

# TEIN-CC Annual Network Operations Center Workshop

## ASTI updates

November 25-29, 2013  
InterLab, AIT, Bangkok, Thailand

Bani Lara  
Advanced Science and Technology Institute

# Advanced Science and Technology Institute

- Established on January 30, 1987
- Philippine government “think-tank” in terms of ICT projects within the bureaucracy
- Specializes in the fields of micro electronics (ME); and information and communications technology (ICT)
- [www.asti.dost.gov.ph](http://www.asti.dost.gov.ph)



# PREGINET

- ASTI operates the national research and education network (NREN) called the Philippine Research, Education and Government Information Network (PREGINET)
- All University of the Philippines (9 campuses) are connected
- [www.pregi.net](http://www.pregi.net)



# Information and Communications Technology Office

- Our director at ASTI is also an executive director at the Informations and Communications Technology Office (ICTO)
- ICTO is the Philippines' equivalent of an ICT ministry
- Thus, ASTI is working very closely with ICTO in e-government initiatives





DOST-ICTO • DOST-ASTI

INTEGRATED GOVERNMENT PHILIPPINES PROJECT

<http://i.gov.ph>



Launching its biggest ICT project yet since Pres. Benigno "Noy" Aquino assumed power in 2010, the government rolled out on Thursday, June 28, a P470-million initiative called the Integrated Government Philippine Project or iGovPhil.



# Fiber Optic Network



- Connect 162 government agencies in Metro Manila and 11 in Cebu

## Benefits

- Faster data transfers between agencies
- Reduced internet connectivity cost for the government
- Encourage migration to Gov't Data Center and server consolidation for improved efficiency and security

~152 Kilometers of dark fiber to be lighted up  
using metro ethernet technology

# Government Cloud



## Two sites for Gov't Data Center

- Manila: NCC
- Host common and shared applications
- Available for co-location, DRR, back-up and hosting services for NGA's

## Benefits for NGA's

- NGAs need not set-up their own data centers or outsource web/online services hosting
- No need to maintain/train own personnel to manage data center
- Improve security for all applications
- Local technical support



# Philippine National Public Key Infrastructure



- Use of digital certificates for authentication, encryption, and validation of online government transactions

## Applications of the PKI

- Secure email
- Secure web server
- User authentication for the
- Single Sign-on
- Digital Signature for online forms/ documents
- Encryption and time-stamping services



# Gov't Online Payment System



- Online payment system for government services and transactions
- Uses various payment methods such as credit card, debit card, online banking, bank and non-bank OTC and mobile banking

## Benefits:

**Convenient** - citizens can pay for government services anytime, anywhere, 24/7. No more long queues

**Comprehensive payment facility** - no need for agencies to develop their own e-payment facility

**Reduces risk of handling cash and opportunities for graft and corruption** - payment is directly transferred to BTr

# Government Web Template

- Aimed at achieving one look and feel for all government websites
- Ensured usability for all government websites by providing standards on navigation, design elements and content based on existing policies
- provide templates for common CMS such as Wordpress, Drupal and Joomla!



# Single Sign-On



- System which allows users (citizens & government employees) to access government services easier and more conveniently by simply signing in into one application



# Electronic Collaboration Systems



## GovMail

- Cloud-based, enterprise-class email solution
- Collaboration Suite which includes calendaring/scheduling, file repository, resource management and contacts
- Multi-platform access: desktop, web and mobile

