

Capacity Building for the INA-TEWS



Capacity Building Unit

in the framework of the German Indonesian
Tsunami Early Warning System

Report on the
Kick-off-Meeting
August 28 2007
RISTEK



Contact:

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in the framework of the
German Indonesian Tsunami Early Warning System
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Menteri Negara Riset dan Teknologi RISTEK
Indonesian State Ministry of Research and Technology
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on behalf of:



InWEnt - Internationale Weiterbildung und Entwicklung gGmbH
InWEnt - Capacity Building International, Germany
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1. Agenda of the Kick-Off-Meeting August 28 2007

Time	Topic and Venue	Institutions
09:30 – 10:00	Registration	
10:00 – 10:10	Opening: Dr. Idwan Suhardi	RISTEK
10:25 – 10:40	Introduction: Dr. Michael Rottmann „The INA-TEWS-Project in the International Context“	UNESCO
10:10 – 11:25	Introduction of Moderator and Participants	Moderator
10:40 – 10:50	Organisational Structure GITEWS Introduction WP 6000	INWENT
10:50 – 11:00	Introduction WP 6300	GTZ-IS
11:00 – 11:45	Project Presentation: Mr. Fenno Brunken, INWENT-CBU-GITEWS	
	<ul style="list-style-type: none"> • Introduction to the Capacity Building Unit in the framework of GITEWS • The CBU core team: Role and Responsibilities • Planned activities of the CBU for 2007 and 2008 • Vision for a Human Resource Development Program in the field of Disaster Risk Management in Indonesia 	INWENT CBU-GITEWS
	Introduction CBU-Core Team	
11:45 – 12:00	Closing Remarks: Dr. Teddy W. Sudinda	RISTEK
12:00 – 13:30	Lunch Break	
13.30 – 15:30	Internal Meeting CBU Core Team	Moderator, CBU Core Team

2. List of Participants

List of Institutions invited for the Kick-Off-Meeting:

Kemenkokesra, RISTEK, BPPT, BMG, LIPI, Bakosurtanal, LAPAN, Deplu, Depdagri, ITB, Bappenas, Depbudpar, TNI AD, POLRI, DKP, ESDM, DEPKOMINFO, DEPDIKNAS, POLRI, KLH, BAKORNAS PB, German Embassy, UNESCO, GTZ-IS, BGR, CIM, INWENT.



The Participants of the Kick-Off-Meeting for the GITEWS Capacity Building Unit, 28-08-2007

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3. Presentations

Deputy Minister Dr Idwan Suhardi, RISTEK: Opening Speech

Dr. Idwan welcomed the participants and stated that this CBU Kick-Off-Meeting is important and will be a starting point for the capacity building related activities in the INA-TEWS program. He pointed out that the meeting is attended by most of the 16 institutes dealing with the INA-TEWS.

As part of government cooperation with the German Government this cooperation is aiming not just in installing the technical instrumentation of the Tsunami Warning System, but also preparing the activities necessary for the sustainable training and education of the experts needed for running and operating the system.

He also referred to UNESCO's role in and support for the international integration of the INA-TEWS in the Indian Ocean wide TEWS.

In this context the GITEWS CBU managed by Fenno Brunken from INWENT has the role to build the necessary capacities to operate the system sustainable.

Dr. Idwan opened the Kick-Off-Meeting for the CBU officially and wished the participants a successful meeting and fruitful discussions.

Dr. Michael Rottmann, UNESCO-IOC on „The INA-TEWS-Project in the International Context“

General Remarks

International Context for the Indonesian Tsunami Early Warning System

- Indian Ocean Region was affected by the Tsunami
- But Indonesia was hardest hit
- Major Donor Countries concentrating on Indonesia
- Indonesia investing a substantial amount into TEWS (\$ 130 Mio in 5 years)
- National Efforts in India, Thailand, Malaysia and Australia and other countries

Contribution of Germany

Contribution from Main Donor Countries

- Over all amount up to 60 millions US \$
- Up to 25 seismometers
- Up to 10 buoys
- Up to 20 tide gauges
- Up to 10 GPS stations
- Capacity building and trainings



Contribution of USA

- \$16,5 Mio USAID program for IOTWS
- \$ 1 Mio NOAA assisting in Buoy Development
- Tsunami Warning and Education Act

Contribution of China

- 10 seismometer
- Processing system for the Warning Center in BMG
- Training and Education

Contribution of Japan

- 15 online seismometer
- Research Processing System
- \$ 2 Mio from JICA, modeling in Sulawesi

Further Contributions of

- France : 5 emergency centers
- Netherlands (EWS in Aceh)
- Australia (mainly downstream activities)
- International Organisations (e.g. UNDP, ISDR)
- I / NGOs (e.g. International Red Cross)

Background UNESCO Role

- UNESCO/IOC General Assembly adapted a resolution to install the Intergovernmental Coordination Group for the Indian Ocean Tsunami Warning and Mitigation System (ICG-IOTWS)
- Secretariat in Perth

ICG IOTEWS has 6 Working groups

- WG1 : Seismic Measurements, Data Collection and Exchange.
- WG 2 : Sea Level Data Collection and Exchange, Including Deep Sea Ocean Tsunami Detection Instruments.
- WG 3 : Risk Assessment

- WG 4 : Modeling, Forecasting and Scenario Development
- WG 5 : Interoperability of watch Providers and Warning Centers.
- WG 6 : Public Education and Awareness Activities.

