on most web sites. Spinning the Web will help to ensure that the knowledge base of the selected organization is fully reflected on the World Wide Web.

## **Spinning the Web Phase II: Pakistan**

### **Pakistan and Internet Communications**

As Pakistan celebrated its 50th Anniversary in 1997, it became clear that the country was at a crossroads. On the basis of present and past experience, its historical pattern of development could not provide an acceptable standard of living for the majority of its population. The level of human development continues to be one of the lowest in Asia. Although, by international standards, Pakistan has been blessed with a fine range of natural resources, population pressure and unregulated economic development are squandering this heritage. Moreover, these "green" issues are further exacerbated by the "brown" issues of industrial pollution, hazardous chemicals and waste as neither public nor private enterprises comply with environmental legislation. Urban squalor is also multiplying since the rate of natural population growth and urban migration exceeds growth in municipal services. By some current estimates, as much as 3-4% of GDP is lost annually due to environmental degradation. Characteristically, the understanding of the issues in Pakistan greatly exceeds the capacity to implement solutions. The National Conservation Strategy (NCS), now being augmented by provincial strategies, provides an excellent diagnosis of the problem and therefore a basis on which to proceed. It lies largely unimplemented. There is an overriding need to educate the population as a whole on the issues of environmentally sustainable development, in order to create an informed civil society able to respond to and support appropriate policies.

While there are about 10 commercial Internet Service Providers in Pakistan, the majority of sustainable development organizations have relied on the Sustainable Development Networking Programme (SDNP) for Internet access. SDNP e-mail rates are considerably higher than other service providers, but its reliability and user support have built a loyal following. The programme in Pakistan began in late 1992 and will be supported by UNDP at least through the middle of 1999. Since June 1993 SDNP has been at the forefront of networking efforts in the country, with activities involving the setting up of an electronic network, public outreach for popularising this medium for information exchange, and trying to change government policies that restrict the free flow of information nationally and globally. Since November 1996, full Internet access through a commercial service provider at 28.8 kbps bandwidth has allowed the SDNP to download information from the World Wide Web. It is then made available to SDNP users via e-mail discussion lists and newsgroups. Once the SDNP acquires a 64 kbps line, it will be in a position to provide full international Internet connectivity to some users. It will also be able to copy ("mirror") international web sites on its server, for faster access from within the country.

### **Knowledge Networking and Regional Priorities**

We would like to include a key Pakistan organization, such as the Sustainable Development Policy Institute (SDPI) or the World Conservation Union – IUCN Pakistan, in the Spinning the Web network in order to make national sustainable development experiences more accessible to national and regional decision-makers. CIDA-funded youth interns at both SDPI and IUCN-Pakistan have made progress in assessing the information infrastructure of these organizations and the contributions they might make to the Spinning the Web network, giving us assurance that either organization is well placed to make this next step toward knowledge networking. Involvement in Spinning the Web will enable the selected organization to build the human and institutional capacity to utilise the World Wide Web to promote policies and solutions supportive of the NCS. Through this project, the selected organization will deliver its knowledge base on the Internet on how to create, implement and monitor sustainable development strategies. The organization will also gain the capacity to act as an Internet knowledge broker for other national organizations and networks involved in environmental policy and management. Of particular value will be the ability to "mirror" the web sites of the other Spinning the Web network members within Pakistan.

Involvement in Spinning the Web Phase II will provide wider benefits for Pakistan and other developing regions:

- Pakistan: Pakistan has been recognised internationally for recent efforts to build policies and practices for environmental protection. The Canadian government has supported these initiatives as the key donor for the 1992 National Conservation Strategy (NCS) which provided a comprehensive analysis of the environment within a sustainable development framework, with specific objectives and a 10-year strategy to achieve them. Unfortunately, little information about the successes and lessons learned through these experiences has yet been made publicly available on Pakistan web sites. Implementation of the NCS could be greatly enhanced through the increased local availability of success stories and contact with other organizations that are leading the way toward sustainability.

- Other developing regions: Increased access to knowledge about the process leading to the establishment of the Pakistan NCS will be of great use to other developing countries. The Earth Council in particular, may be able to promote these learning within the sustainable development planning processes of the National Councils for Sustainable Development in Central America.

**Southern Africa and Internet Communications**

Southern Africa is currently undergoing major political, economic and social transitions. The civil unrest that afflicted much of the region for more than three decades is subsiding and the remaining autocratic regimes are rapidly giving way to fledgling democracies. Highly statist command economies are being restructured into open, free market economies in which conditions exist for the private sector to function as the engine of growth and job creation. Nevertheless, the region still faces serious challenges: rapid population growth, a level of poverty which is among the highest in the world and threatened natural resources, all within the context of a rapidly changing global society. In addition, the region is prone to drought and food deficits since rainfall is highly variable, soils are fragile, and irrigation infrastructure is limited.

There has been an explosion of interest among overseas development agencies in extending the Global Information Infrastructure (GII) into Africa as critical to the continent's survival and future development. USAID's Africa Bureau Office of Sustainable Development is managing the Leland Initiative, which seeks to bring the benefits of the global information revolution to people of Africa through connection to the Internet and other GII technologies. The International Development Research Centre (IDRC) has also developed an effective partnership through Acacia -- the African Networking Initiative -- with the Economic Commission of Africa and a number of international organizations (UNESCO, ITU, Bellanet). Activities range from developing appropriate telecommunications regulatory policies to building Internet gateways to extending the infrastructure into rural and marginalised communities.

**Knowledge Networking and Regional Priorities**

We would like to include a key Southern African organization, such as the Zimbabwe Regional Environment Organization (ZERO) in Harare, in the Spinning the Web network in order to make regional sustainable development experience more accessible to regional and global decision-makers. Southern Africa has been on the forefront of international efforts to devise sound sustainable development policies and practices for meeting the basic needs of rural communities. While the Canadian government has provided extensive funding for fostering food security, social sector reform, and gender equity in the region through CIDA and IDRC, few of the learnings gained from these experiences have been made publicly available on Southern African web sites. ZERO has been active in research and publishing on these issues for a number of years: its policy research in particular has been fostered by the International Institute for Environment and Development in the UK. Like many other organizations in Southern Africa, ZERO is exploring alternative communications methods in response to both the costs of printing and the need for broader distribution of their work. Involvement in Spinning the Web would build the human and institutional capacity to utilise the World Wide Web in promoting policies and solutions which support sustainable human development. This capacity building includes content development and acting as an Internet knowledge broker for other regional organizations and networks.



## **Appendix: IISD and Knowledge Networking**

There is a growing recognition in the private and public sectors that the creation, management and communication of knowledge is key to global sustainability. Institutions are moving beyond the gathering of data and its shaping into information, to the understanding that **knowledge is information put to work**. The private sector recognizes that information alone is insufficient to achieve goals. A decade of downsizing has led to the holders of corporate knowledge being displaced. Companies are now seeking ways to recapture this resource to sustain their competitive advantage. NGOs have demonstrated how knowledge can be translated into political action, most recently through the landmine ban. **Knowledge networks** require individuals and organizations to work together to create and communicate knowledge, based on authoritative data and information bases, with sustainable development action as the goal.

Traditionally, organizations have had to choose between “**reach**” – transmitting a single message as widely as possible – and “**richness**” – developing depth in research and analysis of a given set of issues, and communicating the results to a narrowly defined audience. With the new information and communications technologies, we are in a position to expand our reach to many different audiences, and at the same time we can increase the richness of our messages through the sharing of experience and the co-creation of knowledge.

As a followup to the Strong Task Force Report, IISD and IDRC commissioned a study of knowledge networks in Canada, in order to identify the critical elements of a formal knowledge network.

The following is taken from *the Draft Executive Summary of Formal Knowledge Networks: A Study of Canadian Experiences, by Howard C. Clarke (IISD and IDRC, 1998)*

## What is a Formal Knowledge Network?

The term “network” is used to refer to a combination of persons, usually dispersed over a number of geographically separate sites, with appropriate communications technology. There are several types of networks:

1. *Informal networks*, which are numerous and come and go, but play a very significant role in the creation of knowledge.
2. *Information networks*, such as university library networks, which provide access to information but do not create new knowledge.
3. *Open networks*, which have a well-defined theme, exist to undertake research and generate knowledge, have formal constitutions, and have invitation-based participation.
4. *Development networks*, which have a well-defined theme and carefully chosen criteria for participation, exist to create knowledge and to accelerate the application of that knowledge to economic and social development, and have a formal constitution and tight governance.

Open networks and development networks can be regarded as formal knowledge networks. Certain ideal characteristics of formal knowledge networks can be identified:

1. their main purpose is to create and disseminate knowledge for use beyond the membership of the network;
2. their structure and operation are designed to maximize the rate of knowledge creation;
3. the network must provide recognizable direct benefits to all participants;
4. there is a formal organization and well-defined management structure;
5. participation is by invitation, based on criteria of merit or peer review;
6. there is a well-developed communications strategy; and
7. the network results in a reduction of boundaries between sectors such as universities and industry.