### Benefits:

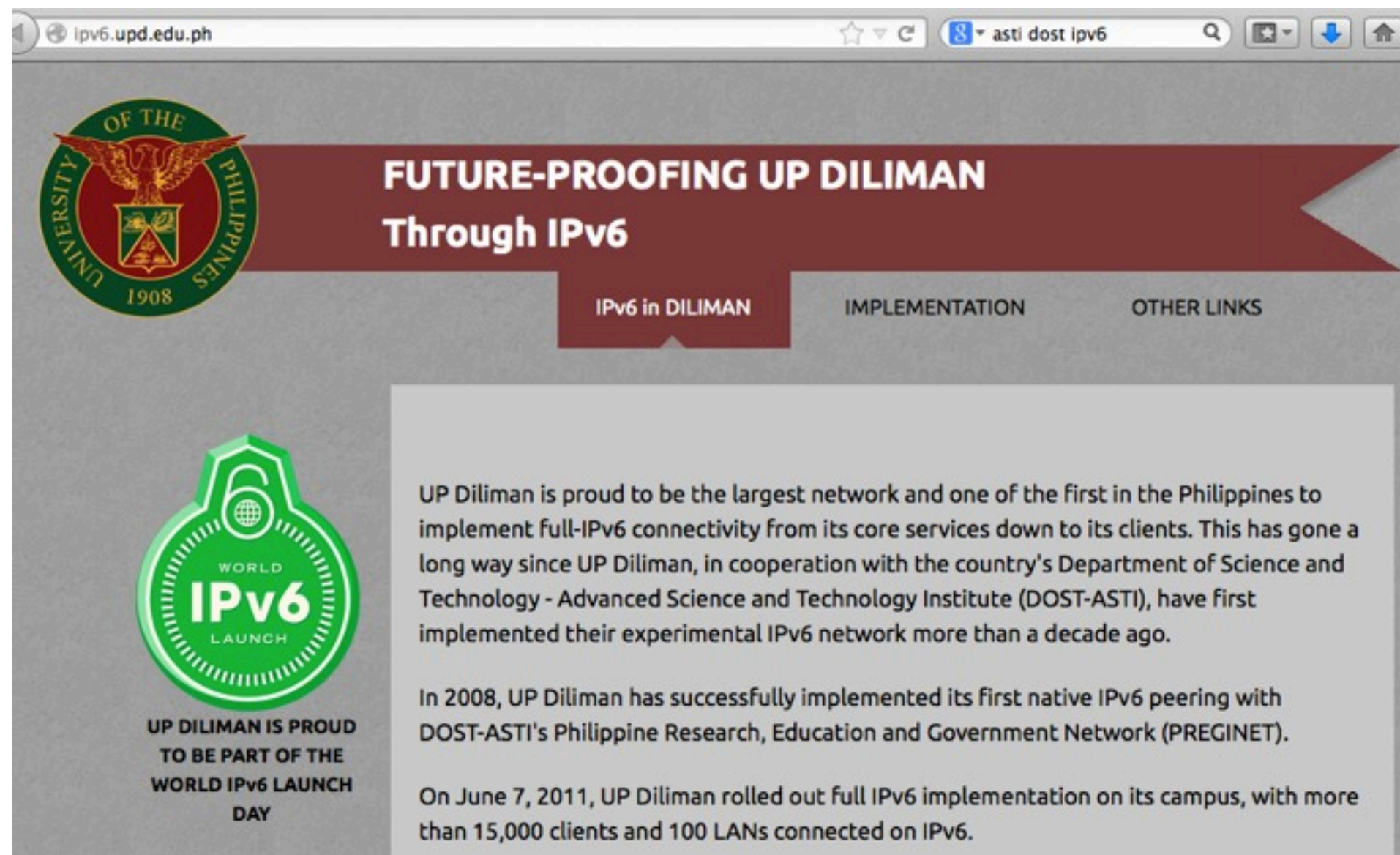
- Provide a “corporate identity” to the government employees through the domain: user@agency.department.gov.ph
- Data sovereignty
- Improved security features + PKI



## VoIP and VideoCon

- Aimed at improving inter-agency communication and coordination

# IPv6









Rina Tolentino at UP PGH Manila



16 hours ago · Manila

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UP MANILA - NIH  
INSTITUTE OF CHILD HEALTH AND HUMAN DEVELOPMENT  
RESEARCH FORUM ON ENVIRONMENTAL HEALTH OF CHILDREN