UNESCO Office JAKARTA

Regional Science Bureau for Asia& Pacific
Cluster Office to Brunei Darussalam,
Indonesia, Malaysia, Philippines and Timor
Leste

UNESCO Office Jakarta

- 60 employees
- Budget around \$ 5 Mio + for education, culture, science
- TEWS Activities : Assisting BMG in building up seismic stations, capacity building, promoting preparedness and awareness

Coordinating Activities

- 16 Indonesian Institutions are involved, coordinated by Ristek
- Besides Germany several Donor Countries contribute to the Build up of the TEWS

Instruments of Coordination

- Communication
- Meetings
- Workshops/Seminars
- JTIC

Jakarta Tsunami Information Center

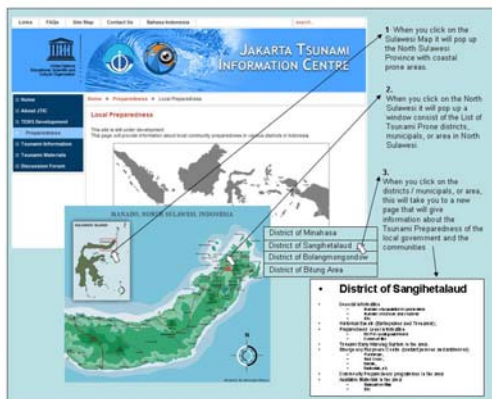
to create Transparency and provide Information

WWW.JTIC.ORG

TEWS Development in JTIC Website



Downstream Material in JTIC Website



Fenno Brunken, InWEnt: „The GITEWS CBU and its tasks and responsibilities“

GITEWS

German-Indonesia Sistem Peringatan Dini Tsunami

Capacity Building Unit - CBU



Selamat Datang di

Kick-off-Meeting for the Capacity Building Unit - CBU

In the Framework of the German Indonesian
Tsunami Early Warning System – GITEWS

August 28 2007 - RISTEK

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Content

- The GITEWS Project
- The GITEWS Capacity Building Unit
- The Human Resource Development Program for a sustainable INA-TEWS

The GITEWS Project in general

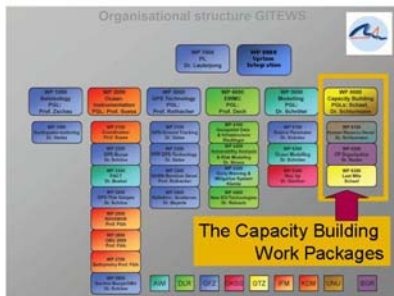
... and its Capacity Building Work Packages

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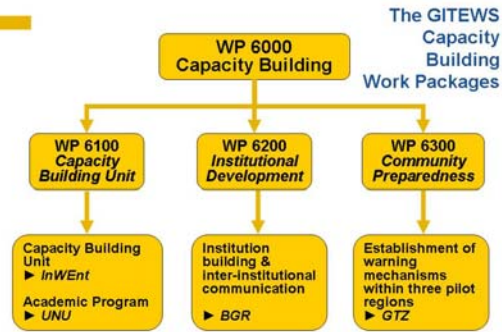
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The GITEWS Capacity Building Unit

... and its duties and responsibilities

The CBU Terms of Reference

- Identification of target groups
- Classification of training needs and existing schemes
- Development of concepts for new training schemes
- Exchange of knowledge and information

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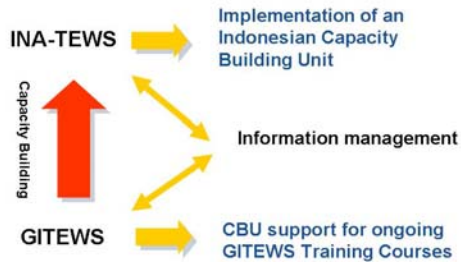
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The CBU Terms of Reference (contd.)

- Training management and steering of training activities
- Organize seminars for technical training
- Selection of potential trainees for training courses
- Evaluation and Quality Assessment

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Implementation of an Indonesian Capacity Building Unit

Status 2007

- 03-2007 Fenno Brunken started CBU activities at RISTEK in Jakarta
- 06-2007 Coordination meeting for the CBU Steering Committee
- 07-2007 Foundation of the CBU core team
- 08-2007 Kick-off-Meeting for the official start of the CBU

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Implementation of an Indonesian Capacity Building Unit (contd.)

Planned for 2007

- 09-2007 Preparation Workshop for the CBU core team
- 11-2007 CBU core team Study Tour to Germany
Intense training course for the future Training Managers of the INA-TEWS
Site visits to GITEWS partner institutions

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Implementation of an Indonesian Capacity Building Unit (contd.)

