



Managing Disaster Information

Felino Castro V
Office of Civil Defense

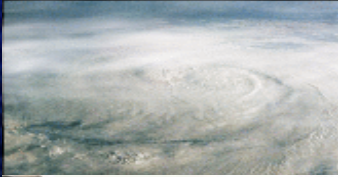


National Disaster Coordinating Council

NATURAL HAZARDS



FLOODS



TYPHOONS AND STORM SURGES



EARTHQUAKES



VOLCANIC ERUPTIONS



CLIMATIC VARIABILITIES (LA NIÑA/EL NIÑO)

LANDSLIDES

TSUNAMI

GROUND SUBSIDENCE



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MAN-MADE HAZARDS

FIRE INCIDENTS

SEA AND AIR ACCIDENTS

OIL SPILL

CIVIL STRIFE

**POLLUTION
(SOLID WASTE, AIR, WATER AND THERMAL)**

**INDUSTRIAL ACCIDENTS
(RADIOACTIVE FALLOUT, GAS LEAKS)**



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The Philippine Disaster Management Framework (PDMF)

- All hazards approach
- All agency/multi-sectoral approach
- Community based



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NATIONAL DISASTER COORDINATING COUNCIL

- **HIGHEST POLICY MAKING, COORDINATING AND SUPERVISING BODY AT THE NATIONAL LEVEL FOR DISASTER MANAGEMENT IN THE COUNTRY.**
- **ADVISES THE PRESIDENT ON THE STATUS OF NATIONAL DISASTER PREPAREDNESS & MANAGEMENT PLANS.**
- **IT RECOMMENDS TO THE PRESIDENT THE DECLARATION OF STATE OF CALAMITY AND THE RELEASE OF NATIONAL CALAMITY FUND.**



National Disaster Coordinating Council

NDCC team

- Secretary, Department of National Defense, Chairman
- Secretary, Department of Agriculture Member
- Secretary, Department of Budget and Management Member
- Secretary, Department of Social Welfare and Development Member
- Secretary, Department of Health Member
- Secretary, Department of Education Member
- Secretary, Department of Finance Member
- Secretary, Department of the Interior and Local Government Member
- Secretary, Department of Environment and Natural Resources Member
- Secretary, Department of Justice Member
- Secretary, Department of Public Works and Highways Member
- Secretary, Department of Transportation and Communications Member
- Secretary, Department of Science and Technology Member
- Secretary, Department of Trade and Industry Member
- Secretary, Department of Foreign Affairs Member
- Secretary, Department of Tourism Member
- Presidential Management Staff Member
- Office of the Executive Secretary Member
- Office of the Press Secretary Member
- Director-General, National Economic and Dev't Authority Member
- Director-General, Philippine Information Agency Member
- Secretary-General, Philippine National Red Cross Member
- Chief of Staff, Armed Forces of the Philippines Member
- Director-General, Philippine National Police Member
- Administrator, Office of Civil Defense Executive Officer