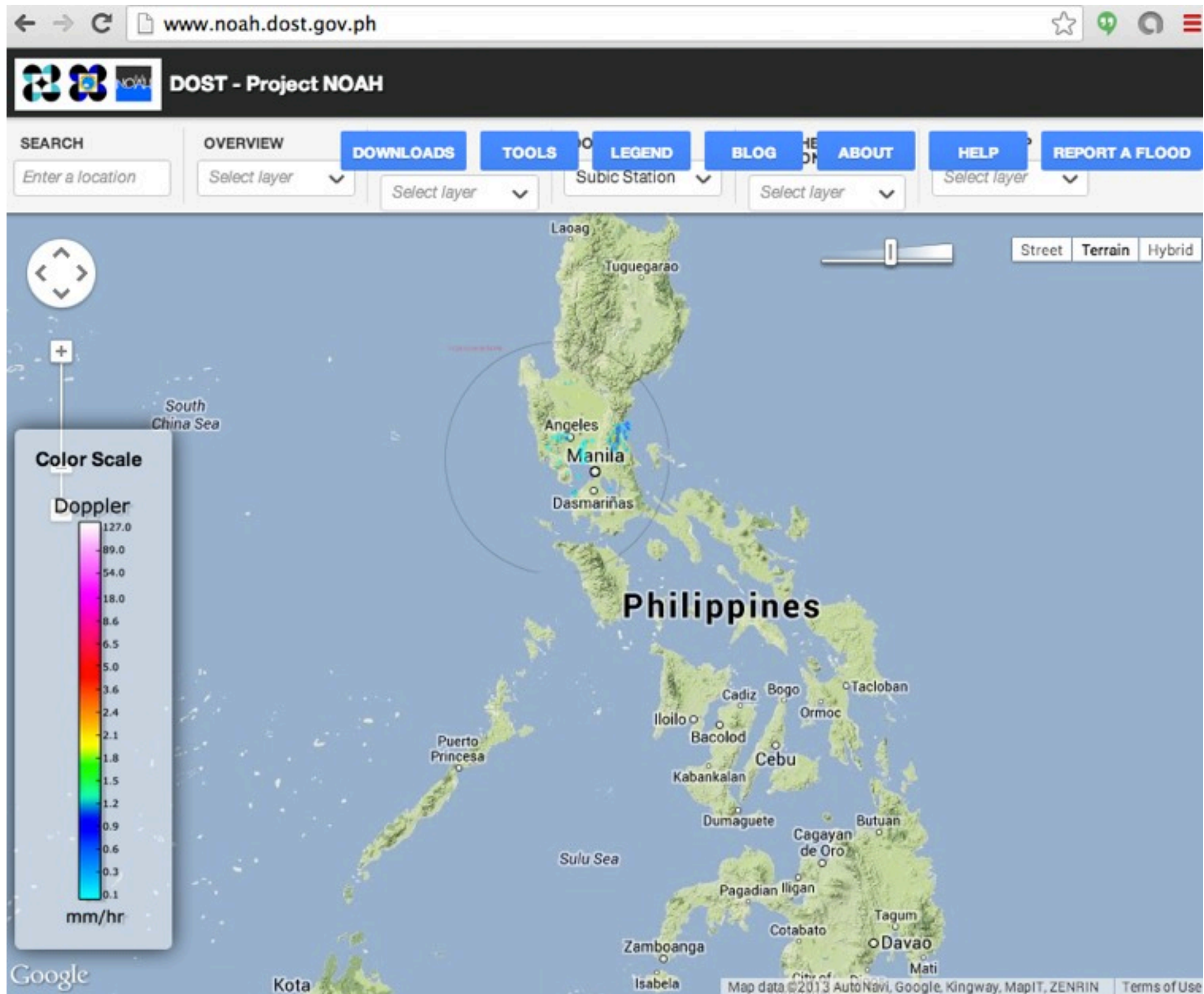
OCTOBER 17, 2013, 1:00 PM  
UP MANILA SOCIAL HALL, 8TH FLOOR  
PHILIPPINE GENERAL HOSPITAL, TAFT AVE., MANILA