Additional elements of a formal knowledge network may include:

- culture shifts within institutions towards collaborative activities between institutions and sectors;
- multidisciplinary, multisectoral and multi-national/regional in terms of both network participants and in audience;
- better relations with funders such as industry and government
- strong involvement in graduate education and training (over 50% of networks surveyed);
- typically, networks produce knowledge at a faster rate than otherwise possible;
- cost effectiveness in operations, and possibly revenue generating through sales of products; and frequently mobilization of more efficient use of human resources;
- more effective influence on decision makers through size of network, reputation of network members and quality of collaborative work - this is maintained through a careful balance of management and degree of selectivity; and
- international scope, either potential or actual (73% of networks surveyed), reflecting the reality that knowledge networks cannot isolate themselves from what is going on elsewhere;
- Knowledge networks can make a considerable contribution to sustainable development.

## Vision of STW

REC	ENDA	Dev Alt	IISD	IDRC	EC	SEI
<p>Promote info exchange and networking between diverse stakeholders</p> <p>Mutual benefit</p> <p>Support and promote partners ongoing and future projects and development of areas of operation</p> <p>Assist partners in improving public access to enviro and SD info about their regions worldwide</p> <p>Support reaching larger audience where other partners have influence and contacts</p> <p>Offer products and services currently being developed</p> <p>Common library collection</p> <p>Identify probable joint projects. IISD help suggest funding sources</p>	<p>Promote democratic access to Internet</p> <p>Strengthen South-South exchanges</p> <p>Build strategic alliances to permit expression of Southern civil society in the context of globalization</p> <p>Encourage production of info by grassroots actors, NGOs, ENDA</p> <p>Gain and give technical training in Java, HTML, tricks for Search Engines</p> <p>Purchase bigger server</p> <p>Regional platform w/ forum for info exchange and platform for lobbying</p>	<p>By 2000:</p> <ul style="list-style-type: none"> <li>Seamless links between automated and non-automated users</li> <li>Make currently available info more accessible</li> <li>Develop new databases and services to address SD problems</li> <li>Improve conversion of IK to global formats</li> <li>Promote mapping and geomatics applications</li> </ul> <p>Focus on facilitating access of ISOs which are non-autmoated.</p>	<p>Give decision-makers in all parts of the world access to the tools for SD planning, to globally share experience about what actually works, to compound current intl knowledge base by new forms of electronically facilitated dialogue.</p> <p>Attract new audiences</p> <p>Expand networking and capacity w/I developing countries and other marginalized groups. Modest resources for capacity building.</p> <p>Foster creation of highly sophisticated and accessible distributed network to draw in a broader range of people.</p> <p>Assist cooperating institutions to integrate electronic delivery of own research into regular communications practices.</p> <p>Package current info on diskette or e-mail for selected organizations</p>		<p>Reduce duplication of efforts</p> <p>Disseminate relevant info on SD to NCSDs, civil society and policy makers</p> <p>Proceed cautiously to avoid mistakes, miscommunication, and over-commitments</p> <p>Promote partner info via reciprocal links, cross-referencing, articles in newsletters</p> <p>Compile and package focused and relevant research materials</p> <p>Enable partners to:</p> <ul style="list-style-type: none"> <li>Easy access to relevant SD info</li> <li>Complement and support info resources of partner orgs</li> <li>2-way info exchange to reach broader audiences</li> <li>develop collaborative projects where partnering is effective</li> </ul> <p>Help reach larger audiences via partners' contacts, influence and outreach capabilities.</p> <p>Allow partners to develop info system at own pace and in own unique way.</p>	<p>International cooperation between expert institutions</p>



## Logical Framework Analysis for Spinning the Web Phase II

Highlights reflect those elements to be achieved under the contribution level subsequently provided by CIDA.

NARRATIVE SUMMARY	EXPECTED RESULTS	PERFORMANCE MEASUREMENT	ASSUMPTIONS
<p><u>Goal</u></p> <p>The Spinning the Web project will create a formal knowledge network on sustainable development policy and practice. This network will improve governance and decision-making by significantly increasing the exposure of Southern member organizations' knowledge about how to address the linkages among environmental, social, economic and security issues. Since the network also includes a number of Northern institutes, this project will contribute to the creation of a new model of international co-operation and development based on knowledge sharing.</p>	<p><u>Impact</u></p> <p>Improved decision-making for sustainable development via:</p> <ul style="list-style-type: none"> <li>• direct flows of information from the South improving Northern and global institutions affecting the South;</li> <li>• rapid access to reliable information throughout South, enabling people there to customise solutions for their own needs;</li> <li>• member organizations undergoing a culture shift which reduces barriers to collaborative modes of operation; and</li> <li>• broader popular audiences becoming engaged in sustainable development.</li> </ul>	<ul style="list-style-type: none"> <li>• Member organizations develop additional collaborative research and/or communications projects</li> <li>• Decision-makers are aware of and utilise the Network's Internet products</li> <li>• Analysis of network Internet traffic indicates significant North-South and South-South exchanges of information</li> <li>• The knowledge networking model is adopted by other organizations</li> </ul>	<ul style="list-style-type: none"> <li>• Knowledge networks foster creativity and produce results at a faster rate than otherwise possible.</li> <li>• Networks have more effective influence on decision-makers based on the size of network, the reputation of members and the quality of collaborative work.</li> <li>• Decision-makers (and/or their research staffs) in the North and South have access to ICTs and are using the Internet to gather information.</li> <li>• National and community level organizations exist that can "interpret" information flowing from the regional level down and back up again so that it is meaningful to local circumstances.</li> </ul>
<p><u>Purpose</u></p> <p>Spinning the Web will develop the capacity of member organizations from developing regions to work with new Internet technologies for rapid and effective creation, aggregation and exchange of sustainable development knowledge.</p> <p>While many excellent SD policies and practices have been developed around the world, it is still difficult for</p>	<p><u>Outcomes</u></p> <ul style="list-style-type: none"> <li>• A well structured, efficient and durable knowledge network with solid representation from developing regions</li> <li>• Increased visibility of Southern perspectives of sustainable development on the Web</li> <li>• Increased institutional and human capacity to work with the Internet in key regional organizations</li> <li>• Strengthened sustainable</li> </ul>	<ul style="list-style-type: none"> <li>• Member organizations see enough benefits from participating in the knowledge network that it becomes self-sustaining.</li> <li>• There is an increased proportion of content from the South accessible through the SD Gateway</li> <li>• Women within member organizations have an increased capacity to utilise the Internet for research and</li> </ul>	<ul style="list-style-type: none"> <li>• Identification of an organization in each designated region which meets Network membership criteria (e.g. sustainable development focus, Internet connectivity, involved in regional networks)</li> <li>• Institutional policies are supportive of Internet use among staff.</li> <li>• Member organizations support participation in the Spinning the Web Network; they are willing</li> </ul>

NARRATIVE SUMMARY	EXPECTED RESULTS	PERFORMANCE MEASUREMENT	ASSUMPTIONS
<p>organizations in the South to communicate their contributions and perspectives. They need to be able to utilise the Internet to provide decision-makers with high quality, relevant and timely content in multiple languages. There is also a need to engage wider portions of society, with and without direct access to the Internet, in these dialogues.</p>	<p>development information flows within each designated region</p> <ul style="list-style-type: none"> <li>Strengthened sustainable development information flows between regions</li> <li>Increased number of decision makers engaged with sustainable development concerns</li> </ul>	<p>communications</p> <ul style="list-style-type: none"> <li>Members have successfully implemented models of two-way regional information flows</li> </ul>	<p>to sign and to abide by a formal network agreement.</p>
<p><u>Resources/Activities</u></p> <p>Resources for Spinning the Web will be utilized for:</p> <ul style="list-style-type: none"> <li>delivery of sustainable development research and experience on the Internet (50%);</li> <li>capacity building to work with new Internet technologies (25%);</li> <li>strengthening information delivery mechanisms within developing regions (25%)</li> </ul> <p>Activities can be grouped into five general tasks:</p> <ul style="list-style-type: none"> <li>Strengthening and expanding the Spinning the Web Knowledge Network</li> <li>Delivering sustainable development research and experience via the WWW</li> <li>Building capacity of member organizations</li> <li>Strengthening regional information flows</li> <li>Ensuring SD content reaches decision makers</li> </ul>	<p><u>Outputs</u></p> <ul style="list-style-type: none"> <li>Ten [Eight] organizations from developing countries members in the Network</li> <li>Individual protocols and policies to ensure long term delivery of member information on the Internet</li> <li>Ten [Eight] well established, stable, reliable Internet sites in developing regions containing a rich collection of high quality sustainable development knowledge (including multimedia and customised services)</li> <li>Series of electronic conferences on critical and timely issues</li> <li>Improved SD Gateway knowledge navigation tools for integrating work of members</li> <li>Member organization staff trained in web site architecture and design</li> <li>Member organizations have strengthened capacity to act as knowledge brokers within their regions</li> <li>Models of two-way information flows between the Internet and traditional channels of communications.</li> </ul>	<ul style="list-style-type: none"> <li>Ten [Eight] organizations from developing countries have signed the formal Network agreement</li> <li>Each member has an Internet communications strategy and policies</li> <li>Each member has an up-to-date web site containing high quality sustainable development information</li> <li>Electronic conferences have been held</li> <li>SD Gateway contains new tools and briefs for decision-makers and researchers</li> <li>Members' staff has received training in Internet research and communications.</li> <li>Member organizations have procedures for knowledge brokering</li> <li>Models of regional information flow have been developed and shared within the Network</li> </ul>	<ul style="list-style-type: none"> <li>Network members develop and implement workplans collaboratively with NCU staff.</li> <li>Members establish communications strategies that designate significant portions of their knowledge bases for international public access on the Internet.</li> <li>Members are willing to act upon synergies in research areas and work collaboratively across institutional boundaries.</li> <li>Startup times are contingent upon the level of Internet infrastructure and experience currently in place. Some members will be further ahead than others will.</li> </ul>

