4. Capacity Building Program

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Executive Summary
The IGES Capacity Building Program in the second phase will focus on the promotion of Web-based learning (eLearning) and implementation of select training workshops. The program’s activities will build on IGES projects and strategic research outputs, as well as benefit from a strong network for implementation and content development. Target beneficiaries for these activities are government officials, corporations, and learning organizations, with special emphasis being given to undertaking activities in the countries of the Asia-Pacific region. Results of work thus far in preparation for the second phase of work can be seen at www.iges.net (English) and www.iges-japan.net (Japanese). These web sites integrate and encapsulate the program’s courses, content and eLearning systems development. The web sites will be a main focus for program development, communication and dissemination of contents and information products.

1. Project Theme
Capacity building

2. Background
The need for capacity building, learning and training programs in the Asia-Pacific region is clear. The demand for capacity building is high, but common problems are faced by international and training organizations, including lack of personnel and funds to implement effective educational and training programs on a consistent, planned basis.

Since June 1999, IGES Capacity Building Program either organized or participated in over six training workshops, where it was found that competition for limited resources for face-to-face workshops is severe. Using feedback from both participants and instructors, work began on investigating the possibility of adopting innovative approaches to capacity building that could

- answer IGES’ needs and make impact
- leverage resources and reduce costs
- respond to needs of the government, international and national organizations.

Investigations into the market regarding existing eLearning technologies found serious deficiencies in those technologies from IGES’ perspective. IGES’ needs could not be sufficiently met. Deficiencies include:
- slow download times,
- high cost,
- high maintenance,
- complex authoring environments, and
- difficult or inflexible programming issues.
- Further, IGES would have less control over language (a major difficulty).

During that time, efforts were made to begin the design of software and capacity building systems that met IGES’ and specific market needs.

### 2.1 Feasibility

In January 2000, IGES contracted expert assistance in Japan to further investigate the feasibility of eLearning and Internet-based applications for learning and capacity building in Japan and abroad.

After 6 months of market surveys, interviews and other fact-finding approaches, results show that the total market in Japan for eLearning applications would come to exceed $300 million in the next three years, taking into account
- the still relatively limited access and integration of the Internet in Japan as a whole;
- future growth scenarios, and
- segments of the US experience and learning processes.

During this phase, over 30 organizations were approached for inputs and opinions concerning Internet-based learning systems, and these inputs were used to provide feedback into the design processes.

Some of the advantages and disadvantages of eLearning and classroom training / education were ascertained and are depicted in Table 1.
<table>
<thead>
<tr>
<th></th>
<th>Advantages</th>
<th>Disadvantages</th>
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<tbody>
<tr>
<td><strong>Classroom/Workshops</strong></td>
<td>Visual contact</td>
<td>Access limited</td>
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<td></td>
<td>Physical attendance</td>
<td>Quality varies</td>
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<td></td>
<td>Training not required</td>
<td>Information retention varies</td>
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<td></td>
<td>Technology requirements low</td>
<td>Results measurement difficult</td>
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<td>Relative cost is high</td>
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<td>Progress reporting difficult</td>
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<td></td>
<td></td>
<td>Self-pacing difficult</td>
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<td></td>
<td></td>
<td>Access to instructor varies</td>
</tr>
<tr>
<td><strong>eLearning</strong></td>
<td>Access open</td>
<td>Internet access preferred</td>
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<tr>
<td></td>
<td>Quality consistent</td>
<td>Limited visual contact</td>
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<td></td>
<td>Information retention is high</td>
<td>New systems training</td>
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<td></td>
<td>Results measurement is automatic</td>
<td>Computer required</td>
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<tr>
<td></td>
<td>Progress reporting automatic</td>
<td></td>
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<tr>
<td></td>
<td>Relative cost is low</td>
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<td></td>
<td>24/7 access</td>
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<td></td>
<td>Mobility of instructor and learner</td>
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<td></td>
<td>Convenience</td>
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<td></td>
<td>Materials ever-present</td>
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<tr>
<td></td>
<td>Self-paced</td>
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<tr>
<td></td>
<td>Access to instructor high</td>
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**2.2 Systems and Testing**

During the period from January 2000 to the present, the Capacity Building Program has developed eight software products in both English and Japanese for:
- eLearning course management (six software products)
- eLearning course authoring (two software products)

These systems have undergone numerous separate testing sessions in English and Japanese. Full conversion into Japanese and real-time market testing began in October 2000, and they are now market-ready. Testing will continue on a wider scale into the second phase.

