Common Alerting Protocol in the Philippines

Bangkok, Thailand – August 23-24, 2016
What is PAGASA?

• **PAGASA** stands for Philippine Atmospheric Geophysical Astronomical Services Administration.

• PAGASA as the National Meteorological and Hydrological Services (NMHS) of the Philippines shall be the “**authoritative**” voice in providing warnings to the public.

• The Philippines, through the PAGASA is a member of the World Meteorological Organization (WMO), a specialized body of the United Nations.
PAGASA on WMO Alert Hub

WMO Register of Alerting Authorities [ home ]

OID: 2.49.0.0.608.0 WMO Member: Philippines ISO 3166: PH PHL 608

Issuing Organization: Philippine Atmospheric Geophysical and Astronomical Services Administration

Hazard Categories: Met

Authorization Basis: As a matter of policy, the agency provides typhoon alerts and warnings which is provided to Disaster Risk Reduction Offices and the public through media and web portals and related warning institution.

CAP Feed URL: http://publicalert.pagasa.dost.gov.ph/feeds/
Forecasts URL: http://www.worldweather.org/021/m021.htm
Alerting Area (NWSE): 19 117 5 127

Map view of the typical area for this alerting authority.

Hazard Categories
Geo: Geophysical (earthquakes, volcanoes, tsunami, etc., includes landslide)
Met: Meteorological (weather, storms, etc. includes flood)
Safety: General emergency and public safety
Security: Law enforcement, military, homeland and local/private security
Rescue: Rescue and recovery
Fire: Fire suppression and rescue
Health: Medical and public health
Env: Pollution and other environmental
Transport: Public and private transportation
Infra: Utility, telecommunication, other non-transport infrastructure
CBRNE: Chemical, Biological, Radiological, Nuclear or High-Yield Explosive threat or attack
Other: Other events
Weather Systems Affecting the Philippines

SOUTHWEST MONSOON (HABAGAT)

NORTHEAST MONSOON (AMIHAN)

TROPICAL CYCLONE

INTERTROPICAL CONVERGENCE ZONE

SREspinueba, Flood Forecasting Branch, PAGASA
Information Dissemination Flow

Legend:
- National
- Regional
- Local
- PAGASA
- NDRRMC
- OP

Office of the President → NDRRMC / OCD → PAGASA Regional Centers → National Media → General Public

PAGASA

DRRMCs
- Local Government Units
- PAGASA Local Stations
- Local Media
PAGASA CAP Development

- Initiated by Google on May 2014
- PAGASA Created a Team for CAP
Development of Tool (version 1)

Outputs:
1. CAP Alert

Using the ff:

- Oasis
- Google.org
- Common Alerting Protocol Validator
- CAP
- GitHub
- PHP
- Laravel
CAP: Tropical Cyclone Alert

Track of Typhoon "INENG" {GONI}

Legend:
- Super Typhoon
- Typhoon
- Severe Tropical Storm
- Tropical Storm
- Tropical Depression
- Low Pressure Area

Forecast: 24-Hr, 48-Hr, 72-Hr, 96-Hr, 120-Hr
CAP: Tropical Cyclone Warning
Next Steps.

- Defining Static and Dynamic Content
- Testing CAP Alerts with Google
- Implementation
- Launching of PAGASA CAP with Google in the Philippines on November 12, 2014
Challenges!

- Experience: 40%
- Support: 30%
- Human Resources: 15%
- Infrastructure: 15%
Birth of CAP in the Philippines

Tropical Storm Queenie
November 26, 2014 – November 28, 2014
CAP alert on HAGUPIT(Ruby)
CAP: General Flood Advisory (2015)
Development of Tool (version 2)

Outputs:
1. CAP Alert
2. PDF (Existing)

Using the ff:

- OASIS
- google.org
- Common Alerting Protocol Validator
- CAP
- GitHub
- PHP
- Laravel
CAP on a MAP: Kickoff Workshop
CAP on a MAP: Implementers Training
2015 CAP Implementation Workshop