2008: Development of the CBU

- 02-2008 Project Planning Workshop
- 03-2008 Training for the CBU core team
- 05-2008 Training for E-learning experts
- 10-2008 Training for the CBU core team

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Implementation of an Indonesian Capacity Building Unit (contd.)

2009: Consolidation of the CBU

- 01-2009 CBU carries out training activities
- 05-2009 Development of Guidelines and Handbooks for future INA-TEWS training activities
- 10-2009 International Conference on Capacity Building for a sustainable TEWS in Indonesia

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CBU support for ongoing GITEWS Training Courses

Status 2007

- 08-2007 GITEWS Workshop of German Indonesian Working Group on Risk Modelling
Moderation by CBU InWent Moderator
Additional management skills and didactical workshop concept
Evaluation and quality assessment

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CBU support for ongoing GITEWS Training Courses (contd.)

Planned for 2007

- 09-2007 Follow up activities for Risk Modelling Working Group: online-discussion-forum

2008

- 01-2008 Integrated Management Module for GFZ-DLR-AWI Workshop at BMG
- 05-2008 Development of E-learning Tools

The Human Resource Development Program

... for a sustainable INA-TEWS

Capacity Building Methodology

- Classroom lectures and Management skills training
- Group work to translate the learned into concepts
- Train-the-trainers and On-the-job-Training
- Development of Guidelines, Handbooks and E-learning tools
- Field trips and Exercises



... thank you very much for your attention!

Please feel free to contact us:

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Ibu Vidiarina, GTZ-IS: The GITEWS WP 6300 on Community Preparedness in three pilot regions

**GITEWS, Capacity Building
In Local Community
WP 6300**

Content

- Overview
- Project description
- Current status
- Future development
- Remarks

Overview
German-Indonesian Cooperation for
Tsunami Early Warning System (GI TEWS)

GI TEWS

- funded by BMBF (45 Mio Euro) channeled via GFZ Potsdam
- Implemented by consortium
- GTZ (BGR/UNU): Coordination of WP "Capacity Building"

WP "Capacity Building in Local Communities"

- Implemented by GTZ-IS
- Duration: 06-2006 to 12-2008
- Budget: 1,5 Mio Euro

WP "Capacity Building in Local Communities"

- Implemented by GTZ-IS
- Duration: 06-2006 to 12-2008
- Budget: 1,5 Mio Euro

Project Description:

- Organizations involved in the Tsunami Early Warning System have developed the Human Resources and coordinating mechanisms to manage and improve the system effectively (WP 6000)
- Development of warning and disaster preparedness mechanisms on the basis of up to 3 Pilot Areas (WP 6300)

Indonesian Partners

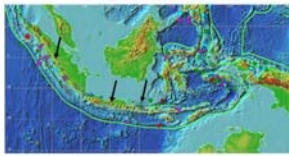
German Partners

GITEWS Structure

GTZ-IS, GITEWS Staffs

- 1 International Team Leader
- 4 National Advisers
- 2 Junior Consultant
- 2 Administrations
- 1 Support staff

Where do we work?



- **National Level:** Links and interfaces between INA-TEWS and the local level
- **3 Pilot areas:**
 1. Sumatra: Padang City
 2. Java: Bantul, Cilacap, Kebumen
 3. Bali: Province, Badung District and Tourism Sector in general.

Type of Services

Identifying local tsunami risks

- Technical advisory for hazard analysis to identify areas affected by tsunamis and safe zones.
- Support for vulnerability analysis

Establishing the warning chain on the local level

- Providing information to understand the system and how to link
- Clarifying roles and responsibilities.
- Developing Standard Operational Procedures
- Design of warning dissemination system and access to new technologies

Preparing for appropriate reaction to the warning

- Awareness rising and educational training
- Developing contingency planning
- Establishing evacuation plans

Current Status: Baseline Survey & Assessment Report



Current Status: Awareness



Current Status: Series of Workshops & Trainings



Current Status: Interlink & Dialogue Process



Future Development

- Consolidate cooperation in the pilot areas
- Support TEWS implementation activities in Pilot Areas
- Coordination between National & Local Level
- Tools development:
 - Hazard assesment
 - Warning Chain Mechanism
 - Evacuation planning
 - Contingency planning
 - Knowledge & Awareness Raising

Discussion:

During the discussion after the presentations the following questions were raised:

1. Is it possible to include more institutions like INFOKOM or Ministry of Environment or Bakornas into the CBU core team?

Mr. Brunken answered, that the 9 members of the CBU core team is not a final decision on the CBU itself. But for this first stage of the CBU activities it was decided to concentrate on the technical trainings for the TEWS. This means that the CBU will mainly cover the so called "structural" part of INA-TEWS.

For the "cultural" part other WPs are responsible e.g. WP 6300 run by GTZ-IS.