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DCC ORGANIZATIONAL NETWORK



NATIONAL DISASTER COORDINATING COUNCIL

17 REGIONAL DISASTER COORDINATING COUNCILS

80 PROVINCIAL DISASTER COORDINATING COUNCILS

113 CITY DISASTER COORDINATING COUNCILS

1,496 MUNICIPAL DISASTER COORDINATING COUNCILS

41,956 BARANGAY DISASTER COORDINATING COUNCILS

NATIONAL DISASTER COORDINATING COUNCIL



OCD CENTRAL OFFICE

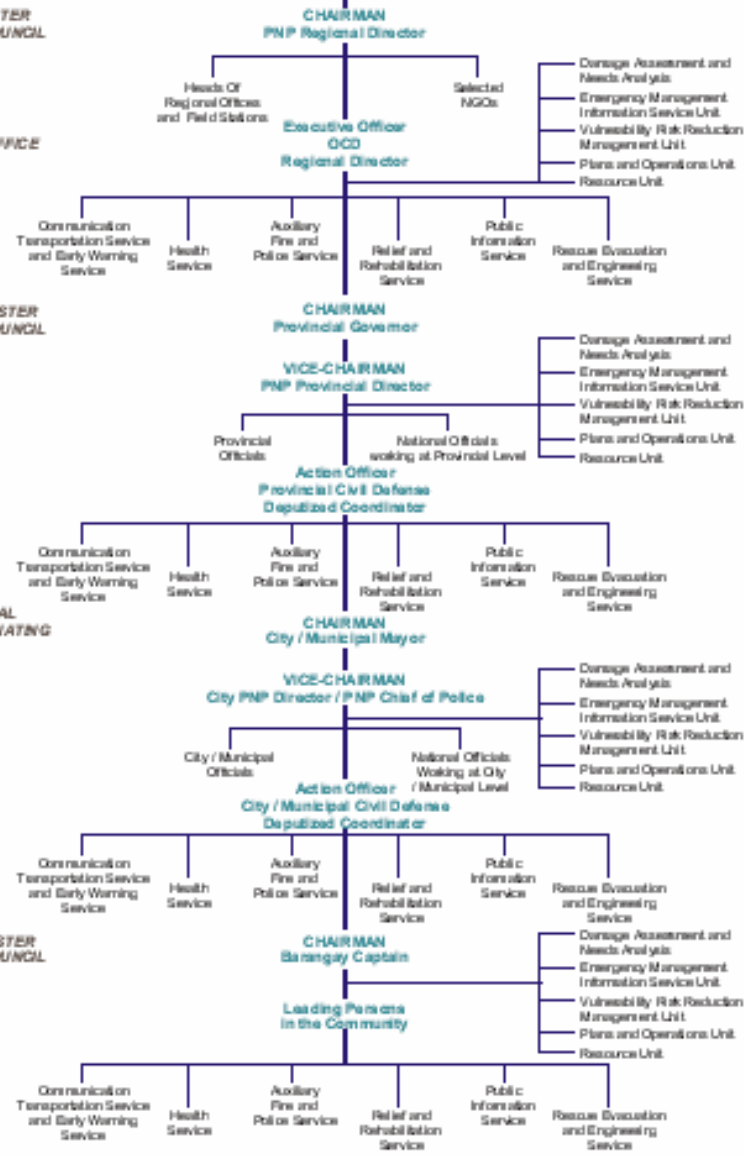
REGIONAL DISASTER COORDINATING COUNCIL

OCD REGIONAL OFFICE

PROVINCIAL DISASTER COORDINATING COUNCIL

CITY / MUNICIPAL DISASTER COORDINATING COUNCIL

BARANGAY DISASTER COORDINATING COUNCIL



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OFFICE OF CIVIL DEFENSE

- has the primary task of coordinating the activities and functions of various government agencies and instrumentalities, private institutions and civic organizations for the protection and preservation of life and property during emergencies...



National Disaster Coordinating Council

OFFICE OF CIVIL DEFENSE

- The operating arm and secretariat of the National Disaster Coordinating Council.