# **Expanding Audience and Capacity of Electronic Networks for Sustainable Development (Spinning the Web Phase I)**

**IDRC Project # 03001**

## **Final Report**

**Submitted to IDRC - 10 March 1999**

*Project undertaken by*  
International Institute for Sustainable Development (IISD)  
*in collaboration with*  
Development Alternatives (DA)  
Environnement et Développement de Tiers-Monde (ENDA-TM)  
Fundación Ambiente y Recursos Naturales (FARN)  
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## **Synthesis**

The goal of the Spinning the Web project was to foster the creation of an Internet-based distributed electronic network of sustainable development knowledge brokers. A Network Coordination Unit (NCU) based at IISD provided advice and assistance to eight partners in designing and implementing the project. Four of these partners located in developing regions also received grants to assist them in project implementation. Partners drew on each other's expertise and that of the NCU to expand and enhance the information they provided on their own Web sites. As part of Spinning the Web, the NCU created a graphical interface and database engine to link together the research and tools of the partners in the network. While each partner maintained its own Internet site, this interface - the SD Gateway - was designed to help put the knowledge bases of the partners into a broader context. Through this project, decision-makers in all parts of the world gained better access to the tools for sustainable development planning and were able to share experiences globally about what actually works. By June 1998, seven participating organisations had signed the Spinning the Web Network Agreement, which provides the framework for continued collaboration on communicating sustainable development knowledge and the structures and tools to do so effectively.

## Research problem

The interrelated nature of social, economic and environmental challenges has created a significant need for cooperation between people within and outside of regions, as well as between governments, local communities, NGOs, businesses and other stakeholders at all levels. The importance of access to high quality, timely information on these issues is critical to stakeholders and can mean the difference between the success and failure of many initiatives. When the Spinning the Web (STW) project was conceived in March 1996, it was clear that the Internet could become a significant force for promoting sustainable development policies and practices at all levels. Organisations from around the world were rapidly developing their own Web sites and attempting to engage decision-makers in the tasks at hand.

However, most of these organisations faced significant challenges as they attempted to create and promote online sustainable development tools and services:

- The rapid explosion of Internet content, and lack of corresponding progress on search engine technology, made their content extremely difficult to find. Web content was generally becoming more commercial in nature and established Northern sites were growing exponentially as they entered their 3<sup>rd</sup> or 4<sup>th</sup> phases of development. What sustainable development content was freely available was therefore dominated by a handful of Northern and United Nations agencies.
- Senior decision-makers from around the world in business, government, and civil society are among the key target audiences for sustainable development information. It was difficult to reach them directly through the Internet since they often lacked access to the new technologies or had been frustrated by earlier attempts to locate reliable, timely information on the Web. They continued to rely more heavily on traditional forms of communication and information gathering.
- Other decision-makers were unfamiliar with or hostile to the concepts of sustainable development. These individuals were unlikely to invest time seeking information about the topic.

Spinning the Web was initiated in April 1996 to figure out how to create a sophisticated, yet accessible distributed Internet network which would balance the voices and perspectives of developing and industrialised regions to draw in a broader range of people to sustainable development issues. The project sought not only to inform, but also to use the new technology in innovative ways that engage the attention and commitment of decision-makers in their work for global and local change. We wanted to take many more people from all sectors beyond their current awareness of sustainable development to an ownership of these concepts and an understanding of how to put them into practice. Our goals were to give decision-makers in all parts of the world better access to the tools for sustainable development planning, to globally share experience about what actually works, and to compound the current international knowledge base by new forms of electronically facilitated dialogue.

The International Institute for Sustainable Development (IISD) was particularly interested in playing a leadership role within Spinning the Web. IISD's mandate is to promote sustainable development in decision-making internationally and within Canada. Spinning the Web has provided us with the partnerships needed to promote the sustainable development knowledge and experience from the South and from emerging economies to decision makers around the world. We believe that knowledge networking is a new approach to advance sustainable development more rapidly, by bringing together groups of leading institutions to aggregate and create new knowledge. Spinning the Web has become our collective testing ground for understanding how to put the knowledge and the "work" into a knowledge network.

## **Research findings**

Findings resulting from Spinning the Web have been wide-ranging. They have included insights into the ways in which key audiences use the Internet, the work entailed in creating thematic gateways which lead decision-makers to distributed information resources, the importance of well-structured member Web sites, and the role and operations of knowledge networks.

If Canadians are to play a role as international information brokers and creators as per the recommendations of the 1997 "Connecting with the World: Priorities for Canadian Internationalism in the 21<sup>st</sup> Century," these lessons are as valuable for Canadian organisations as they are for organisations in developing countries and elsewhere. While we have provided training on knowledge networking for over fifty young Canadian interns, the real beneficiaries of this knowledge have been the intern's host organisations overseas (e.g. WBCSD, UNEP, IUCN, FLACSO, SDPI, Panos). While this has led substantial international interest in the network and what it has learned about the institutional requirements of effective knowledge systems, inquiries from Canadian based organisations have been limited. In Phase II of Spinning the Web, we must expand our outreach activities in Canada beyond such internationally-focused organisations as the Canadian International Development Agency (CIDA) and the Commission for Environmental Cooperation (CEC) to encompass a broader range of Canadian sustainable development organisations.

## **The Internet and sustainable development audiences**

The rapid growth of the Internet around the world means that at least 50% of Internet users at any given time are new to the technology. All systems must be designed with these new users in mind. Access to the Internet is accelerating faster in developing countries than anywhere else. The number of Internet users will almost quadruple in Africa, Latin America and the Caribbean, and Central and Eastern Europe by the year 2001.<sup>1</sup> However, due to government policies and fiscal constraints, the telecommunications infrastructure in places such as India, Central and Eastern Europe, and West Africa is still incomplete. Predictions indicate that while there will be 827

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<sup>1</sup> Panos London. The Internet and poverty: Real help or real hype? Panos Briefing No. 28 (April 1998).

million email users by 2001, only 436 million users will have access to the World Wide Web and be able to post their own Web pages.<sup>2</sup>

In the next two to three years, there will continue to be a need for organisations and technologies that can create a seamless link between the high tech world of the World Wide Web and traditional communications channels. In order to facilitate these processes, World Wide Web content must be designed for maximum compatibility with low end and text based interfaces. Any sophisticated databases and programming must be “hidden” on the server and used to generate very simple and fast HTML outputs. In addition, there will continue to be a strong demand for individuals who can translate knowledge to and from the Internet.

The development and packaging of appropriate content is a key concern of all partners in Spinning the Web. The Internet is best used for delivering timely, reliable, and user friendly information to decision-makers around the world. Raw data is not enough; it has to have an added value and be packaged in the right way for the users. Feedback received by partner organizations indicates that these users include a substantial number of junior level and mid-level decision-makers. They are often individuals who have attended university and been exposed to Web products and services through free university access. They are fairly comfortable seeking information on the Web and will often use it as a research source when preparing oral and written briefings for senior decision-makers. They serve as important links between online and traditional communication methods.

### **Internet gateways**

Internet gateways are converging in their format and approach. This trend promises to continue over the next two years with the launch of large commercial gateways such as the Mining Co. (<http://home.miningco.com/>). To be effective, a gateway must combine the reach of a search engine with the selectivity of a directory in which a human editor highlights the most recent and relevant content for a user. Neither approach alone is sufficient. Search engines return too many results for a beginner and directories can never keep up with the pace of Internet growth. However, a good gateway can utilise a directory's database structure and take advantage of automated search engines to answer out-of-the-ordinary questions and to help manage the large number of records. Contrary to the initial assumptions made in the project, technology has not evolved to the point where the creation of electronic flags and filters for content can be automated.