In the future the CBU will also include additional activities with other INA-TEWS institutions and it will try to cover also other parts of the INA-TEWS.

The UNU is organising the PhD-Program with now 8 students doing their scientific work in Germany for the next 2-3 years. The CBU will implement close cooperations with the Universities and other research institutions in the future.

2. What about the ongoing GITEWS training activities: are they linked to the CBU work?

Mr. Brunken stated, that the CBU core team is only one part of the CBU work. The second part is concentrating on contributing to ongoing and planned GITEWS training courses.

E.g. the Workshop in Bandung from July 30 to August 3 2007 on Risk-modelling and vulnerability assessment was jointly conducted by DLR, UNU, LIPI and LAPAN with special support from CBU on Didactical Concept, Moderation and additional course modules on management skills for the participants.

The workshop was a great success and the CBU will continue similar support for other GITEWS events e.g. the GFZ-BMG-DLR training in January 08 in Jakarta.

3. What are the concrete plans of the CBU for 2008 and 2009?

Mr. Brunken explained that the draft working plan presented during the kick-off-meeting is the actual status of the planning and it has still to be discussed with RISTEK and the INA-TEWS institutions. Therefore it is not possible at this stage of the project to give more detailed data on the concrete training events.

4. How to disseminate the information on Capacity Building in the TEWS community?

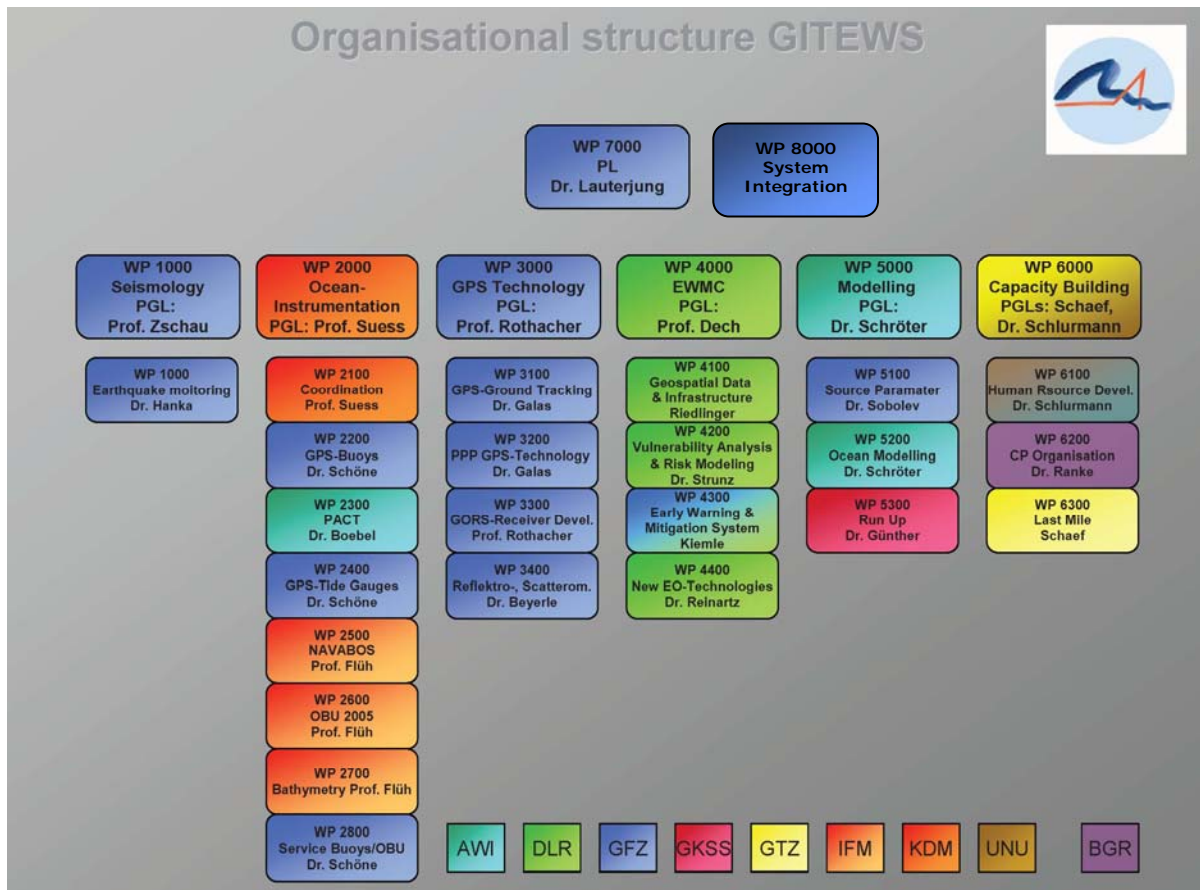
Mr. Brunken listed some of the planned information platforms for the CBU work:

- The websites: www.jtic.org website from UNESCO will implement a specific CB related chapter on its website. In addition the CBU is contributing to the PIRBA-website: <http://www.pirba.ristek.go.id/index.php> and to the GITEWS website: www.gitews.org.
- The CBU will install online discussion forums for specific working groups (e.g. Risk Modelling and Vulnerability Assessment, in progress)
-