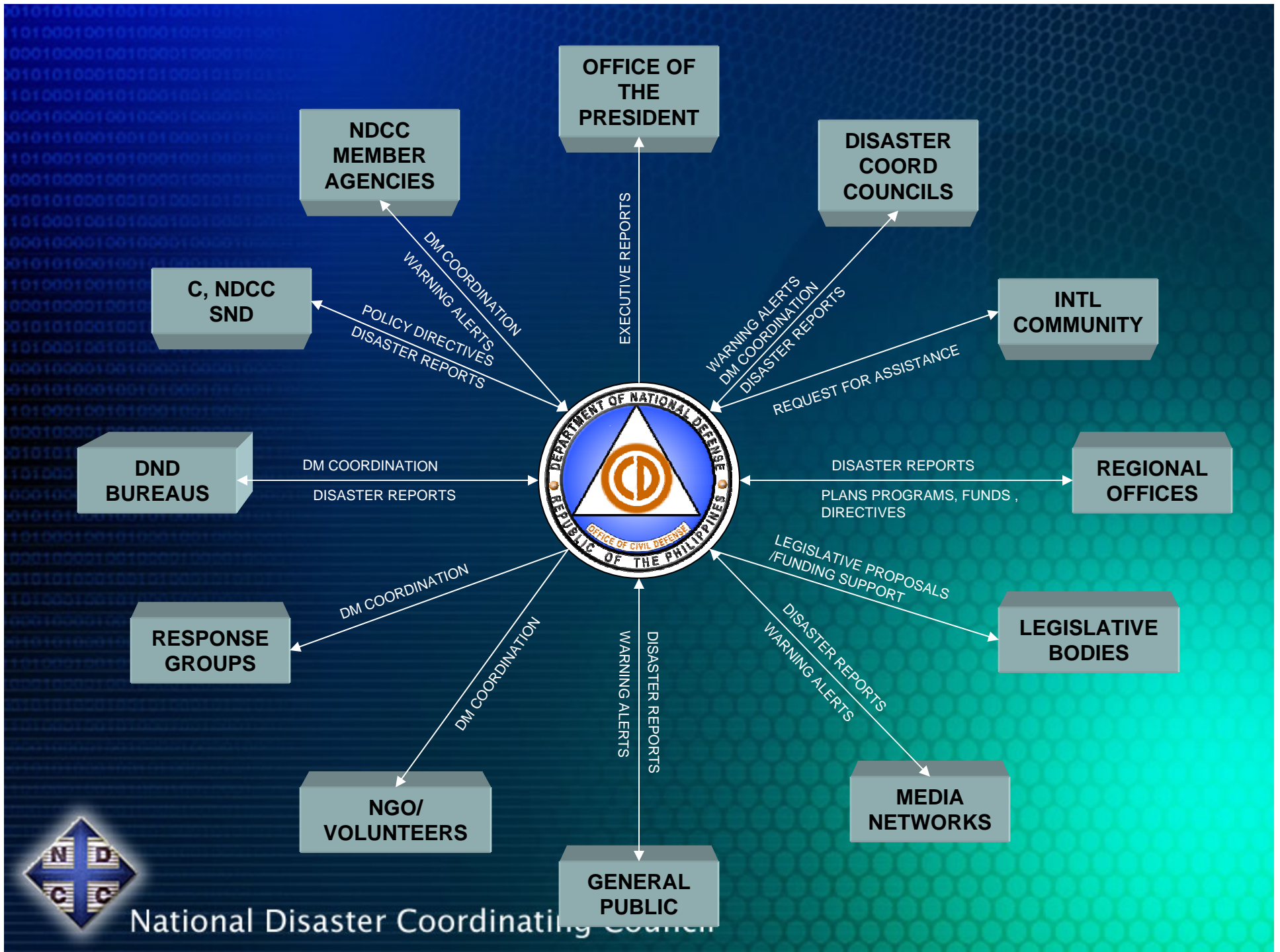
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OCD Functions

- To establish and administer a comprehensive national civil defense and civil assistance program;
- To formulate plans and policies for the protection and welfare of the civilian population in time of war directly involving the Philippines or other national emergencies of equally grave character;
- To estimate the total materials, manpower and fiscal requirements of carrying out the civil defense program, and allocate to the provinces, cities and municipalities such aid in facilities, materials and funds as may be made available from the National Government.



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Disaster Loss Information Management



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Database concerns

- **Accuracy**
- **Timeliness- (Golden Hour Principle)**
- **Granularity**
- **Accessibility**
- **Security**



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- Political issues that surround the official use of disaster databases and how to manage expectations and reservations.
- Methodology and criteria to define, homogenize and gather data about losses (i.e. disaggregation, geo-references, glossary of terms, thresholds, etc) .

- To address field data inaccuracy, limited coverage and data aggregation, the NDCC has developed a standard format to capture direct losses
- Accomplished by the lower DCCs in coordination with National agencies field offices.
- Measuring indirect damages following ECLAC methodology discussed with NEDA-in process as input to development plans



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REPUBLIC OF THE PHILIPPINES
NATIONAL DISASTER COORDINATING COUNCIL
National Disaster Management Center, Camp General Emilio Aguinaldo, Quezon City, Philippines

MEMORANDUM CIRCULAR NO. 32
June __, 2004

JUL 0 2 2004

TO : All Chairmen, Regional Disaster Coordinating Councils (RDCCs) and Local Disaster Coordinating Councils (LDCC)

SUBJECT : Guidelines on the Use of Standard Templates for Reporting Disaster-Related Information

1. Rationale

A timely, appropriate and accurate assessment of disaster situation by the local DCCs facilitates the following: effective decision making by the disaster managers at the emergency operations centers (EOCs); immediate response to save lives and minimize damage to properties; immediate allocation of available resources through prioritization of identified needs; and evaluation of post disaster activity that is geared towards improvement and/or development.

Real time information plays an important role in disaster management because it is where the effective response lies. In this light, there is a need for the local DCCs to institutionalize the existing standard reporting mechanism in assessing disaster damage impact to be able to submit information in real time.