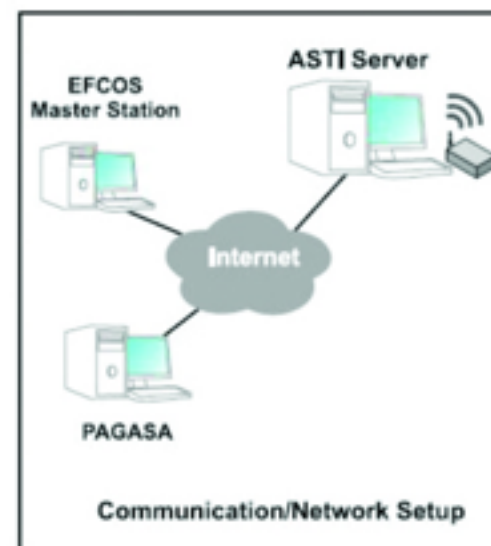
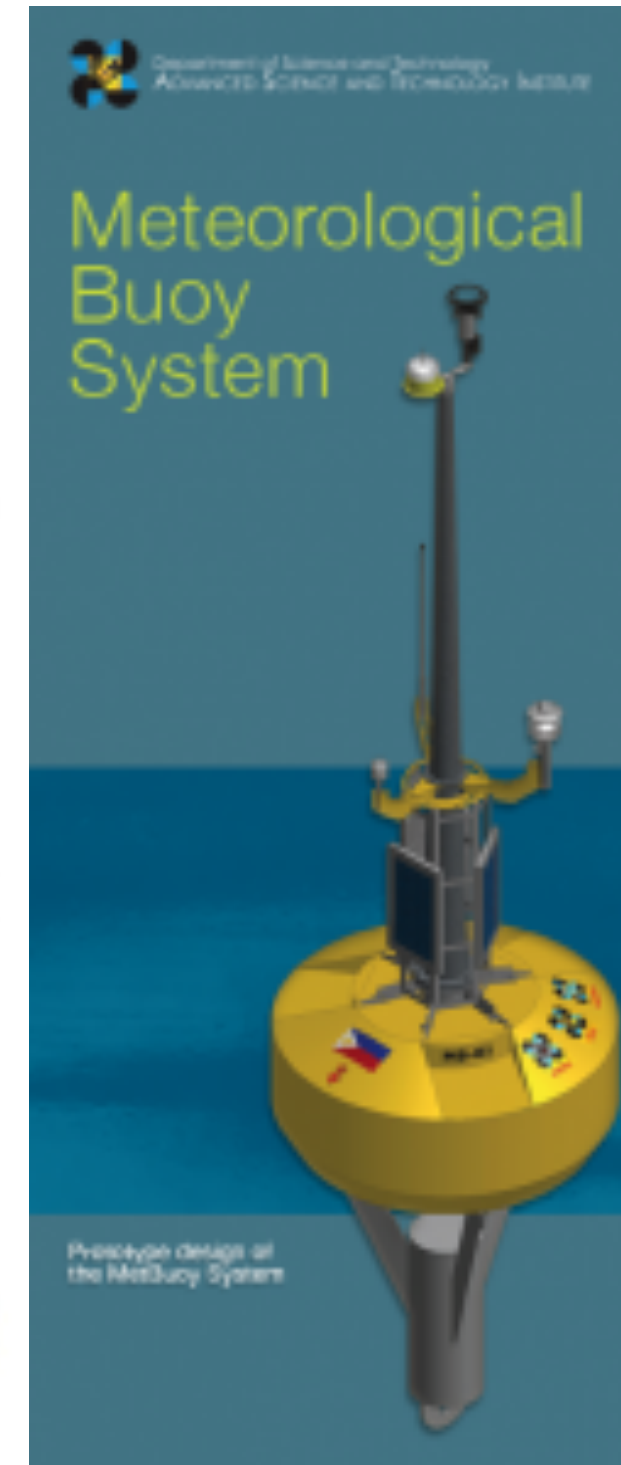
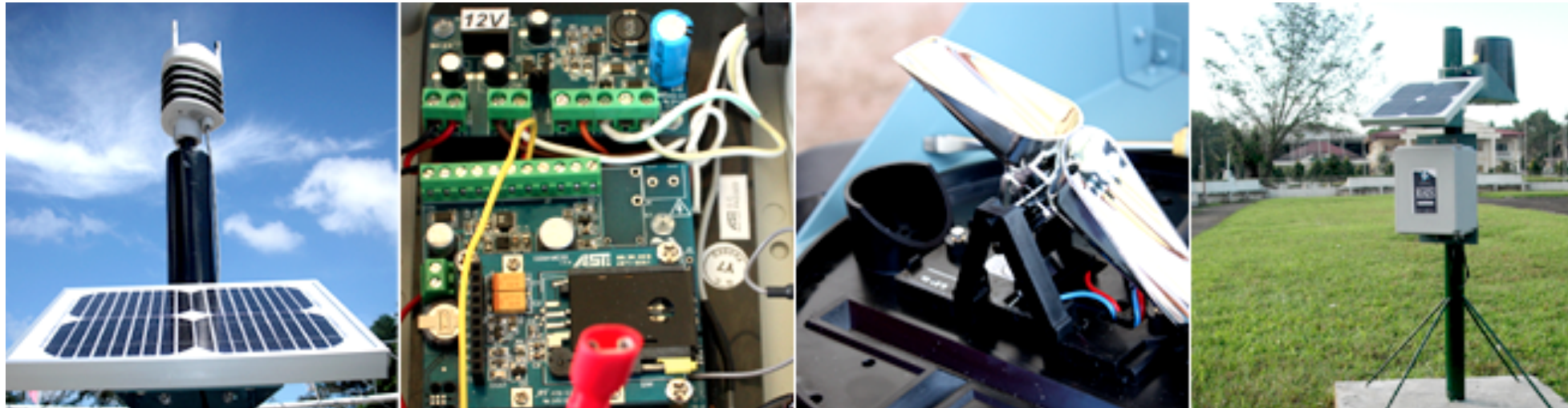
STREAMING LIVE BY THE INFORMATION MANAGEMENT SERVICE  
IN COOPERATION WITH THE ADVANCE SCIENCE AND TECHNOLOGY INSTITUTE - DOST  
VIA THE PHILIPPINE RESEARCH, EDUCATION, AND GOVERNMENT INFORMATION NETWORK