While a few large commercial ventures hope to reap profits from gateways to the entire Internet, the greatest competition and innovation is occurring at the level of thematic gateways. As communities of interest coalesce on the Web, they are finding it necessary and desirable to assist their members and other interested individuals through their content. These gateways often assume their own identities with unique names, logos, URLs and designs distinct from that of any site within the community. Such distinction allows them to be seen as independent and reliable. This is important since thematic

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<sup>2</sup> Panos London. *Ibid.*

gateways gain their usefulness from providing thorough access to the most reliable content on the subject. Quality control of content is essential to maintaining the usability of the site.

In the case of the SD Gateway, we have chosen to restrict the majority of information to that emerging from the Spinning the Web network of organisations. In essence, we judge quality at the institutional level, rather than the document level. This has resulted in the SD Gateway giving a large profile to a small group of organisations, largely dealing with sustainable development issues from a southern perspective. We have also included links to a small number of the other best non-network resources on the Web. These non-network links provide in-depth focus on narrow concepts which sustainable development organisations may not provide. They also help to balance out regional and global perspectives.

Experience with the SD Gateway has shown us that no gateway site can be totally closed. The Internet has traditionally been an open forum and users expect that they will have the opportunity to promote their own information through any other site. We must provide avenues for non-network members to become involved or risk their frustration and non-return to the site. This participation has been accomplished through a variety of open directories including a job bank, calendar of events, list of electronic discussion forums, and the Sustainability Webring.

Establishing a gateway site requires a thorough understanding of the subject matter and the relationship between concepts. This is necessary in order to construct a useful information architecture with a clear classification hierarchy and keywords. This is difficult in the case of sustainable development with its vague definitions and amorphous knowledge base. Every organisation around the world has interpreted the concepts and their structure slightly differently. These differences often reflect deeply felt values. Recognising the problems inherent in attempting to create a definitive sustainable development metathesaurus (differences in interpretations, insufficient time to agree on terms and so forth), the Network Coordination Unit at IISD opted for organising the information resources of the partners according to six views that users have of the world of sustainable development:

- Dangers – the critical challenges to sustainability today
- Livelihoods – sectoral solutions and concerns
- Places – where sustainable development is being implemented around the world
- Resources – the key environmental, social, and economic resources which should be conserved and enhanced through sustainable development
- Roles – approaches and views of a wide variety of stakeholder groups ranging from business to government and civil society
- Strategies – actions which are being taken to achieve sustainability

While this approach has proven successful so far, the classification hierarchy under each of these main headings continues to be refined.

## **Individual Web sites**

A good gateway requires that partners maintain high quality content on their own independent Web sites. At the minimum, each site must provide reliable information supported by clear writing and a simple and fast design. If possible, content should be made available in at least one or two major languages. Most Web users are adept at translating from a major language to other regional languages (e.g. French to Wolof, Spanish to Portuguese), so budgeting for the translation of content into a selection of major languages should suffice. To provide the greatest benefits to users entering from the gateway, the site must also possess good navigation that will lead users deeper into related content on the site. It must also provide meta-tag support for its content to fully support the network search engine. While these are generally characteristics of a good Web site, they become increasingly important as an increasing number of users enter a site through pages other than the designated home page.

The creation and maintenance of high quality, timely content requires a thoughtful process at each organisation. This process will be very different within each organisation and is dependent on its institutional structure and history. It is important to keep in mind that Web sites are increasingly seen as a high profile marketing tool for organisations. When organisations are undergoing restructuring, work on the Web will often halt until new directions are agreed upon. Both ENDA and IISD experienced this during Phase I. These partners have found that such situations actually provide a window of opportunity to create sites less tied to organisational program structures and more reflective of general themes of importance to users.

An important finding of Spinning the Web Phase I has been that NGOs are generally not as far along in their ability to use the Web as assumed. The initial search for partners took longer than expected due to the difficulty of identifying sustainable development organisations which met the criteria of having regional linkages and the human and technical infrastructure to pursue advanced Web applications. While connectivity is becoming increasingly accessible, funding for computers, technical staff, internal policy dialogue and training has been lacking.

## **Knowledge networks**

The final, and perhaps most important, finding of the Spinning the Web project has been that it is very difficult to build a distributed network of sustainable development information without creating a distributed network of sustainable development organisations. The ongoing creation of new content and the monitoring of links between existing content requires sustained effort by all organisations involved in the network. Since the quality of each member's information has repercussions on the overall impression of visitors through the Gateway, each member of the network has some amount of self-interest in assisting with the improvement of all other sites.



This network must have a formal agreement to clearly delineate responsibilities. It must also truly be multi-lateral and enable partners to work together equally. This is especially true if the network is to be sustainable and outlast any particular project funding. It must also have a clear focus if it is to lead to meaningful cooperation, learning and action. In the case of Spinning the Web, the network has decided to focus on communicating sustainable development knowledge and the structures and tools to do so effectively.

Finally, we found that while Internet technology may facilitate the operations of a knowledge network, other communications means must be used as well. It takes a long time for relationships to be built virtually and online communities require even more trust and time than physical ones. Since participating organisations in Spinning the Web were selected by IISD, in part based upon their different regional emphases and issue focuses, it should not be surprising that many of the organisations were unfamiliar with each other. There were notable exceptions, such as previously existing relationships between REC and SEI, and DA and the Earth Council. Real multi-lateral cooperation on the project only began in June 1997 when project staff from each organisation met face-to-face with each other in Toronto. Subsequent meetings have improved network relations even more. The tone of e-mail discussions has relaxed and partners feel more confident providing critical feedback to the NCU. Nevertheless, by the end of Phase I, it was still difficult for partners to talk openly about the institutional policies and procedures that support Web content creation at each organisation. This information or lack thereof, may be seen by as too sensitive to discuss since it often touches upon institutional politics.

Strong institutional relationships are critical to the health and sustainability of knowledge networks. Rapid knowledge creation can best occur when individuals from each organization feel empowered to engage in full and frank discussions of common interest. If an institutional culture discounts the value of outside discussions or professional development in favour of internal projects, full and frank discussions will not be forthcoming. In order to gain from a network, everyone has to be willing and able to give. Network discussions may also break down if tangible benefits are not quickly forthcoming. This situation may occur if a number of organisations do not have the resources available to implement the solutions uncovered through their collaboration. In the case of Spinning the Web, we found that while partners may have learned how to improve their Web content delivery, they often lacked the human resources necessary to implement the solutions.

## **Satisfaction of objectives**

1. Overall objective – To foster the creation of a highly sophisticated, yet extremely accessible distributed network designed to draw a broader range of people into the web of information required for sustainable development action.

### **Achievements:**

- The Spinning the Web network with a formal governance agreement signed by seven partners

- The SD Gateway which integrates the knowledge bases of the partners
- The Sustainability Web Ring which expands access to SD information

## 2. Specific Objectives –

- Developing the initial network of cooperating organisations;
  - IISD, IDRC, REC, ENDA, FARN, DA, SEI, and the Earth Council. In December 1997, partners decided not to increase the size of the core network until a second phase of the network could begin.
- Designing and implementing an interactive interface and tools to help decision-makers make optimal use of the information provided through the network;
  - The SD Gateway with its related modules and directories including a search engine indexing all partners sites.
  - Numerous new modules and electronic forums developed by individual partner organisations
- Expanding the knowledge base through linkages to information resources held on-line and off-line by key organisations around the world; and
  - The SD Primer on the Gateway provides access not only to partner information, but to important information resources on the Web from other organisations as well.
- Balancing the knowledge base with input from regions throughout the world
  - New and expanded information on partner Web sites has increased the amount of regional sustainable development information on the Internet.

## **Project design and implementation**

The project was initially designed for IISD and other partners to learn by doing. No research component was included in the project proposal or Memorandum of Grant Conditions. The project design had two major components:

- constructing a gateway to sustainable development information; and
- assisting selected members within the network of organisations to provide expanded content reflecting regional sustainable development perspectives.

The implementation of each component was undertaken in a fairly independent manner.

### **Construction of the gateway and its tools**

The gateway was envisioned as an extension and modification of one of IISD's existing Web sites - IISDnet (<http://iisd.ca>). However, early work on the Community Adaptation and Sustainable Livelihoods (CASL) section of the site demonstrated the difficulties of reworking the existing site to provide linkages with other partners in a network.

By October 1996, work began on the design of an independent gateway that would rely on a database engine to help maintain and organise links to partner content. The pilot site was also designed to include short articles that would add value to partner links by

introducing users to the variety of views on sustainable development topics within the network. The site was demonstrated before a number of audiences and received positive feedback for its visual design and use of sophisticated Internet technologies. However, this pilot site received negative reviews from network partners who found the five-frame interface to be confusing and slow to load.

Two further redesigns were undertaken. Each redesign reduced the number of frames and removed user customisation options. These technologies were found to hinder the ability of many new users to find the information they were seeking. The redesigns also reduced the prominence of the background articles, as it became clear that they could not be written nor updated with the speed initially envisioned. In addition, each redesign increased the availability of non-member content in response to the demand by visitors for ways to interact with the site. Once supplementary funding from IDRC was received, we were also able to translate the interface and tools into French and Spanish to benefit users in Latin America and West Africa.