Report of the 2015 CAP Implementation Workshop
CAP on a MAP: Training on SAMBRO (May 2016)
CAP on a MAP: Training on SAMBRO

http://sambro.meteopilipinas.gov.ph/
CAP on a MAP: Training on SAMBRO

http://sambro.meteopilipinas.gov.ph/
CAP on a MAP: Training on SAMBRO (May 2016)
CAP on a MAP: Simulation and Testing on SAMBRO (July 2016)
CAP on a MAP: Simulation and Testing on SAMBRO (July 2016)
CAP on a MAP: Simulation and Testing on SAMBRO (July 2016)
CAP on a MAP: Simulation and Testing on SAMBRO (July 2016)

http://sambro.meteopilipinas.gov.ph/
On-Going Activities within PAGASA

• Flood Bulletin
• Thunderstorms Advisory
• Heavy Rainfall Warning
Severe Weather (Tropical Cyclone)

SEVERE WEATHER BULLETIN #6
FOR: TYphoon "BUTCHOY" (NEPARKA) TROPICAL CYCLONE: WARNING

ISSUED AT 5:00 AM 7 JULY 2016
(Valid for broadcast until the next bulletin to be issued at 5 AM today)

Typhoon "BUTCHOY" has maintained its intensity as it moves closer to Taiwan.

- Estimated rainfall amount is moderate to heavy within the 600 km diameter of the typhoon.

- Fishermen are advised not to venture out over the northern and eastern waters off Luzon.

- Maximum sustained winds of 220 kph near the center and gustiness of up to 255 kph.

- Forecast movement: To move Northwest at 25 kph.

- Forecast positions:
  - 24 hour (Tuesday morning): 1,670 km North of Ilbagay, Batanes (OUTSIDE PAR)
  - 48 hour (Friday morning): 1,320 km North Northeast of Ilbagay, Batanes (OUTSIDE PAR)
  - 96 hour (Monday morning): 1,150 km North North Northeast of Ilbagay, Batanes (OUTSIDE PAR)
  - 120 hour (Tuesday morning): 910 km North North North of Ilbagay, Batanes (OUTSIDE PAR)

- TCWS: Luzon

- Impacts of the wind:
  - Very light or no damage to low risk structures.
  - Light damage to medium to high risk structures.
  - Slight damage to some houses of very light materials or makeshift structures in exposed communities. Some banana plants are tilted, a few downed and leaves are generally damaged.
  - Tufts of small trees may be broken.
  - Rice crops, however, may suffer significant damage when it is in its flowering stage.

- Wave Height (Open Sea): 2.5-4.0 meters

The public and disaster risk reduction and management council concerned are advised to take appropriate actions and watch for the next weather bulletin to be issued at 11 AM today.

Prepared by: [Name]  Checked by: [Name]

Republic of the Philippines
Department of Science and Technology
Philippine Atmospheric, Geophysical and Astronomical Services Administration
Weather Division
NOAA-Bulacan
Mexican City, Bulacan

[Image of a weather map and details about the typhoon]
Flood Bulletin

Flood Bulletin No. 1 - Pampanga River Basin
Issued at 5:00 am, 22 September 2021
Valid until the next issuance at 5:00 am today

Average Basin Rainfall as of 5:00 am today:
PAST 24 HOURS: 0 mm
FORECAST FOR THE NEXT 24 HOURS: 0 mm

Low-lying areas likely to be affected:

- San Isidro Station, Pampanga River: Flooding is possible in San Isidro and Caballeros.
- Candaba Station, Candaba Swamp: Flooding to persist and remain in Candaba/Pampanga, portions of San Miguel, and San Rafaelo/Bulacan within the swamp area.
- Arayat Station, Pampanga River: Flooding to occur in Riverside areas of Arayat, San Luis, and San Simon.
- Silingay Station, Pampanga River: Flooding is possible in Silingay, Lubao, and Guagua.

Coastal flooding in the low-lying areas to be influenced are affected by local winds.

The residents and the local disaster risk reduction management councils (DRRMCs) concerned are advised to continue to take appropriate actions.
On-Going Activities within PAGASA
Future Development

• Additional CAP alerts
  • Thunderstorms Warning
  • Rainfall Warning

• Improving existing alerts

• Inter-agency collaboration
  • Office of Civil Defense, Phil. Red Cross,
  • PhiVolcs, DSWD ....
CAP Development Team in Philippines
Thank you!

Tracking the sky...Helping the Country