4. GITEWS Overview

Directly after the Sumatra earthquake of December 2004 the German Federal Ministry of Education and Research (BMBF) commissioned the Helmholtz Association of National Research Centres to develop a German Indonesian Tsunami Early Warning System (GITEWS) for the Indian Ocean. The plan integrates terrestrial observation networks of seismology and geodesy with marine measuring processes and satellite observation. Thereby, Germany cooperates in this with Indonesia, which is the area most heavily threatened by earthquakes in the Indian Ocean. The Joint Declaration of BMBF and the Indonesian research ministry RISTEK, signed on March 14 2005, is the basis for this co-operation.

Besides the early warning system itself, it also contains the provision of capacity building among Indonesian institutions. The project is embedded in the international endeavours for an integrated solution for the entire Indian Ocean coordinated by the Intergovernmental Oceanographic Commission of the UNESCO.



The GITEWS project is accomplished by a consortium of German research institutions¹ and will be implemented in close cooperation with the Indonesian partner organisations of GITEWS: Ministry of Research and Technology (RISTEK), Meteorological and Geophysical Agency of Indonesia (BMG), National Coordinating Agency for Surveys and Mapping (BAKOSURTANAL), Agency for the Assessment & Application of Technology (BPPT), National Institute for Aeronautics and Space (LAPAN), Indonesian Institute of Science

¹ Geoforschungszentrum-Potsdam (GFZ), Alfred Wegener Institute for Polar and Marine Research (AWI), Federal Institute for Geosciences and Natural Resources (BGR), German Aerospace Center (DLR), Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ), GKSS Forschungszentrum, Konsortium Deutsche Meeresforschung (KDM), Leibniz Institute of Marine Sciences (IFM-GEOMAR), United Nations University, Institute for Environment and Human Security (UNUEHS) and InWent Capacity Building International.

(LIPI), Department of Communication and Information Technology of the Republic of Indonesia (INFOCOM), Secretariat of National Board for Disaster Management and IDPs (BAKORNAS PBP).

Research and Development work of this multifaceted project is done in the following work packages (WP):

- Earthquake Monitoring (WP 1000)
- Ocean Instrumentation (WP 2000)
- GPS Technology (WP 3000)
- Early Warning and Mitigation Centre (WP 4000)
- Tsunami Modelling (WP 5000)
- **Capacity Building (WP 6000)**
- Project Management (WP 7000)
- System Integration (WP 8000)

More Information on the GITEWS activities in the different work packages can be found on the project website: www.gitews.org

WP 6000 includes comprehensive Capacity Building activities like academic and technical training and education as well as organisational consulting aiming to prepare the effective and sustainable establishment of the developed tsunami warning components in the region.

5. CBU Institutional Framework

In this project, Capacity Building is defined as the development of the requisite individual and institutional capacities to support the implementation, maintenance and expansion of the Tsunami Early Warning System.

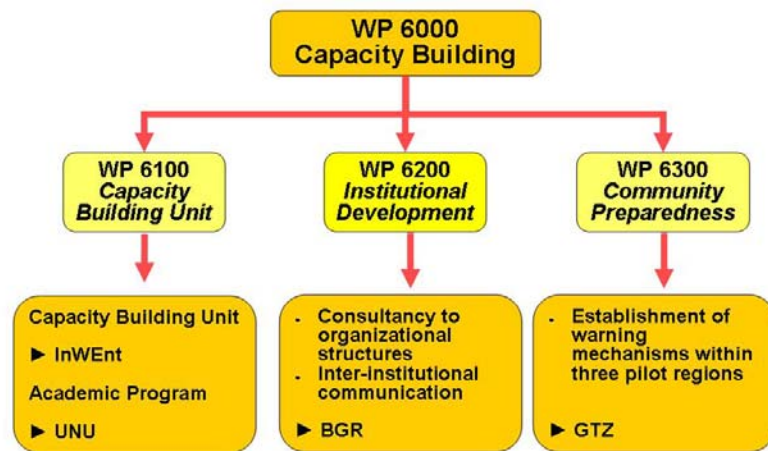
The partners in the Tsunami Early Warning System comprise individuals and organizations from the local to the international level. Support must therefore be provided to the local community, local decision-makers and local disaster risk management organizations as well as executive agencies and scientific institutions.

The sustainable operation of the system crucially depends not only on the establishment of the requisite technological bases (such as earthquake detection, ocean instrumentation, modelling and earth observation data), but also on the development of the institutional and human capacities that are necessary for the nationwide implementation/application of the system in Indonesia. The capacities required to operate the system effectively include scientific and technical expertise, such as earthquake detection, modelling and data management in the data centre, and especially the skills to translate scientific data into clear warnings, support for decision-makers and publicize this information via the relevant agencies.