Behind the scenes, each redesign required increasingly sophisticated database programming in order to provide the NCU with the tools necessary to maintain and update the site. Over 90% of the HTML files in the current version of the SD Gateway are automatically generated on a weekly basis from style sheets and information in databases. This has vastly improved the ability of the team to maintain the site in three languages. The site is also automatically generated, modified, zipped, and FTP'd to REC on a monthly basis to update the European mirror.

One substantive change in the implementation of the gateway was the gradual move away from expecting each partner to be equally able to update and maintain its own links in the SD Gateway. Early in the project, a password protected Extranet was created to enable partners to perform these tasks. Supporting documentation on indexing within the SD Gateway system was also made available. This proved unfeasible for most organisations since it would have required broad staff understanding of the indexing system. The system has worked best for FARN - a small organisation, with a small amount of content, in which the responsibility for working with Spinning the Web has been assumed by library staff already experienced with indexing. Updates of other links to partner content have been done by the NCU with help of a search engine that can identify new files on each site for review. This action has reduced the workload of the partners and increased the consistency of indexing.

### **Creation of new content and tools on sustainable development by partners**

Funds for content development activities were made available at the beginning of each project year to the four core regional partners for content development. Supplementary funding from IDRC provided additional support to these core partners to offset the costs of telecommunications and publishing their existing knowledge bases online. The creation of workplans with each partner proved problematic due to the conflicting views of partners on whether content development was to be undertaken individually or by groups of partners.

It was not possible in Phase I to undertake joint content development since each partner was at a very different level of experience and the technical staff in each partner organisation had little knowledge of the substantive research expertise within the other partner organisations. Even upon the completion of matrices indicating potential topics for collaboration, it proved difficult for technical staff to reach out and engage their own research staff in creating content with the research staff of another partner organisation. Spinning the Web was too narrowly structured institutionally within each partner organisation with the funding flowing only to the technical group. Partners therefore developed and implemented their workplans separately from each other.

In large part, the partners found it most effective to use the funding as leverage to other Internet projects. Spinning the Web leverage enabled partners:

- to make the time to monitor and evaluate evolving Internet technologies for possible implementation on their sites;
- to train research staff in the use and development of Web content;
- to establish policies and processes for the strategic use of the Internet by the organisation;
- to offset losses of funding for technical teams as the organisation responded to reduced core funding from major donors;
- to undertake critical updates of online databases constructed under other completed projects; and
- to demonstrate commitment to and competency in Web development to other potential donors.

While some of these activities had outputs within the project life, they can be expected to have a longer-term impact on the organisations and their long-term ability to develop successful Web content.

### **Usefulness of partnerships in achieving the project objectives**

This project would have been impossible to execute without the full participation of all project partners. To encourage participation, IISD contributed financially to support the designation of one staff member at each core regional partner as an IISD Associate. Unfortunately, the individuals selected were not always the staff most closely involved with the implementation of the project. It was difficult to identify individuals with the appropriate levels of authority, reach within their organisation, and understanding of the technologies involved. If the person was too senior, he frequently had little time for the project or interest in details of Web site management. He tended to delegate the work to other more junior staff. Over the course of the project, this resulted in two levels of co-operation being established:

- between the senior communications staff at each institute about future project development and the potential for forming strategic alliances; and
- between junior communications staff to answer pressing questions about how to implement the project and to use the Internet more effectively for sustainable development communications.

Together, these two levels of cooperation were able to address most concerns of the network. Senior staff identified the need to increase the emphasis on capacity building within the network and to create a multi-lateral agreement within which all network members (funded and unfunded) would be on equal footing. This resulted in the creation of a formal network agreement that delineates the responsibilities of all partners and specifies the processes for making a variety of decisions pertaining to the network. Junior staff helped us to understand the significant limitations they still faced when trying to use the Web as a tool for information dissemination. Their cooperation in reviewing the SD Gateway and their insights about how regional users access the Internet also added substantially to our collective knowledge about what works and doesn't work on the Web.

We experimented briefly in this phase with creating a category in the network for Associate Members and nominated the Sustainable Development Policy Institute (SDPI) as the first such member. This approach was not particularly useful. In further development of the network, we will look at other ways to nominate and engage organisations from within the regions of network members.

Perhaps the most challenging aspect of partnerships within the project was in trying to create a role for IDRC as an active project participant. IDRC has a number of initiatives concerning information and communications for development, not to mention a large in-house Research Information Management Services (RIMS) department. IISD and IDRC had hoped to uncover a large number of synergies between these endeavours. To promote greater interaction between IISD and IDRC, the Spinning the Web project officer was hired by IDRC and seconded to IISD.

Spinning the Web benefited from IDRC's insights through discussions regarding such diverse subjects as meta-thesauruses, publications catalogues, online newsletters, database integration, and network-induced institutional change. It is less clear whether IDRC benefited fully from these interactions. It seemed that as a donor organisation, IDRC was dealing with different types of information and Web challenges than most of the other partner organisations. IDRC's needs were complex and would have taken most of the STW team's time to adequately address. A proposed collaborative project to develop a module on the "Well-being of Nations" did not materialise due to delays by the author in publishing his work.

## **Project outputs and dissemination**

- Knowledge creation
  - SD Gateway <<http://sdgateway.net/>> with mirror at <<http://sdgateway.rec.org/>> in English, French, and Spanish including:
    - SD Primer - Basic encyclopaedia of sustainable development covering over 150 topics. By the end of the project, the Primer contained 39 peer reviewed background articles, 1407 links to selected STW partner content, and 243 links to other important Internet Resources.

- Sustainability Webring – distributed navigation system allowing users to quickly navigate between the Web sites of the 34 participating organizations (38 other organisations applied, but were rejected since they did not meet all criteria for participation)
- SD Job Bank - contained a total of 84 Jobs with an average of 9 active records at any time
- List of Electronic Discussion Forums - 94 annotated records and information on how to join
- Calendar of Events - contained 444 records; integrated with the SD Primer as well as a stand-alone directory.
- Search engine allowing full-text searching all partner Web sites in addition to the SD Gateway itself.

REC also produced a CD-ROM version of the SD Gateway interface enabling access to the broad range of information for those constituents without interactive Internet capabilities. This was distributed to its regional offices throughout Central and Eastern Europe.

- New Web products and services:
  - Rio+5 Forum Web site <<http://www.ecouncil.ac.cr/rio/>> - containing all preparatory reports submitted to the Earth Council including 67 national reports, 11 regional reports, and 70 special focus reports
  - Pilot Development Alternatives Information Network (DAInet) Web site <<http://www.ecouncil.ac.cr/dainet/>> - a regional information system for sustainable development in the Indian subcontinent
  - Estonia Agenda 21 site <<http://www.agenda21.ee/>> - houses an organised collection of publications, references, events, projects and links related to sustainable development in Estonia
  - Sustainable Development Initiatives Database <<http://www.rec.org/REC/Databases/SDInitiatives/SDInitiativesFind.html>> - includes 28 annotated records of CEE initiatives and full text versions of 10 national policies and action plans
  - Community Adaptation and Sustainable Livelihoods <<http://iisd.ca/casl/intro+defs/default.htm>> - IISD module including an online handbook on conducting participatory action research about rural livelihood strategies
  - Environmental News Service <<http://www.rec.org/Default.shtml>> - regularly updated news and links to environmental content of interest to CEE users. Replaced by Green Horizons media alerts in October 1998.
  - Enviro-Phantom <<http://phantom.rec.org/>> - full-text search engine/Internet crawler for Central and Eastern Europe-related environmental and sustainable development-related documents
  - SD Timeline <<http://iisd.ca/timeline/>> - MacroMedia Flash presentation of international events from 1962-1997. Print version also available in poster format.

- Internet broadcasts:
  - Rio+5 Forum <<http://www.ecouncil.ac.cr/rio5/>> with 5 mirrors during the conference at:
    - ENDA (Senegal) <<http://www.enda.sn>>
    - SEI (Sweden) <<http://www.sei.se>>
    - JCA-NET (Japan) <<http://www.jca.ax.apc.org/index-en.html>>
    - Pegasus Networks (Australia) <<http://www.peg.apc.org/>>
    - PanAsia Networking (Singapore) <<http://www.panasia.org.sg/>>
  - Global Knowledge '97 plenary sessions
  - FARN colloquium on “Propuestas de politicas publicas para el desarrollo sustentable”
- Interactive electronic forums for discussion of:
  - Desertification - under the auspices of RIOD
  - International trade - groups working on trade in Africa
  - Renegotiation of the Lome Convention - NGOs from Africa, the Caribbean, and the Pacific
  - Lome - West Africa - West African NGOs working on the Convention
  - Health and rights for West African francophone women
  - Issues of concern to DAInet partners
- Improvements to existing sites:
  - FARN - information on the Buenos Aires Sustainability Programme, the Legal Environmental Information Centre, and six full-text publications
  - ENDA - information on energy and gender issues
  - DA - program information and full-text articles from 5 issues of their newsletter
- Network support products:
  - SDGate-L partnership discussion list and archives
  - STW Extranet - password protected archive of Network documents and online forms for adding and maintaining partner links to SD Gateway.
- Policies and training materials
  - ENDA electronic communications strategy and elaboration of an appropriate thematic information architecture to guide site redesign
  - DA feasibility study on Internet connectivity options concluding that radio-modem was the most viable and cost effective option in the current Indian context.
  - Internet training materials for ENDA staff and IISD youth interns
- Started under STW Phase I, to be completed in Phase II
  - Indian NGO database - STW funding enabled data processing. The print version of the directory is currently available. The CD-ROM and online searchable database will be available in 1999.
  - Indian funding database - Compiled a database of the schemes, eligibility criteria, and procedures for applying to roughly 100 donor agencies (national, bi-lateral, and multi-lateral).