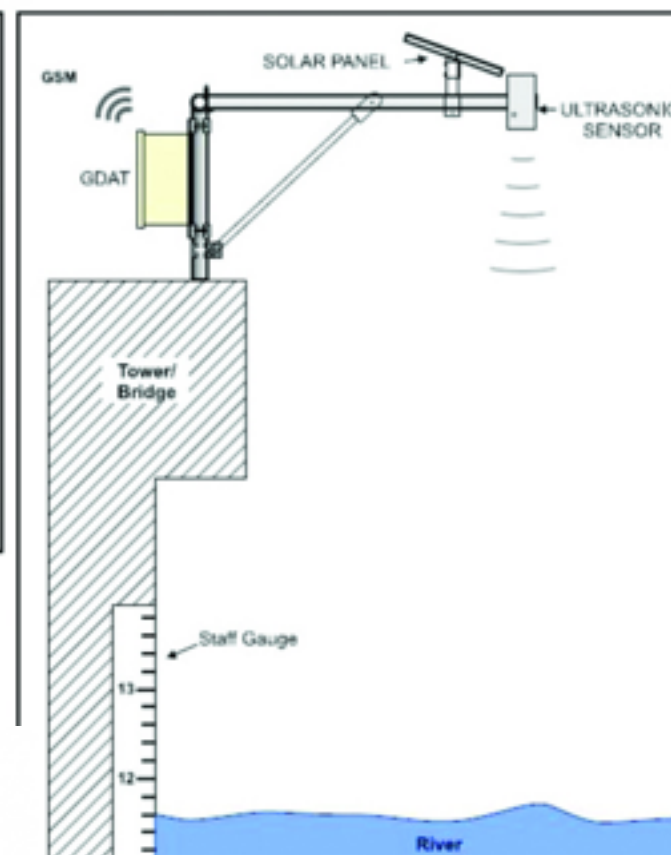
# <http://noah.dost.gov.ph>



# <http://embedded.asti.dost.gov.ph/projects>



Installation of ASTI Water level Monitoring Apparatus





<http://embedded.asti.dost.gov.ph/projects>



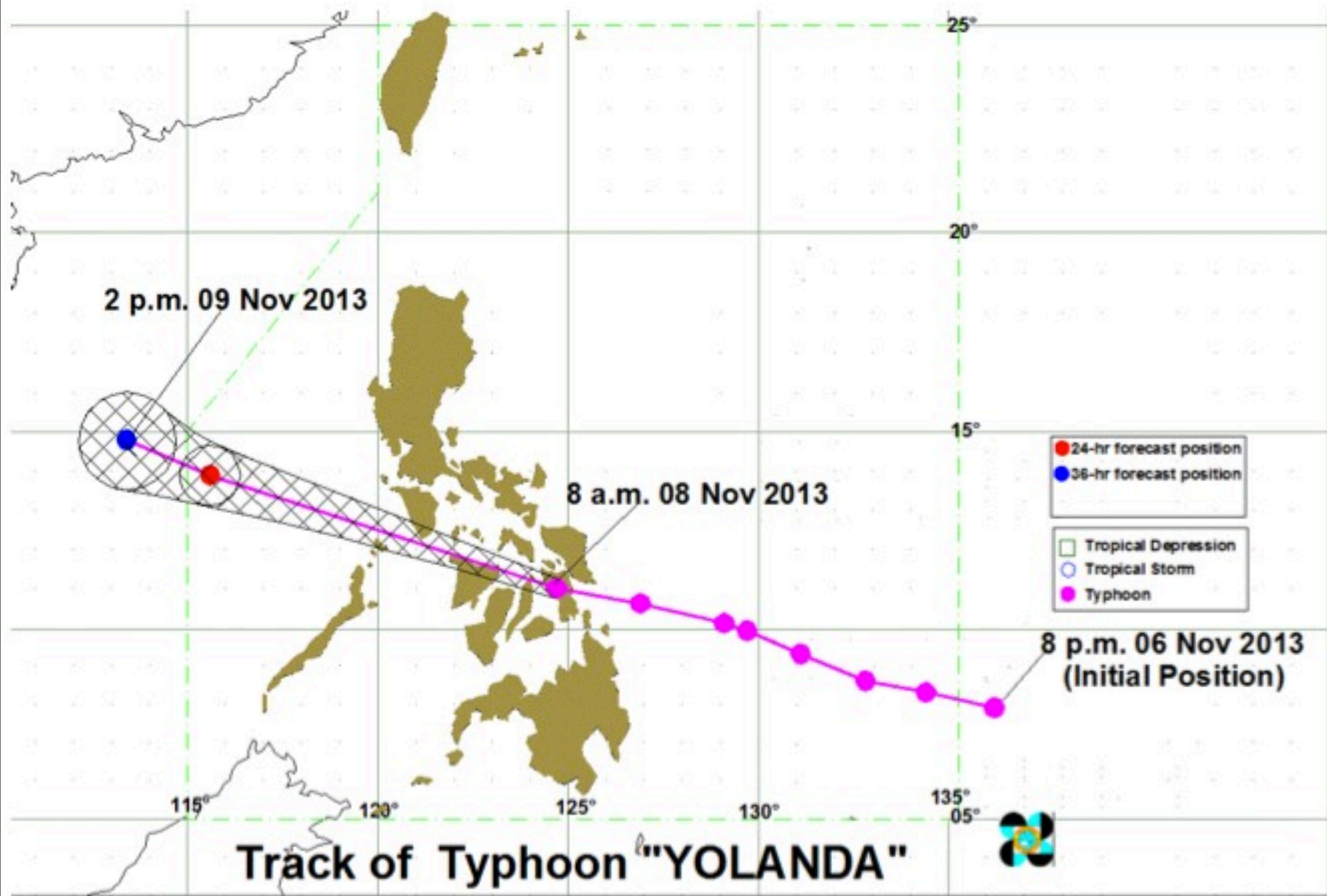
# Yolanda (Haiyan)

- Whole cities were devastated
- Utilities went down
- Communications blackout
- No contact from our staff until the 3rd day