2. Objectives

- 2.1 To institutionalize the revised standard reporting mechanisms in assessing disaster situations
- 2.2 To facilitate immediate generation, consolidation and timely dissemination of damage and needs assessment for purposes of immediate action

3. Policy Guidelines

Since the local DCCs are the closest to the people, it is at this level that the disaster impact is most felt and where the disaster management efforts are being carried out. To be able to generate and analyze real time information for immediate action, there is a need to institutionalize a standard reporting mechanism.



Telephone Numbers: (632) 911-5051 to 64 / (632) 912-5979 / (632) 912-5658 / (632) 912-2424 FAX: (632) 911-1406 E-mail: ccc@ncc.gov.ph

Sources of Disaster Loss Data across NDCC

- DOH
- DENR
- DSWD
- LGU
- DPWH
- DOTC
- DA
- DepEd
- OCD



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Local Disaster Coordinating Councils / LGUs

- Conduct damage assessment on the effects of the calamity on the population and private properties
- Reports on the number of people affected, casualties, injuries and missing



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Dept of Health

- Assess damage on health facilities and status of health services including water and sanitation;
- Determine requirements for medicines, medical personnel, sanitation disease surveillance and control and other health needs.



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Dept of Social Welfare and Development

- Determines requirement of people inside and outside evacuation centers in terms of food, clothing and shelter



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Dept of Public Works and Highways

- Assess damages on infrastructure and public works such as flood control, international and local roads and bridges and other vital installation and facilities
- Determines road accessibility and recommends actions for emergency clearing and reconstruction.



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Dept of Agriculture

- Assess the damages and impacts to agriculture



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Dept of Transportation and Communications

- Conducts damage assessment on communication and transport facilities



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Dept of Environment and Natural Resources

- Conducts assessment on the effects of the calamity in the environment and natural resources.



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Dept of Education

- Conducts assessment on the effects on the education sector, school facilities/buildings and provide an inventory of school buildings used as evacuation center.



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Dept of Energy

- Conducts damage assessment on power generating facilities



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OCD

- Constitute the DANA Teams;
- Establish the plan of action. It should be reflect the information available on the emergency, the mission objectives and the planned activities of the DANA Teams given its constitution and means available;
- Determine the requirements of the team;
- Consolidate and Prepares assessment reports.



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Attribute data per event

- AREAS AFFECTED
- POPULATION AFFECTED AND DISPLACED
- PROFILE OF DISPLACED POPULATION
- PROFILE OF HOMELESS POPULATION
- PROFILE CASUALTIES
- DAMAGE TO PRIVATE PROPERTIES
- DAMAGE TO HOUSES
- DAMAGE TO AGRICULTURE
- DAMAGE TO LIVESTOCKS AND FISHERIES
- DAMAGE TO INFRASTRUCTURES

- DAMAGED ROADS
- DAMAGED BRIDGES
- DAMAGED COMMUNICATION FACILITIES
- DAMAGED ELECTRICAL FACILITIES
- DAMAGED PUBLIC FACILITIES
- DAMAGED WATER FACILITIES
- DAMAGED HEALTH FACILITIES
- OTHER DAMAGED FACILITIES



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Use of data in post-disaster situations

- **Disaster loss data + hazard data + GIS used for rehabilitation and mitigation programs**
 - i.e. flood mitigation master plan
 - Relocation plans
 - Geohazard map generation
- **Disaggregated demographic and disaster data shared to relief and rehabilitation stakeholders for sectoral approaches**
 - Casualties
 - Affected population
 - Evacuees
 - Per Barangay
 - Families vs individuals
 - Men
 - Women
 - Children



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Data analysis methodologies

- **Affected population profile- Gender and age groups**
- **Sieved maps**
 - Typhoon track
 - Flooding
 - Landslides – rain and Earthquake induced
 - Earthquakes



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Status of database development