In order to translate these long-term targets into action, **WP 6000** is divided into three components:

- **WP 6100** aims to build individual capacities in the relevant organizations and institutions in order to meet the scientific and technological needs of the GITEWS. It also aims to develop management skills and build the organizations' own internal capacity-building capabilities.

- **WP 6200** aims to strengthen the executive agencies' capacities, especially their cooperation and organizational structures at national level.
- **WP 6300** aims to strengthen the institutional and organizational capacities of local organizations working in the fields of disaster risk management and early warning.



6. The Capacity Building Unit - CBU

A key component of the GITEWS project in achieving the above mentioned goals is to support the implementation of a "**Capacity Building Unit**" (CBU) in Indonesia.

The CBU will be responsible for the preparation, implementation, development and quality assurance of the training activities and will be a coordination and service provider working closely with all the German and Indonesian partners involved in the Tsunami Early Warning System. The CBU will also deliver expert and organizational support for the training courses provided within GTZ/BGR Components 6200 and 6300.

The Terms of Reference for the Capacity Building Unit (CBU) for Human Resources Development in the framework of the German-Indonesian Tsunami Early Warning System (GITEWS) where finally adopted in January 2007 by RISTEK and GITEWS:

"The CBU for Human Resources Development supported by InWEnt under the umbrella of RISTEK (Ministry of Science and Technology) and assistance of other Indonesian research institutions should monitor, assist and coordinate technical training activities related to GITEWS.

It should highlight the existing training activities as well as detect training gaps and advise Indonesian institutions how to fill them, e.g. to coordinate and set-up technical trainings, courses or educational campaigns or to develop teaching and awareness materials in Indonesia".

The Terms of Reference for the Indonesian CBU members from relevant INA-TEWS Institutions are the following:

1. Identification of target groups for TEWS training activities for INA-TEWS

- Identify existing responsibilities, tasks and mandate of relevant TEWS institutions and its personnel
- Defining the "change needs" of the target groups in terms of mandate, organisation, management and service

2. Clear classification of training needs and existing schemes

- Identification of job requirements, existing competencies, required competencies for the project
- Organisational environment for efficient and sustainable capacity building
- Objectives, contents and expected results of the required training

3. Elaborate concepts for training schemes in close co-operation with Indonesian and German institutions

- Development of training concepts and programs
- Development of e-learning tools
- Identification of potential training institutions and training providers

4. Coordinate the exchange of knowledge and information in regard to training courses by permanent communication and reporting to all involved partners in GITEWS

- Development of an information management system for TEWS
- Collection of ongoing and planned Capacity Building activities in GITEWS, INA-TEWS and from other international donor institutions

5. Training management and steering of training activities in Indonesia

- Development of an organisational structure for TEWS capacity building
- Definition of tasks and responsibilities for different stakeholders in the TEWS management concerning capacity building

6. Organize seminars for technical training for TEWS experts jointly with Indonesian and German institutions

- Development of additional technical training activities and programs in the framework of the GITEWS project

7. Support and carry out pre-selection of potential trainees for specific training courses

- Identification of training participants from the target groups
- Supervision and support for trainees before and after the training activities

8. Evaluation and Quality Assessment of training activities

- The CBU will continuously assure the quality its work by evaluating the ongoing activities
- Implementation of the evaluation results in the training management cycle

7. Draft Work Plan for the CBU

The following pages show a draft Work Plan for the GITEWS Capacity Building Unit which is under construction and will be adjusted to the discussions with the GITEWS Partners, RISTEK and the INA-TEWS institutions.

7.1. *InWEnt will contribute to the implementation of an Indonesian Capacity Building Unit with the duties explained above*

Status:

- 01-2007 Fenno Brunken, a German Capacity Building Expert from InWEnt, started his work as Coordinator of the GITEWS Capacity Building Unit in January 2007 in Jakarta.
- 03-2007 The CBU office at BPPT Building was equipped and the first meetings with TEWS stakeholders took place. During the first weeks of his assignment Mr. Brunken negotiated the Terms of Reference with RISTEK and the responsibilities and tasks of the CBU where fixed.
- 04-2007 Database for Indonesian Trainers and Moderators is started to be built up.
- 05-2007 In May 2007 Mr. Dwinanta was nominated by RISTEK as direct CBU counterpart for supporting the implementation of the CBU and the development of CB activities in the INA-TEWS.
- 06-2007 On June 6 2007 a Coordination Meeting for the CBU took place at RISTEK. The purpose of this meeting was to found a Steering Committee (SC) for the Capacity Building Unit (CBU) in the framework of INA-TEWS and to decide on its responsibilities and duties in order to guide and steer the CBU activities.
- 07-2007 The CBU held a series of interviews with relevant TEWS stakeholders to develop a first catalogue of training needs.
- 08-2007 Prior to the CBU Kick off Meeting on August 28 2007 a "core team" was selected to form a first cell of expertise in the field of Capacity Building in the relevant INA-TEWS Institutions.