# Recommendations

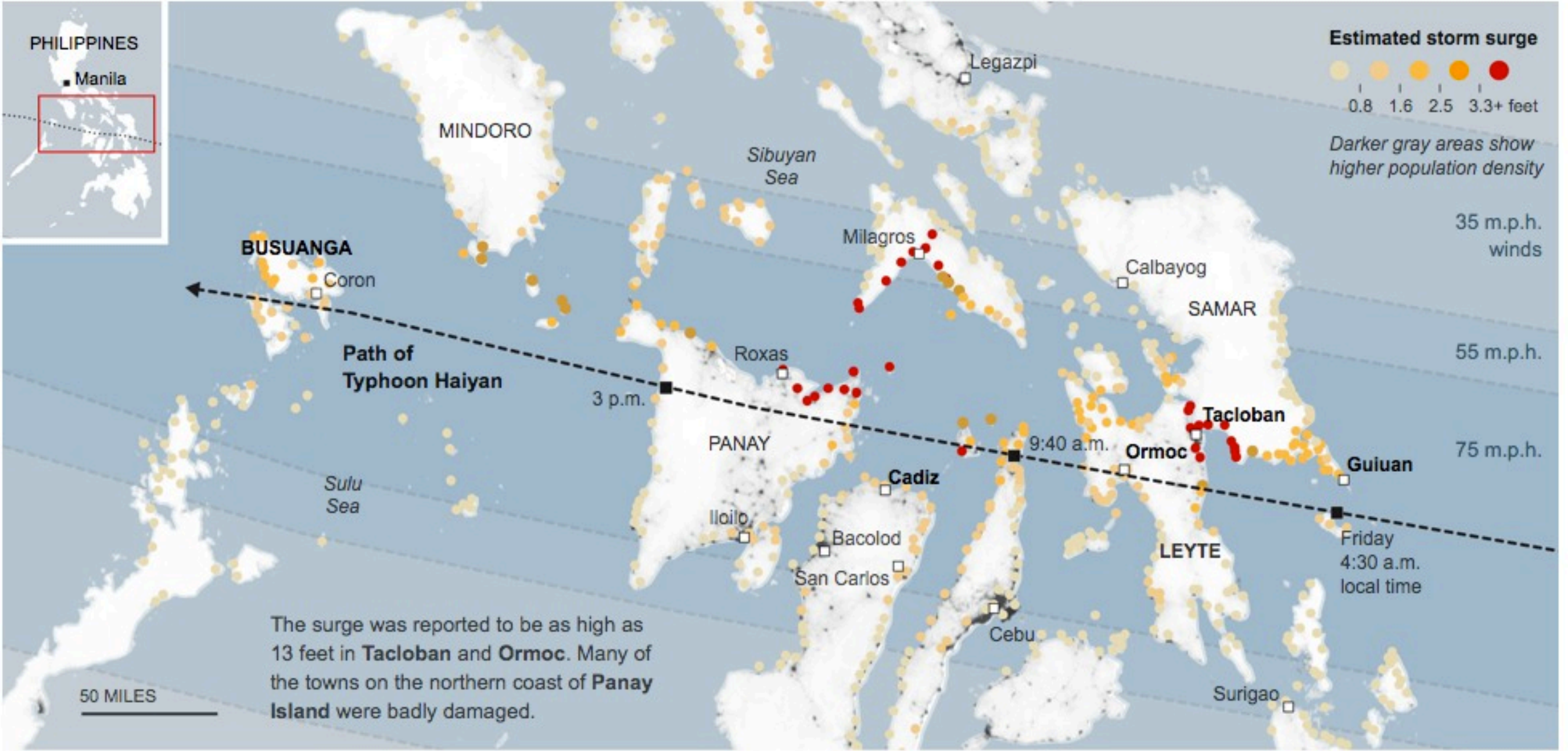
- Research networks (NRENs) have a lot of points of collaboration with regards to addressing climate change







The storm's surge swept away small villages and displaced more than 650,000 people. It was predicted to be about eight feet at its peak, but reports indicate it was higher in some areas.



Sources: United Nations; MapAction; WorldPop; Global Disaster Alert and Coordination System

Updates  
as of  
Tuesday,  
Nov. 12

**Busuanga** The United Nations reported severe damage to housing and public infrastructure, and said that food and water would run out in two days.

**Cadiz City** About 5,000 houses and nearly all corn and sugar crops were destroyed in the storm. The nearby city of Sagay was also severely damaged.

**Leyte** An attempted hijacking of a convoy around 20 miles south of Tacloban forced it to stop, and by Tuesday night the roads were still too unsafe for the convoy to proceed.

**Tacloban** Only small planes with limited capacity could use the Tacloban airport, and pilots flying in and out had to navigate by sight, slowing deliveries.

**Guiuan** Early Tuesday, Philippine authorities delivered aid to the area, which had been without water or electricity since Friday. Nearly all of the municipality's 50,000 residents are homeless.



## **Severe Weather Assessment for the Super Typhoon Haiyan affecting the Philippines and Vietnam, in the next 5 days**

Issued on Wednesday, 6 November 2013 at 0845 local time.

