

To Ms. Monika Linn, Senior Adviser on Sustainable Development  
Address: Two UN Plaza, Room DC2-2234, New York, N.Y. 10017  
Phone: 1 (917) 367 20 89; Fax: 1 (212) 963 42 60  
E-mail: [linnm@un.org](mailto:linnm@un.org)

**Name of the Partnership/Initiative**

**Asia-Pacific Earth observation pilot project**

**Expected date of initiation: on-going project**

**Expected date of completion:**

**Partners Involved:**

- Asian Institute of Technology (AIT)  
AIT Homepage: <http://www.ait.ac.th>  
Space Technology Applications and Research Program Homepage: <http://www.star.ait.ac.th>
- The Geo-Informatics and Space Technology Development Agency of Thailand (GISTDA), Thailand  
GISTDA Homepage: <http://www.gistda.or.th>
- The National Institute of Aeronautics and Space (LAPAN), Indonesia (\*)  
LAPAN Homepage: <http://www.lapan.go.id>
- National Space Development Agency of Japan (NASDA), Japan  
NASDA Homepage: [http://eos.nasda.go.jp/eathindex\\_e.htm](http://eos.nasda.go.jp/eathindex_e.htm)

**Name of the contact person/focal point:**

Dr. Yoji Furuhamo

Executive Director,

Office of Satellite Technology, Research and Applications

National Space Development Agency of Japan (NASDA)

Address: 2-4-1 Hamamatsucho, Minato-ku, Tokyo 105-8060, JAPAN

Phone: +81 3 3438 6007

Fax: +81 3 5402 7934

E-mail: [Furuhamo.Yoji@nasda.go.jp](mailto:Furuhamo.Yoji@nasda.go.jp)

## **Main objectives of the Partnership/Initiative:**

### **1. Training programmes for Asian pacific region at Asian Institute of Technology (AIT)**

Asian Institute of Technology (AIT) and The National Space Development Agency of Japan (NASDA) have promoted training programmes at AIT on the satellite data analysis and its applications with the participation of various organizations in Asia-Pacific region, especially for developing countries. Training also includes the new application technology of Advanced Earth/Land Observation Satellites of NASDA, which will facilitate and activate the pilot project of Indonesia and Thailand. Caravan type of training so far conducted outside of AIT is also welcomed by developing countries and should not be neglected, but rather, should be emphasized or enhanced, targeted at the promising tele-training in the future.

### **2. Pilot projects for the use of satellite data in Thailand and Indonesia**

The Geo-Informatics and Space Technology Development Agency of Thailand (GISTDA) and Thailand and The National Institute of Aeronautics and Space (LAPAN), Indonesia and NASDA have started pilot projects, with the following objectives:

- i. help develop groups of experts in satellite data applications within the administrations of Indonesia and Thailand, especially experts in mapping using satellite data;
- ii. help these expert groups to create maps of land use and other factors, for the operational use of each government.

To achieve these objectives, a number of government agencies of Thailand and Indonesia have been participating in this project. Under this pilot project, a series of trainings and Seminars have been implemented using satellite data (mainly, JERS-1, ADEOS). AIT also plays an important role in the training of participating agencies.

#### **Indonesia**

In Indonesia, the National Institute of Aeronautics and Space (LAPAN) and the Centre for Soil and Agroclimate Research (CSAR) participated in this project with the following aims:

- Map rice crop areas
- Monitor rice crop growth development
- Estimate rice yields
- Detect and identify rice diseases

#### **Thailand**

The Geo-Informatics and Space Technology Development Agency of Thailand (GISTDA) coordinates the participating Thai government agencies:

- i. Department of Fisheries (DOF), Land Development Department (LDD) and Office of Agricultural Economics (OAE) of Ministry of Agriculture and Cooperatives;
- ii. Department of Town and Country Planning, Ministry of Interior.

These agencies are implementing a pilot project with the following aims:

- Mapping of urban land use
- Constructing a Digital Elevation Model (DEM) database of Thailand
- Mapping for agricultural classification
- Mapping of coastal land use for fisheries
- Mapping of regional land cover

**Please also provide a brief description of the relationship of the Partnership/Initiative with the objectives of Agenda 21 as well as relevant goals and objectives of the United Nation Millennium Declaration:**

**1. Agenda 21 and remote-sensing**

Earth observation data provides essential information for decision-making and participation on sustainable development. In this regard, Agenda 21 recognises the importance of the improvement of data collection and use as follows:

40.8 ... Within the organs and organizations of the United Nations system and relevant international organizations, data-collection activities, including those of Earthwatch and World Weather Watch, need to be strengthened, especially in the areas of urban air, freshwater, land resources (including forests and rangelands), desertification, other habitats, soil degradation, biodiversity, the high seas and the upper atmosphere. Countries and international organizations should make use of new techniques of data collection, including satellite-based remote sensing. ....