Workshop in Bandung: Mood Barometer

Planned activities:

2007 Foundation of the CBU

09-2007 Preparation Workshop for the CBU core team

In September 2007 the CBU will conduct a two day workshop for the CBU core team in Jakarta as preparation for the Study Tour to Germany.

The participants will develop a perspective for their future tasks in the framework of INA-TEWS:

- Which role will their institution play in the field of Capacity Building for a sustainable TEWS?

- What are the training needs and the target groups for training activities?
- Which are the training institutions able to carry out these activities?

11-2007 **CBU core team Study Tour to Germany**

The CBU will carry out Study Tour to Germany for the CBU core team on Training Management with exposure to German partner institutions from November 10 to 25 2007.

The CBU core team will act as Training Managers in their institutions and therefore the main targets of the Study Tour are:

- Introduction to Training Management and Capacity Development
- Identification of Target Groups
- Training Needs Assessment
- Awareness Raising for training needs and results
- Development of training activities
- Curriculum development in all fields related to Early Warning and Disaster Risk Management
- In depth knowledge of GITEWS partners and project in their capacity building efforts, potentials and requirements.



Workshop in Bandung: Metaplan-Technique

11-2007 **E-learning basics for the CBU core team**

During the study tour to Germany the core team will get an introduction to the basic structure and preconditions for E-learning tools in the TEWS framework.

2008 Development of the CBU

02-2008 **Project Planning Workshop**

In January 2008 the INA-TEWS stakeholders and the GITEWS CBU should decide on the future CB activities for the CBU team. Especially the results of the study tour to Germany should be taken into account for the answering of the question how to proceed up to 2010 and beyond.

Main task for the Workshop should be to formulate a CB strategy for the implementation and development of a Human Resource Development Program for Disaster Risk Management in Indonesia.

Also the question of additional funding for these future activities should be discussed during this workshop.

03-2008 **Training for the CBU core team**

Content will be determined on the basis of the results of the study tour and the project planning workshop.



05-2008 **Training on E-learning Development**

Training of Experts from IT-Institutions in the development of E-learning Tools on the basis of existing GITEWS technical training courses.

10-2008 **Training for the CBU core team**

Content will be determined on the basis of the results of the study tour and the project planning workshop.

2009 Consolidation of the CBU

01-2009 **CBU Capacity Building Activities**

The Indonesian CBU members will start to develop and carry out CB activities in their institutions. They will start their work as Training Managers in identifying target groups; conduct training needs assessment and the development of training course programs.

The CBU will act as a service provider by helping to implement the training programs for the TEWS in Indonesia also in other parts of the country and in other institutions.

05-2009 **Development of Guidelines for Training Activities**

The CBU will develop guidelines and handbooks for the different levels of training management in the field of INA-TEWS and Disaster Risk Management in general.

Target of these activities will be to guarantee the sustainable implementation and performance of the TEWS in Indonesia.

The CBU will deliver a Human Resource Development Program with specific targets for the education and training of experts needed for the smooth operation of the INA-TEWS and will make suggestions for the extension of its activities to the disaster risk managements of other hazards in Indonesia.

10-2009 **Conference on Capacity Building for a sustainable TEWS in Indonesia**

The CBU will conduct a conference with input from the other GITEWS CB work packages with the aim to

- Present the CBU results especially the Human Resource Development Program for INA-TEWS,
- Show the perspectives for the capacity building in disaster management in Indonesia in the future,
- Raise the awareness for disaster risk management and
- Exchange of information with national and international partner institutions

7.2. The CBU will support the technical training courses carried out by the German GITEWS partners and will include and add management skills training modules

Status:

08-2007 Integrated Management Modules for GITEWS Training Courses

From July 30 to August 3 2007 the CBU was organising a workshop for the *Joint German Indonesian Working Group on Risk Modelling and Vulnerability Assessment* (LIPI, LAPAN, BAKOSURTANAL, BPPT, DLR, UNU and InWEnt) in Bandung. The goal of the workshop was to give an overview on the current state of the work for researchers and decision makers and to elaborate in detail the next steps necessary for the design of the operational research on risk modelling and vulnerability assessment by developing common concepts and methodologies.

To reach these goals the GITEWS-CBU provided a facilitator who moderated the Workshop and the group work as well as integrated additional management tools and skills to enable the participants to improve their performance in their institutions in order to fulfil their duties and responsibilities.



**Bandung Workshop:
Feedback and Evaluation**

Planned activities:

2007

09-2007 Follow up activities

Development of an online discussion forum for the German Indonesian Working Group as a follow up activity to guarantee the continuous exchange of information between the participants of the workshop to reach its goals at the Global Campus (<http://gc21.inwent.org/en/index.jsp>) managed by INWENT.

2008

01-2008 Integrated Management Modules for GITEWS Training Courses

In January 2008 the CBU will provide additional management tools in the GFZ-DLR training course on seismology and the Decision Support System for the BMG team for the TEWS Warning Centre.

02-2008 Follow up activities

The CBU will carry out a Management Training for the PhD students currently staying in Germany in the framework of the Academic Exchange Program conducted by the United Nations University (UNU) in the framework of GITEWS.