### **Summary**

Tropical Storm Haiyan is currently located 150Nm southeast of Yap, Caroline Islands, is tracking westwards at 16Kt. This system is well defined on imagery, with a developing "eye" now evident. Current wind speeds of 127Kt have been derived within the system and there remains a consistent forecast for this system to intensify further in the next 24 hours as it moves towards the Philippines in the next 34 hours.

It is expected to be a Category 4 Super Typhoon when it makes landfall over the Visayan Islands and is likely to be the most intense storm the Philippines has seen this season so far.

Haiyan will weaken somewhat as it tracks over the central Philippines, then emerge over the South China Sea. Thereafter the weakening storm continues to track westwards towards Northern Vietnam. The rain from Haiyan will add to the accumulations from ex-tropical storm Krosa that is presently decaying in this area.

**This forecast may be amended at any time**

mailto: [GGU@metoffice.gov.uk](mailto:GGU@metoffice.gov.uk)

Phone Duty Forecaster, Global Guidance Unit (GGU), Operations Centre, Met Office, Fitzroy Road, Exeter

VPN n6225 4319, BT 01392 884319

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# After days without communication, Yolanda survivor 'reunites' with sibling on air

November 13, 2013 3:24pm

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Tags: typhoon yolanda

**(Updated 7:54 p.m.)** After days without communication with his loved ones in storm-wrecked Tacloban City, Dennis Salameda broke into sobs upon seeing through a livestream the image of his sister, Mary Joy, who survived the wrath of super typhoon Yolanda (Haiyan).

Although she has been enduring hunger and fearing for her life in Yolanda's onslaught, Mary Joy first gave words of assurance to her brother, who lives in Quezon City.

"Kuya, huwag ka mag-alala. Okay kami lahat. Kailangan lang namin talaga makaalis dito," Mary Joy told her brother through GMA News'

"Panawagan mula sa Leyte," a livestream set up at the Tacloban Airport to enable Yolanda survivors to reach their loved ones.



**Yolanda victims seek shelter under tarpaulins.** Survivors make do with tarpaulins recovered from the rubble in Barangay Anibong, Tacloban City on Wednesday, November 13, five days after super typhoon Yolanda devastated many parts of the Central Philippines. *Raffy Tima*



# Tent city rises in Tacloban for Yolanda survivors

Uploaded on 5:47PM Nov 19

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Survivors of Typhoon Yolanda who have been staying at the Tacloban City Astrodome since November 8, the day the super typhoon lashed most of the Visayas, have been transferred to temporary tent shelters on Tuesday, November 19. Mayor Alfred Romualdez said the city is slowly getting back on its







# UN, gov't send communications teams to Tacloban

BY RUPERT AMBIL

POSTED ON 11/09/2013 8:25 AM | UPDATED 11/09/2013 3:23 PM



RELIEF EFFORTS. A government relief operations team prepares to leave Manila for Tacloban City to help restore communications in areas badly hit by the super typhoon. Photo by Rupert Ambil/Rappler



# Globe, PLDT race to restore service in Yolanda-hit areas

By [DANESSA O. RIVERA](#) and [SIEGFRID O. ALEGADO](#), GMA News November 19, 2013 8:01pm



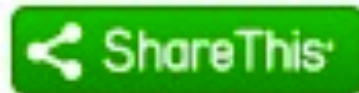
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The country's top two telecommunication firms are facing bottlenecks as they work to restore network coverage in central Philippines, with both companies scrambling to repair cell sites, bay stations and cables in the areas hit hardest by super typhoon Yolanda almost two weeks ago.

The PLDT Group is still working to fully restore network coverage of its wholly-owned wireless subsidiaries Smart Communications Inc. and Digitel Mobile Philippines Inc., public affairs head Ramon Isberto told GMA News Online in a phone interview Tuesday.

"We're now at the hard part. We're literally climbing mountains to replace damaged equipment and restore transmission lines. We have been able to restore coverage in a lot of areas, but we're now at the hard part," he said.

In a separate phone interview, Globe Telecom's head of corporate communications Ma. Yolanda Crisanto said the company has yet to set a specific target date when full network coverage will be brought back in affected areas.

# Recommendations

- It would be good for TEIN member countries to work on emergency communication systems for disaster use
- It would also be very useful for TEIN member countries to share disaster data with each other

# Thank you!

<http://www.pregi.net/teinws2013.pdf>