In addition, the Capacity Building Program has authored two large web sites in both English and Japanese. Addresses are: www.iges.net (for English) and www.iges-japan.net (for Japanese). These web sites include integration of the IGES’ eLearning software, contents and systems. Limited marketing of the systems will be undertaken on the Program’s web sites.

**3. Objectives**

The objectives of the Capacity Building Program are:
(1) to promote eLearning systems, particularly in the Asia-Pacific region,
(2) to implement training workshops in IGES project-related areas, and
(3) to build on IGES projects and strategic research outputs to develop content and courses, both for on-line and off-line use.

4. **Target Groups**

Target groups over the next phase are:

**a. Corporations**
- Personnel sections
- Environment sections

**b. Learning organizations and institutions**
- Universities/Faculties (post-graduate)
- Technical and short-term schools
- Schools

**c. Government officers**
- Environment-related sections
- ODA-related sections
- Personnel divisions

5. **Expected Policy Impact on Stakeholders**

Policy impact will also depend upon the success of the IGES projects. Potentially, the impact of capacity building activities can be enhanced by linking to mainstream IGES activities including business, environmental education, and climate change. Impact can also be enhanced by providing professional and consistent on-line and off-line training and capacity building services for organizations and individuals, responding to needs both inside and outside of IGES.

6. **Methodology/Approach**

During the second phase, research outputs of the IGES projects will be built upon by developing related eLearning content and organizing face-to-face training workshops. eLearning systems will enable relatively fast authoring and deployment of content. Partnerships for implementation will be sought. Training workshops will have special regard to the needs and opportunities of the Asia-Pacific region. In carrying out the Capacity Building Program, networking will be a high priority, and the Program will cooperate with UNESCAP, UNITAR, World Bank, UNDP, ADB, UNEP, LEAD, Japanese local governments and others. The Program will also focus on formulating and implementing, either partly or wholly, environment-related training programs commissioned by JICA and other agencies.

The Capacity Building Program will have special regard to exploring the implementation of eLearning and training projects in developing countries in the Asia-Pacific region. Possible starting points include existing collaborations with UNESCAP, ADB and governments in the region. The Capacity Building Program will be able to offer to these projects:

- eLearning systems and software,
- Internet and IP provision for learning services,
Avoiding duplication has been a genuine prerogative for the program since the start. Feasibility studies, networking and communication with many organizations have continued to be high priorities in the search of ascertaining a comparative advantage. In this light, the program is aiming to hold a strong position in the Asia-Pacific region in eLearning and environmental learning.

6.1 Topics for Content Development
Initial topics for course and content development will center on:
(1) ISO14001 implementation (relating to business and environment),
(2) climate change and environmental education (relating to IGES projects), and
(3) leadership and strategic skills.

These topics are seen to be answering needs, and are both adaptable to and support the IGES projects. Additional areas for focus include sustainable development strategies and environmental law/governance. Their development will depend on resources available.

6.2 Leadership
Leadership is becoming an increasingly important topic for the Capacity Building Program as relations with the LEAD program continue to strengthen, as it develops its own contents and holds its own workshops. It is proposed that this collaboration with LEAD continue.

6.3 IGES Project Content
The Capacity Building Program will work closely to support capacity building aspects of the IGES projects, with initial focus on development of materials on climate change and environmental education. Environmental education is an area for focus, and this process will be supported by LEAD program interns developing contents in related fields. In addition, collaboration with the Communications Program of IGES is expected to evolve and be clarified early in the second phase.

6.4 Building on the Efforts of Others’
Throughout its work, the Capacity Building Program will build on the efforts of others, where those efforts have clear similarities with the program’s objectives and activities. These will initially include work with UNITAR for an eCourse series on biodiversity and/or with other organizations on climate change. In doing so, it will work closely with the IGES projects’ outputs, and other partners in putting together effective programs that may incorporate IGES’ comparative advantages in the process.

7. Continued Systems Development
As a result of undertaking the process of software and systems development, the Program has developed – and will continue to refine and improve – a set of comprehensive eLearning and educational tools that can be used to effectively support the marketing and dissemination IGES
outputs as whole. In addition, these products and their copyrights ensure that the Program can provide significant inputs when developing future programs with others.