05-2008 Integrated Management Modules for GITEWS Training Courses

The CBU will organise and moderate the fourth Workshop of the *Joint German Indonesian Working Group on Risk Modelling and Vulnerability*



Assessment in Bali with additional soft skills and management tools for the participants.

2009

01-2009 **Integrated Management Modules for GITEWS Training Courses**

In January 2009 the CBU will provide additional management tools in the **GFZ-DLR Training Course on Seismology and the Decision Support System** for the BMG team for the INA-TEWS Warning Centre.

8. CBU “core team” members

The CBU core team will organise and manage the development of the human resources of the future early warning system. It will be responsible for the preparation, implementation, development and quality assurance of the training event and the coordination and service delivery for all the German and Indonesian partners involved in the Tsunami Early Warning System.

The CBU core team members were chosen from the most relevant INA-TEWS institutions especially from the “structural” part of the system. This means that the CBU core team will concentrate its work on technical training needs and target groups.

The members are the following:

- | | |
|-------------------------------------|--------------|
| 1. Ir. Dwinanta Utama, M.Sc. DIC | Ristek |
| 2. Ir. Djoko Hartoyo | BPPT |
| 3. Ir. Velly Asvaliantina, MSc. Eng | BPPT |
| 4. Dr. Parluhutan Manurung | Bakosurtanal |
| 5. Cecep Subarya, M. Surv | Bakosurtanal |
| 6. Dr. Masturyono | BMG |
| 7. Dr. Hamzah Latief | ITB |
| 8. Ir. Agus Hidayat, M.Sc | LAPAN |
| 9. Ir. Irina Rafliana | LIPI |

9. Training Course for the CBU core team in Germany

The GITEWS CBU will carry out an intense training course on training management with exposure to German partner institutions from November 10 to 25 2007.

The course will address the members of the CBU core team who will play an important role in Capacity Building in “Early Warning” and “Disaster Risk Management” in the context of the Indonesian TEWS.

Methodology:

- Classroom lectures
- Management skills training
- Group work to translate the learned and experienced into first concepts and instruments for the work of the CBU in Indonesia
- Visits of authorities dealing with disaster prevention and management and the training efforts and institutions in this field
- Field trips to GITEWS project partners and relevant institutions for disaster management.

Expected results:

At the end of the training activities which will start in 2007 the CBU core team members will finally be able to fulfil the following tasks in the field of Human Resource Development:

- To identify Target Institutions and Groups and assess and conceptualise their Training Needs under TEWS and the wider framework of disaster Risk Management.
- To identify and outline objectives and expected results for training courses, workshops and awareness campaigns.
- To give essential input into the design of methods and contents of the required training activity.
- To organise follow up measures and training impact assessments.
- To design and implement capacity building programmes with curricula adapted to the requirements of different target groups of GITEWS.
- To use the new awareness, knowledge and skills to facilitate the development of new curricula for training modules for their own training institutions.
- To formulate and implement a documentation and quality control system for Capacity Building.
- To design criteria for the selection and the appointment of training providers and their networking.
- To integrate their efforts and activities into a long term Capacity Building Programme of the CBU for a sustainable TEWS in Indonesia
- Are familiar with the strengths and limitations of e-learning courses.
- The CBU core team members are informed in depth about the GITEWS-project activities in Germany.

Institutions to be visited during the training course (draft):

- GFZ – Geological Research Center Potsdam
- DLR – Deutsches Luft- und Raumfahrtzentrum, Oberpfaffenhofen
- BGR – Bundesanstalt für Geowissenschaften und Rohstoffe, Hannover
- Institut für Wasserbau und Küsteningenieurwesen, Leibniz Universität Hannover
- UNU – United Nations University, Bonn

Draft schedule for the CBU training activities in Germany:

Date		Program	Venue	Place
Sa	10.11.2007	Flight		Dep. Indonesia
So	11.11.2007	Flight		Arr. Europe
Mo	12.11.2007	Training Course	InWEnt	Bad Honnef
Tu	13.11.2007	Training Course	InWEnt	Bad Honnef
We	14.11.2007	Training Course	InWEnt	Bad Honnef
Th	15.11.2007	Training Course	InWEnt	Bad Honnef
Fr	16.11.2007	Training Course	InWEnt	Bad Honnef
Sa	17.11.2007	Training Course	InWEnt	Bad Honnef
So	18.11.2007	Sight seeing		Koeln
Mo	19.11.2007	GITEWS Visits	UNU	Bonn
Tu	20.11.2007	GITEWS Visits	GFZ, PIK	Potsdam
We	21.11.2007	GITEWS Visits	DLR	Munich
Th	22.11.2007	GITEWS Visits	BGR, University of Hannover	Hannover
Fr	23.11.2007	Wrap up, Closing	InWEnt	Berlin
Sa	24.11.2007	Flight		Dep. Europe
So	25.11.2007	Flight		Arr. Indonesia