- DAI-net Data Centre on Joint Forest Management - completed several rounds of discussions with organisations and state government officials who are working on joint Forest Management and Non Timber Forest Products.
  - SD Gateway Introduction to Sustainable Development module
- Training
  - Sustainable Development Policy Institute (SDPI) - Masood Hussain Quraishi – Spring 97
  - IISD/Tata Energy Research Institute (TERI) PEERS program workshop – Nov 97
  - Earth Council Institute Canada (ECIC) – Kim Peters – Jan 98
  - Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ) GmbH – Doris Klein – Apr 98
  - 23 Canadian interns trained for placement international host organizations (1997).  
33 Canadian interns trained to be placed with host organizations during Phase II (1998).
  - 11 DAI-net members
  - ENDA Cyberpop program - trained poor youth from Dakar in the use of electronic communications to provide information support and create community telecentres.
  - ENDA GRAF program – networked and trained area credit unions
- Presentations at numerous conferences including:
  - The World Conservation Union (IUCN): Annual congress (Montreal, Canada – Oct 96)
  - Global Environmental Options: “Sustainable Development and the Net” workshop (Washington, DC, USA – Dec 96)
  - Global Knowledge '97 (Toronto, Canada – Jun 97)
  - Local Knowledge (Toronto, Canada – Jun 97)
  - Asia Connects: Student conference (Winnipeg, Canada – Oct 97)
  - Manitoba Library Association: "Partnerships for the Environment" conference (Winnipeg, Canada – Apr 98)
  - STW press conference (San Jose, Costa Rica – Jun 98)
  - Massachusetts Institute of Technology (MIT) : Cyberspace for Global Sustainability workshop (Boston, US - Sep 98)
  - Development Alternatives highlighted the role of “Spinning the Web” in various meetings related to sustainable development
  - ENDA promoted STW at a number of meetings which they organised or attended

## **Capacity building**

Only modest resources for capacity building were included in the project, since partnership criteria assumed the existence of institutions who already had the capacity to create advanced Web products and services. Any capacity building was seen as a two-way street in which IISD would learn as well - especially about what was and was not working effectively in developing countries. However, initial assumptions were not borne out in reality for many of the project partners.



## **Institutional reinforcement and sustainability**

All core partners utilised some amount of the Spinning the Web funding for the institutional reinforcement of their organisations. Two out of the four partners (ENDA and FARN) used their grants primarily for this purpose. In addition, the placement of young Canadian interns with partner organisations through the CIDA-DFAIT International Internship Program provided these organisations with needed additional resources.

### ***Equipment***

Technical capacity was built at REC, ENDA, and FARN through the purchase of computer software and hardware and the upgrading of Internet connections. These expenditures have allowed the partner organisations to increase the number of staff who are able to use and to produce Internet content. IISD facilitated some equipment purchasing and shipping to Senegal at ENDA's request, when international commercial suppliers were found to be unhelpful, untimely and overpriced. Purchases included:

- FARN - 2 PCs for LAN in the Legal Environmental Information Centre. Zip drive.
- ENDA - Server. Computer. Printer. LAN extension.
- REC - upgraded Internet connection; digital camera; search engine

### ***Training***

Training was undertaken in large part by the IISD Youth International Interns assigned to each partner. Interns in Tallinn (SEI), Dakar (ENDA), and Buenos Aires (FARN) spent large portions of their time training technical and program staff in the use of Internet tools and resources. Development Alternatives, ENDA and FARN all commented on the help they received in website architecture and navigation, and the use of different approaches (e.g., basic html, frames, etc.) These intensive training periods were supplemented by the more informal discussions and knowledge sharing which occurred through the SDGate-L listserv. In addition, IISD, Earth Council, and REC staff were often consulted on specific technical issues (e.g. Java, search engines, Internet broadcasting, compilation of site statistics) when the need arose. IISD's travel costs for Spinning the Web were substantially reduced by sourcing the funding for intensive capacity building through the Youth International Interns Program.

Informal learning opportunities also arose through collaboration and joint testing of software. For example, the Earth Council and IISD built their skills in Internet RealAudio/Video broadcasts by sending a joint team to Brazil to cover the Rio+5 meetings. Development Alternatives, IISD, the Earth Council, and SEI built confidence with Internet conferencing while IISD and REC tested the utility of other groupware tools such as Teamwave.

### ***Marketing and outreach support***

In the highly competitive world of Internet products and services, many partners expressed the desire to pool their efforts in order to expand the visibility of their own work. STW partners assisted each other by cross-linking their online content and mentioning partner outputs in newsletters, announcements, and meetings. In addition, the marketing of the SD Gateway has assisted partners to reach broader audiences and achieve a higher profile. In September 1998, we began an ad banner campaign with Yahoo.com that has shown early signs of increasing the profile and traffic of the SD Gateway.

### **Capacity building of women**

Spinning the Web has had a positive impact on the capacity of women to take advantage of the new communications technologies. Through Spinning the Web, ENDA has begun to play an important role in looking at issues surrounding women and electronic communications in Africa. ENDA staff are also involved in organising activities on this theme for the 40<sup>th</sup> anniversary of the Commission Economique des Nations Unies pour l'Afrique (CEA). Other capacity built of women through the project has been dependent on the situation of Internet team and culture in each organisation. In the cases of FARN, IDRC, and IISD, the Internet team has grown out of traditional library and information services teams. These organisations have a high percentage of women now involved with the management of their Web sites. They have been extremely successful at building the technical skills of these female staff members to complement their existing knowledge about information architecture and communications.

In addition, the project has led to an increase of content on the Web about women in sustainable development. ENDA, in particular, has begun to upload its considerable French-language documentation on women's contributions to solving problems in the fields of desertification, shelter, health, and electronic communications.

### **Project management**

#### **Administration by IISD**

The project team at IISD proved to be flexible in adapting the project to meet the needs of project participants. As the project evolved and the split between the needs of junior and senior communications staff emerged, the team at IISD responded by effectively dividing networking responsibilities. IISD's Knowledge Communications Program Director, Heather Creech, oversaw strategic dialogues with senior staff regarding future project collaborations and funding, while the Spinning the Web project officer and project assistant maintained an ongoing dialogue with junior staff about how to improve their Web products and services. By the end of the project, it became clear that Spinning the Web would require the efforts of two project officers to continue its work. One officer would manage the growing SD Gateway and one would more closely interact with

partners to ensure that workplans are being achieved and that capacity-building needs are being met.

IISD relied on a variety of tools to administer the activities of such a broadly distributed network:

- E-mail discussion forum - excellent for dissemination of capacity-building information from the NCU. Less effective when response was needed to an item.
- E-mail and phone chats (1-to-1) - good for building rapport and soliciting feedback or response from each network member. Usually these two methods had to be used in conjunction in order to get substantive feedback.
- Staff visits - Due to budget and time constraints, it was not possible for staff from each partner organisation to spend substantive time at IISD. REC and the Earth Council were the only organisations with which this was possible, while other partners spent a few days at IISD during the December 1997 partner meeting. IISD staff visits to REC, EC, SEI, DA and SDPI were made by Heather Creech, during which she was able to address strategic concerns of the network.
- Intern placements – IISD Youth interns performed an important role. Interns played an important role by increasing the visibility of Spinning the Web at the partner organisations where they were placed. Interns maintained regular e-mail contact with the NCU and with each other, leading to greater flows of information between organisations.
- 3 partner meetings - June 1997 at Global Knowledge 97 in Toronto; December 1997 in Winnipeg; and May 1998 in Costa Rica. Very effective for team building and decision-making.