8. Linkages with International Programs

The program will link with programs of:

- UNESCAP
- UNEP
- ADB
- UNU
- APCEL
- World Bank
- EBRD
- UNITAR
- LEAD International
- LEAD Japan
- IPCC/TSU
- JICA
- Others
### 9. Schedule

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<tr>
<th>Year</th>
<th>Planned Activities</th>
<th>Benchmarks</th>
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| FY2001 | • Complete first full scale testing of systems  
• Translation into Japanese and testing  
• Course authoring, testing and review  
• LEAD Internship program  
• Implement LEAD Japan workshop  
• IGES-KFACE Leadership seminar  
• ESCAP eLearning project  
• UN related capacity building (limited)  
• IGES related capacity building  
• PR Seminars  
• Hire trainers, others on an as-needed basis  
• Test translation of software into other languages  
• New applications considered – IT, language | • Web site operational  
• Software completed  
• Teams in place  
• First market project  
• First leadership seminar  
• First update of software  
• 3 seminars/workshops  
• Web site access at 1000 individual users per month |
| FY2002 | • In-house capacity and personnel strengthened  
• Hire trainers, others on an as-needed basis  
• LEAD Internship program continued  
• LEAD Japan workshop continued  
• IGES-KFACE Leadership Seminar series  
• UN related capacity building  
• IGES related capacity building  
• New version(s) of software  
• Strengthen links with trusted partners | • Web site access at 2000 individual users per month  
• New software completed  
• New applications  
• 20 organizations using our systems  
• 5 workshops/seminars |
| FY2003 | • In-house capacity and personnel strengthened  
• Hire trainers, others on an as-needed basis  
• Strengthen links with IGES outputs  
• LEAD Internship program continued  
• LEAD Japan workshop continued  
• Leadership Seminar series continued  
• Seminars/workshops expanded  
• UN related capacity building  
• IGES related capacity building  
• PR Seminars  
• New version(s) of software released | • Web site access at 3000 individual users/month  
• 40 organizations using our systems  
• 5 workshops/seminars |
### 10. In-house Staffing and External Collaborators and Organizations

<table>
<thead>
<tr>
<th>Project Core Members</th>
<th>Main Project Collaborators</th>
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<tbody>
<tr>
<td>- Senior Research Fellow</td>
<td>- UNESCAP</td>
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<tr>
<td>- Ms. Reiko Koyama</td>
<td>- UNEP</td>
</tr>
<tr>
<td>- Mr. Masahisa Sato</td>
<td>- ADB</td>
</tr>
<tr>
<td>- Ms. Sue Park, Secretary</td>
<td>- UNU</td>
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<tr>
<td>- Consultants for technical support</td>
<td>- APCEL</td>
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<tr>
<td>- Possible additional person(s) for customer and web support</td>
<td>- World Bank</td>
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<tr>
<td>- Additional consultants for training (off-line and on-line) as needed</td>
<td>- EBRD</td>
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<td></td>
<td>- UNITAR</td>
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<td></td>
<td>- LEAD International</td>
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<td>- LEAD Japan</td>
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<td>- IPCC/TSU</td>
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<td>- JICA</td>
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<td>- Griffith University</td>
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<tr>
<td></td>
<td>- Content developers</td>
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<tr>
<td></td>
<td>- Web management and site developers</td>
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<tr>
<td></td>
<td>- Course designers</td>
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<td>- Translators and others</td>
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### 11. Project Management

Management of the program will be spearheaded by a manager, who will work closely with IGES management and be responsible for all the systems. Components of the management system include:

- office systems
- personnel training
- software development
- marketing/communications
- Web site development
- customer support and technical training
- setting directions for the program
- supporting the IGES projects

Important documents have been drafted for use by the Capacity Building program on an interim basis. These will be tested and improved through application, and include:

- Legal notices / agreements
- Guidelines for Intellectual Property
- Email Policy
- Records Retention Policy
- Office systems

Graph 1 identifies a program structure to meet both IGES and market needs, having capacity to offer both workshops and eLearning activities.
12. Monitoring and Evaluation

Monitoring and evaluation systems have been put in place, and will be used as part of management evaluation of the Program. Topics for consideration include numbers trained, number of learners and users, and software applications.