**2. CSD9 and the use of satellite data**

Furthermore, the Decision 9/4 "Information for Decision-making and Participation" of the Commission on Sustainable Development Ninth session (16-27 April 2001) encourages the cooperation for training and capacity building as follows:

- (g) Encourages countries, particularly developed countries, with the cooperation of relevant international organizations, as appropriate to:
  - (i) Assist in training and capacity-building, particularly in developing countries, which will help promote wider use of information and communication technologies, including satellite data, and its application;

**3. Agreement at PrepCom IV for WSSD (Bali, Indonesia, 27 May-7 June 2002)**

As the results of discussions, the following action was agreed regarding the support to encourage the use of satellite and remote-sensing technologies as follows:

Draft Plan of Implementation for the World Summit on Sustainable Development

115. [Agreed] Support countries, particularly developing countries, in their national efforts to:

- (a) [Agreed] Collect data that are accurate, long-term, consistent and reliable;
- (b) [Agreed] Use satellite and remote-sensing technologies for data collection and further improvement of ground-based observations;
- (c) [Agreed] Access, explore and use geographic information by utilizing the technologies of satellite remote sensing, satellite global positioning, mapping and geographic information systems.

**Expected results:**

Pilot project will contribute greatly to human resource development and transfer of technology for the use of satellite data and applications in Indonesia and Thailand.

**Specific targets of the Partnership/Initiative and timeframe for their achievement:**

NASDA plans to launch the Advanced Earth Observation Satellite (ADEOS II) in 2002, and is also developing the Advanced Land Observing Satellite (ALOS) which is scheduled to be launched in 2004.

Data obtained from these satellites will contribute greatly to this pilot project and thus encourage active use

<p>of satellite data by the administrations of Thailand and Indonesia.</p>
<p><b>Coordination and Implementation mechanism</b></p> <p>Please provide a brief description of expected coordination/implementation mechanism of the Partnership/Initiative.</p> <p>To help support the operation of the project, representatives of AIT, GISTDA, LAPAN and NASDA periodically meet and decide the policies for the planning and management of the project.</p>
<p><b>Arrangements for funding</b></p> <p>Please describe available and/or expected sources of funding for the implementation of the Partnership/Initiative (e.g. donor government(s); international organization(s)/financial institution(s); foundation(s); private sector; other major groups, etc.)</p> <p>Partners agree among themselves regarding the necessary resources for the project. In this regard, AIT is willing to provide human resources, education materials and facilities but could neither be a fund provider nor a donor.</p>
<p><b>Arrangements for capacity building and technology transfer</b></p> <p>Please include information if the Partnership/Initiative provides for training, informational support, institutional strengthening and/or other capacity building measures:</p> <p>Please also provide here a brief description of expected arrangements for technology transfer (if applicable).</p> <p>The aim of the project is capacity building and technology transfer in the use of satellite data.</p>
<p><b>Links of Partnership/Initiative with on-going sustainable development activities at the international and/or regional level (if any)</b></p> <p>Please provide a brief description:</p> <p>AIT is a founding member and, currently serving as the Secretariat of the Greater Mekong Subregion Academic and Research Network (GMSARN). GMSARN is composed of eight of the region's top-ranking academic and research institutions and carries out activities in the following areas: human resources development, joint research, and dissemination of information and intellectual assets generated in the GMS, which includes Cambodia, Yunnan Province in China, Laos, Myanmar, Thailand and Vietnam.</p>
<p><b>Monitoring Arrangements</b></p> <p>Please describe expected arrangements for monitoring of progress in the implementation of Partnerships/Initiative after it will be launched at the WSSD:</p> <p>(e.g. frequency/modalities of preparation of progress reports; electronic updates, news-letters, etc)</p> <p>In the implementation of project activities, partners prepare reports. Partners will also organize a Seminar to review the progress and achievement of the project. Follow up meeting will periodically be organized throughout project period to discuss on problems and solutions.</p>
<p><b>Other relevant information:</b></p>

**Name and contact information of the person filling in this table:**

Takashi Moriyama

Senior engineer, strategic planning manager, ALOS/I-space Deputy program manager,

Satellite Program and Planning Department,

Office of Satellite Technology, Research and Applications

National Space Development Agency of Japan

Phone +81-3-3438-6332

FAX: +81-3-5401-8702

E-mail: moriyama.takashi@nasda.go.jp

**Revised 19 August 2002, Tokyo Japan**