### **Technical and other support and administration by IDRC**

In the original memorandum of grant conditions, IDRC noted its desire to function as a partner in the work of STW, in addition to providing financial resources to the project. We believe that this project has significantly strengthened the working relationships between IISD staff and IDRC staff. We are grateful to have had the opportunity for many useful discussions with Renald Lafond, Carole Joling, Alison Ball, Robert Valentin, Robert Charbonneau, John Stevenson, Djilali Benmouffok and others. The visits of Carole and Robert to IISD and the return visits of Terri and Heather on several occasions to IDRC provided us with many good ideas and lessons learned from IDRC's previous experience with information and networks. In addition, contacts were made with Uganisha, PAN, RIMS, Acacia, and Bellanet to explore possible areas of overlap or synergies that would encourage the active participation of IDRC in the project. The one-on-one discussions held with individuals from each of these programs provided insights that were incorporated into the project design. IDRC participated in two of three network meetings.

However, IDRC has chosen not to sign the formal network agreement. RIMS staff have expressed concern that they may not have sufficient resources to fulfil all of the duties required of network members. They have decided instead to focus on improving IDRC's Web products and services and contributing to network discussions on a periodic basis.

While we look forward to their continued participation on this basis, it does raise an issue of how to incorporate the Internet knowledge of donor agencies into the Spinning the Web network. CIDA has recently expressed an interest in both funding and playing an active role in STW during a second phase – “to learn by doing.” Our experience with IDRC on this issue leads us to be more aware of the challenges in trying to find a role for financial supporters beyond the contribution of funds.

## **Impact**

The Spinning the Web project has had reach and impact on three different communities:

- 1) Those interested in making effective use of the WWW for sustainable development communications -  
Reach - Deep reach into partner organisations and their Internet project partners (DAInet, ENDA’s West African network)  
Impact - Increased quantity and quality of sustainable development information on the Web. Experience in STW has also helped partners to leverage other funding sources for their Internet work. The STW NCU is increasingly contacted by organisations looking to become involved in the network in some way so as to learn from our experiences. Also, members are being contacted to provide consulting services to other organisations wishing to improve their Web sites. Such opportunities will be pursued more systematically in Phase II.
- 2) Those interested in knowledge network governance and operations -  
Reach - Other knowledge networks initiated by IISD, with support and involvement of IDRC (e.g. Climate Change Knowledge Network; Trade Knowledge Network); Other networks (e.g. IUCN’s proposed regional policy network, the Global Knowledge Partnership; MIT’s Cyberpartnership for Sustainable Development)  
Impact - These networks are studying the STW formal governance agreement as a potential model for their own network.
- 3) Those interested in sustainable development policies and practices-  
Reach - Expanded online services that are more accessible to the public. Publications and resources made more available to a wider audience. Site statistics on the usage of the SD Gateway from May-September 1998 indicate a growing interest in the site both within Canada and internationally. From May to October 1998, nearly 2000 distinct Canadian users visited the site (12% of total users). They represented institutions ranging from universities (University of British Columbia, Guelph) to provincial governments (Manitoba, British Columbia, Alberta, Ontario, and Newfoundland). While roughly 21% of global Internet users are from the South, only 8% of the visitors to the SD Gateway can be identified as accessing the site from developing countries and countries in transition. This is not too troubling considering that the number of Web users globally continues to be only one-half the number of Internet users. It can be assumed that people with Web access in the South are considerably less than 21% of global Web users. Nevertheless, there is still a need to accelerate partners’ marketing of the SD Gateway in the South. Detailed statistics are

available in Appendix I to this report. Other indicators of the use of network information include:

- REC local offices handling increased information requests using the information provided on the SD Gateway.
- DAInet helping its partners to identify mailing lists of interest through the SD Gateway list of listservs.
- FARN receiving increased requests to consult their Legal Environmental Information Centre. They have also received feedback from Chile and Uruguay, where interest in FARN's online publications has been high.

Impact – The products and services developed through Spinning the Web have had an impact on the sustainable development community. Four primary indicators demonstrate the usefulness of the project outputs:

- Feedback from Development Alternatives and others on their use of the SD Gateway as a cost-effective research tool. They cannot afford the time traditional search engines require to locate comparable information
- An increasing number of repeat users of the site (approximately 750 per month by September 1998) who find it an effective means of locating high quality information on sustainable development.
- An increasing number of requests to join the Sustainability Webring as a method of gaining profile with their target users.
- STW members have requested numerous copies of the SD Timeline poster printed in part with funding from the American Library Association.

## **Overall assessment**

As mentioned in the Spinning the Web Interim Assessment Report submitted to IDRC in July 1998, project participants have felt that Spinning the Web has added significantly to their ability to communicate sustainable development effectively through the Internet. Human and technical capacity building played a larger role than initially planned as resource shortages at partner organisations arose throughout the course of the project. All organisations in the Network have undergone a period of significant web site restructuring over the past two years. This has been a result of discussions, sharing of experiences and support across the network concerning the purposes and types of web sites that we are now creating. The SD Gateway and other content developed by the partners is attracting a growing audience of decision-makers to sustainable development principles and practices on the Internet. In addition, STW has added value to other projects and the forging of strategic alliances between member organisations. Awareness among researchers and senior management of the strengths of the partner organisations is growing.

## **Recommendations**

IISD's experiences and our observations of other networks have led us to conclude that seven to ten years are required to create a network and to ensure its sustainability. Spinning the Web Phase I has exceeded our expectations by moving beyond the stage of creating of an Internet gateway to the development of a formal knowledge network. Our

principal recommendation to IDRC was that Spinning the Web be extended to a second phase. This recommendation was accepted and IDRC has provided funding for an additional two years of activities under Spinning the Web. Funding has also been sought from other organisations in order to broaden the participation in and international exposure of the network. At the time of writing this report, we are awaiting CIDA's signature on a grant for support for Phase II. During Phase II, network members will work to:

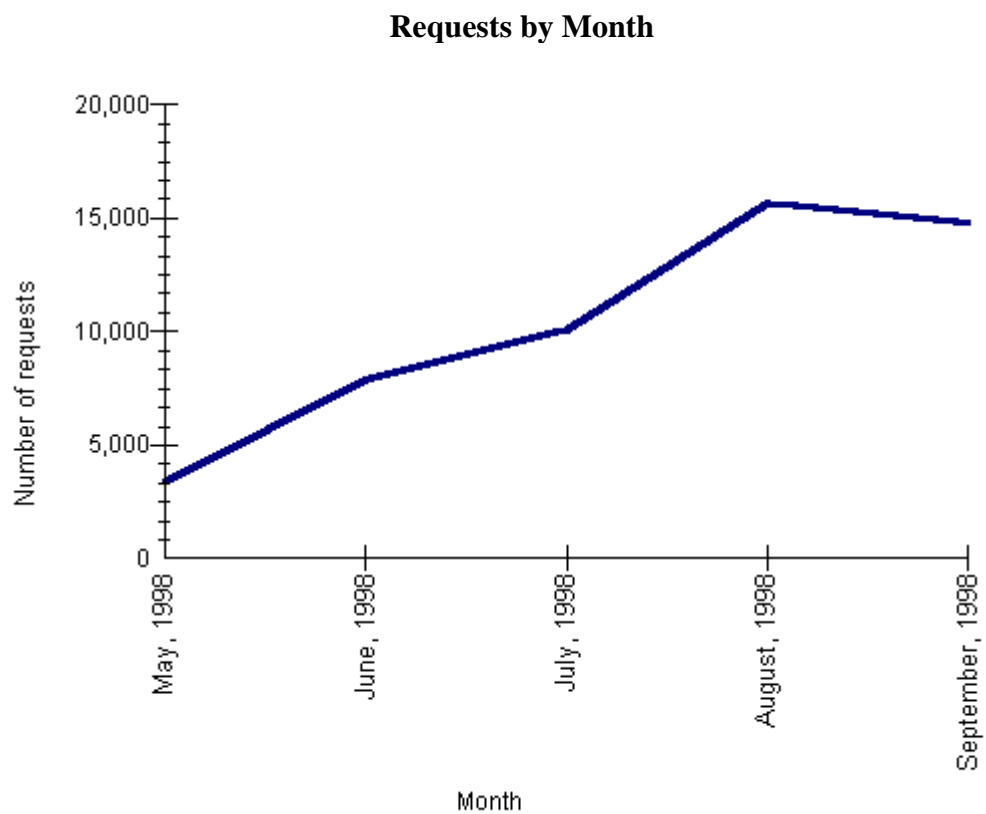
- Operationalise knowledge networking within the current core membership of the Spinning the Web network;
- Expand the knowledge network to include members from new regions;
- Establish principles and protocols of knowledge networking;
- Improve tools for measuring the success of knowledge networking;
- Test "virtual" communications and collaborative work tools;
- Deliver the combined knowledge base of the Spinning the Web network on the Internet;
- Exchange technology and SD knowledge across the network, through specific demonstration projects;
- Transfer the Spinning the Web knowledge networking model to other regional and international networking initiatives

These activities will lead to significant contributions from Spinning the Web members to the Global Knowledge 2000 efforts.

