



DEVELOPMENT OF EMERGENCY NETWORKS TRAINING AND TOOLKITS

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BACKGROUND: **PROJECT DUMBO**

“Wireless 'DUMBO' turns ordinary laptops/ PDAs into live-saving network and a platform for effective recovery management.”


- DUMBO can deploy mobile wireless network on an ad hoc basis for emergency conditions, such as after a natural disaster when a fixed network infrastructure is not available or had been destroyed.
 - AIT's Post-Disaster Recovery Management and Coordination Program launched in Myanmar aftermath of Cyclone Nargis.
 - **DUMBO-Myanmar**
 - Useful in handling of relief, recovery and resettlement activities aftermath of Nargis Cyclone.
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OBJECTIVES OF THIS DEVELOPMENT PROJECT

- To address infrastructures and technology-related connectivity problems by coupling advances in mobile ad hoc wireless communication network;
- To deliver technology know-how to the community and make this platform accessible as an open source;
- To create a website to disseminate information on how to build and deploy a DUMBO system;
- To develop out-of-box tools package (software), reference guide/manuals; training materials and case studies to include additional components such as mapping, GIS etc.; and
- To identify and manage the relationships with local technical resource persons and to assist local training partners in delivering training courses to volunteers or field operators.



WHY THIS PROJECT IS INNOVATIVE?

- It does not rely on fixed telecommunication infrastructure hence can be set up within a relatively short period of time and with little effort. The network should sufficiently serve the demand of rescue operation and the disaster recovery communications;
 - Allow streaming video, VoIP and short messages to be simultaneously transmitted from a number of mobile laptops to the central command center, or to the other rescuers at the same or different disaster sites; and
 - Make the commercially available equipments into 'Ready-to-Roll Toolkit' for deployment of mobile wireless network on an ad hoc basis for emergency conditions.
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DEVELOPMENT PLANS

- To develop the reference guide/ manuals for an easily manageable DUMBO system for laymen, who have very limited knowledge on technologies but who are exposed to a first-handed experience in the post disaster recovery and resettlement operations; and
- To set up ad hoc wireless mesh networking in order to develop their own communications network out of the box in an emergency situation or in disaster areas.



WHAT DO WE EXPECT FROM OUR FELLOWS?

With the help of our APNG fellows:

- To create a one-stop information site to disseminate disaster preparedness information and how-to-build-and-deploy a DUMBO system;
- To identify and manage the relationships with local technical resource persons and to assist local training partners in delivering training courses to volunteers or field operators.



Thank you!

Ref: <http://www.interlab.ait.ac.th/dumbo/index.php>
<http://dumbo2.interlab.ait.ac.th/>
<http://www.interlab.ait.ac.th/myanmar/cyclone/>

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