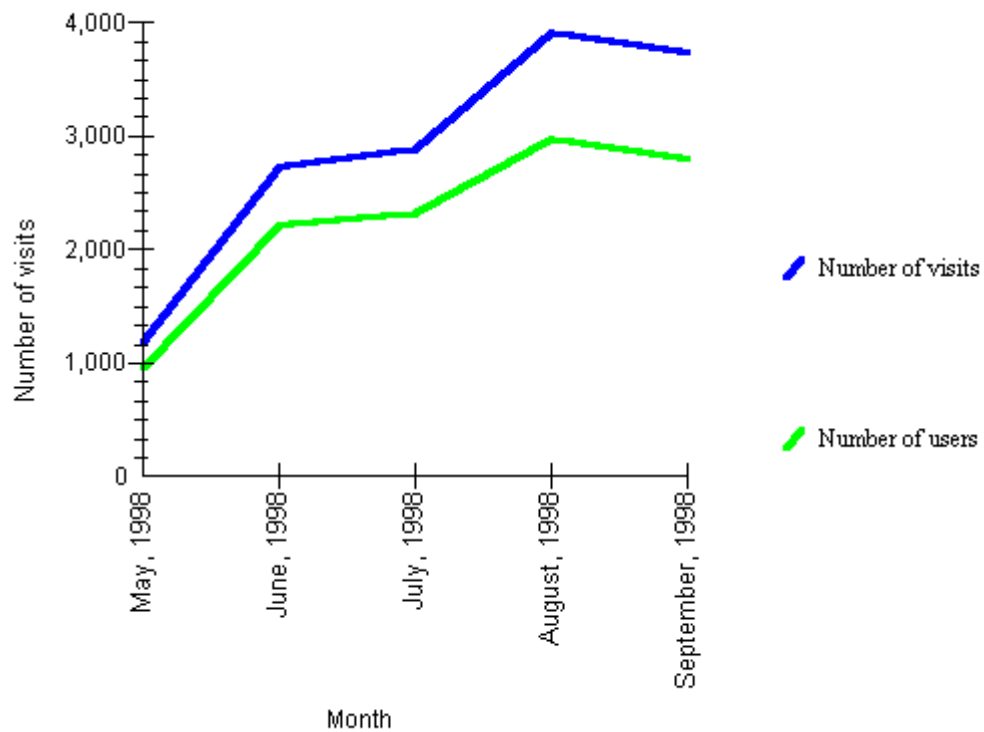
## Appendix I: SD Gateway site statistics (May-September 1998)

### General activity statistics (May-September 1998)

Number of hits	480,014
Number of requests	51,910
Number of visits	14,451
Number of users	10,457
Average number of requests per visit	3.59

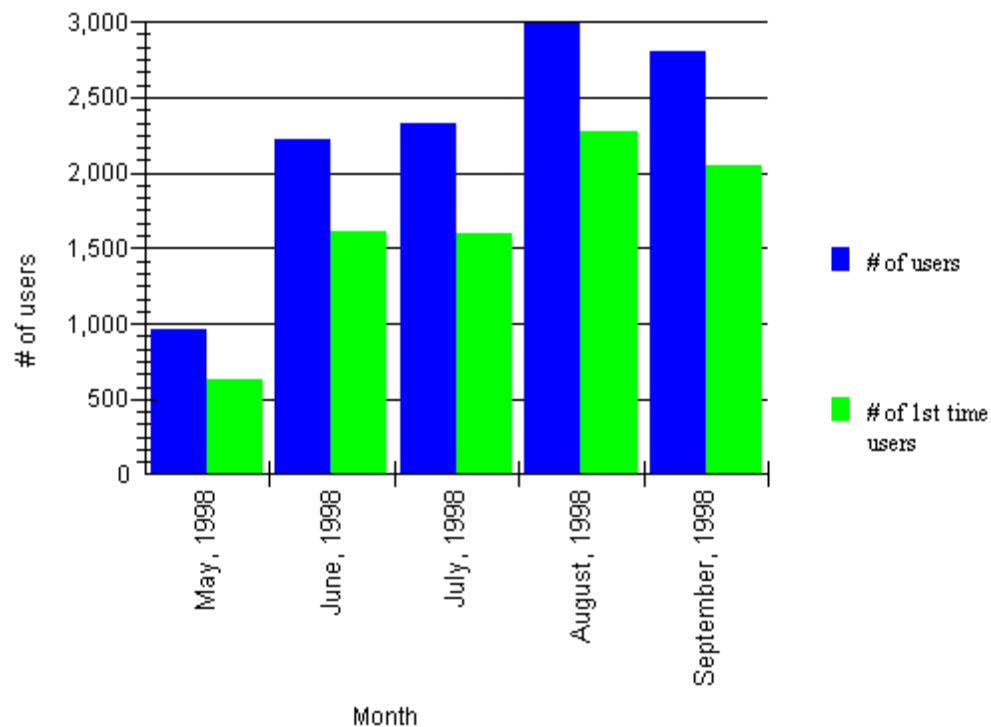


### Vists and Users by Month

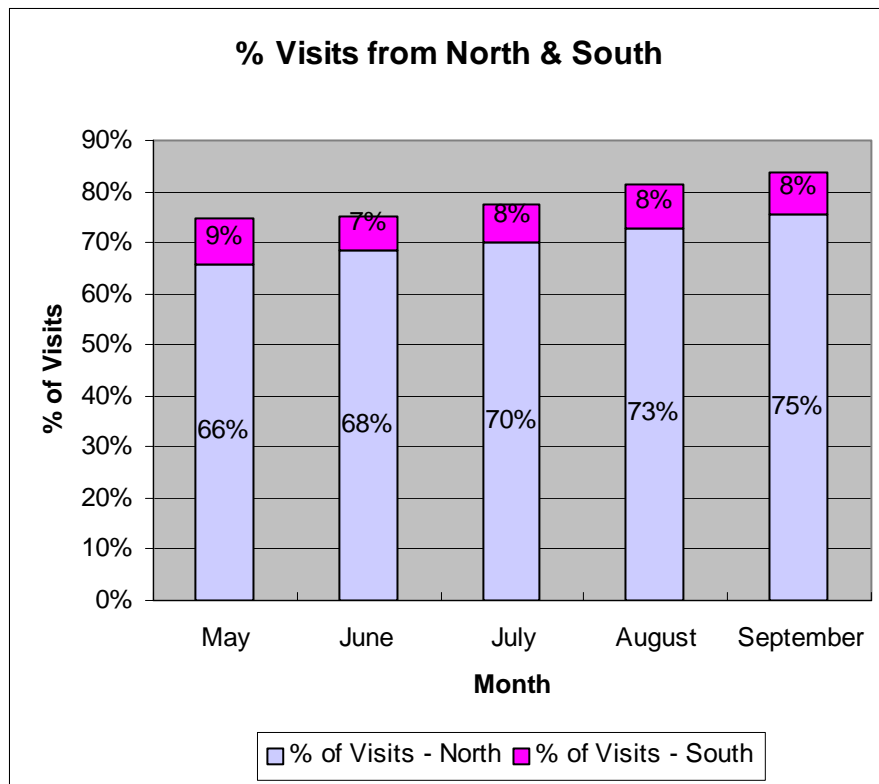


### Users by Month

Larger gaps between total and 1st time users indicate a growing level of repeat, and presumably satisfied, customers.







## Definition of terms related to site statistics

<b>Hit</b>	Any connection to an Internet site, including inline images and errors.
<b>Request</b>	Any <i>hit</i> that successfully retrieves content. Unlike hits, requests are related to content and user behavior. For example, if a user requests an HTML page that has three graphics files, the web server might make a log entry for the three graphics files, the HTML page, and perhaps add some lines for overhead. However, only one request is counted by Analysis.
<b>Visit</b>	A series of consecutive requests from a user to an Internet site. If your log file data includes <i>referrer</i> data, then new visits begin with referring links external to your Internet site. Regardless of whether or not you have referrer data, if a user does not make a request after a specified time period, the previous series of requests is considered to be a completed visit.
<b>User</b>	Anyone who visits your site at least once. If your log file data contains <i>cookie</i> data, users will be identified by their cookie . If your log files do not contain cookie data, a registered <i>username</i> is assigned to users. Or, if no registration information is available, users' are identified by their Internet <i>hostnames</i> . Many organisations use Internet gateways, which mask the real Internet hostnames, so user counts may be conservative for those users identified by their Internet hostnames.
<b>Organisation</b>	A commercial, academic, nonprofit, government, or military entity that connects users to the Internet, identified by an entity's Internet <i>domains</i> . Microsoft Site Server Analysis groups together all domains registered to the same organisation as one organisation. If a domain is unavailable in the database, one Internet domain is used to identify one organisation.
<b>Geography</b>	The continent, country, region, state, city, and zip code are based on an organisation's Internet domain registration. Only Internet domains found in the Analysis database are included in region, state, city, and zip code analyses. Each Internet domain is associated with only one zip code, so all users from a domain used in multiple locations are considered to be at one location.

This report was created using the Microsoft (TM) Site Server Analysis - Report Writer.  
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