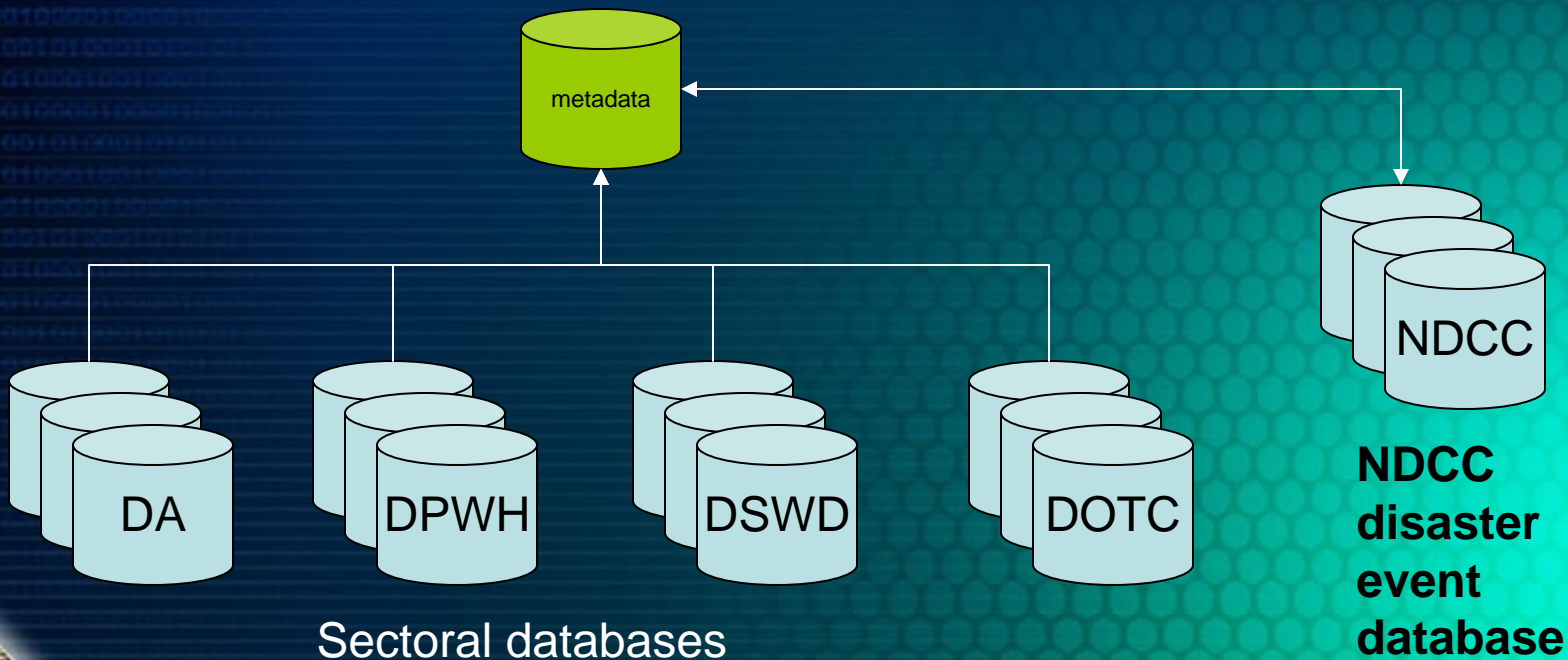
- **Current format**
 - Proprietary: Access/MSSQL/CSV
 - FOSS- PHP/MySQL
- **Additional attribute data**
 - Inclusion of the Philippine Geographic Code for Georeferencing
 - Conventional ID systems e.g. GLIDE



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- Status of database development

- **Use of metadata for Disaster KM**
 - Identifying related data over islands of databases



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- **Use of FOSS web-based information systems for multiple disaster event management**
 - **FOSS**
 - **open-component based APIs**
 - **XML standard for Web data exchange**



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NDCC Virtual Disaster Operations Coordination System

**Facilitating Good Governance
in Disaster Management**



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Urgency

- **Facilitate effective coordination and seamless information sharing among NDCC member agencies, affected Local Government units/ DCCs, private sector and civil society groups involved in disaster response, relief and rehabilitation.**



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- the NDCC through the OCD, in partnership with DOST-ASTI, IBM Philippines, PLDT-SMART and SAHANA core team from Sri Lanka has customized SAHANA, an open source disaster management system to be the NDCC virtual disaster operations coordination facility in the relief and rehabilitation phases of the Guinsaunon landslides, and as a preparedness measure for future disasters.



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NDCC Virtual Operations Coordination System

- **Adjunct system to support the existing Information Management System of the Local DCC Disaster Operations Coordination Center**
- **Interim System, in case no system is set up**



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Available Modules

- Missing Person Registry
 - **Helping to reduce trauma by effectively finding and identifying missing persons**
- Organization Registry
 - **Coordinating and balancing the distribution of relief organizations in the affected areas and connecting relief groups allowing them to operate as one**
- Relief Supply Management System
 - **Registering and Tracking all incoming requests for support and relief up to fulfillment and helping donors connect to relief requirements**
- Evacuation Center, Camp Registry
 - **Tracking the location and numbers of victims in the various camps and temporary shelters setup all around the affected area**



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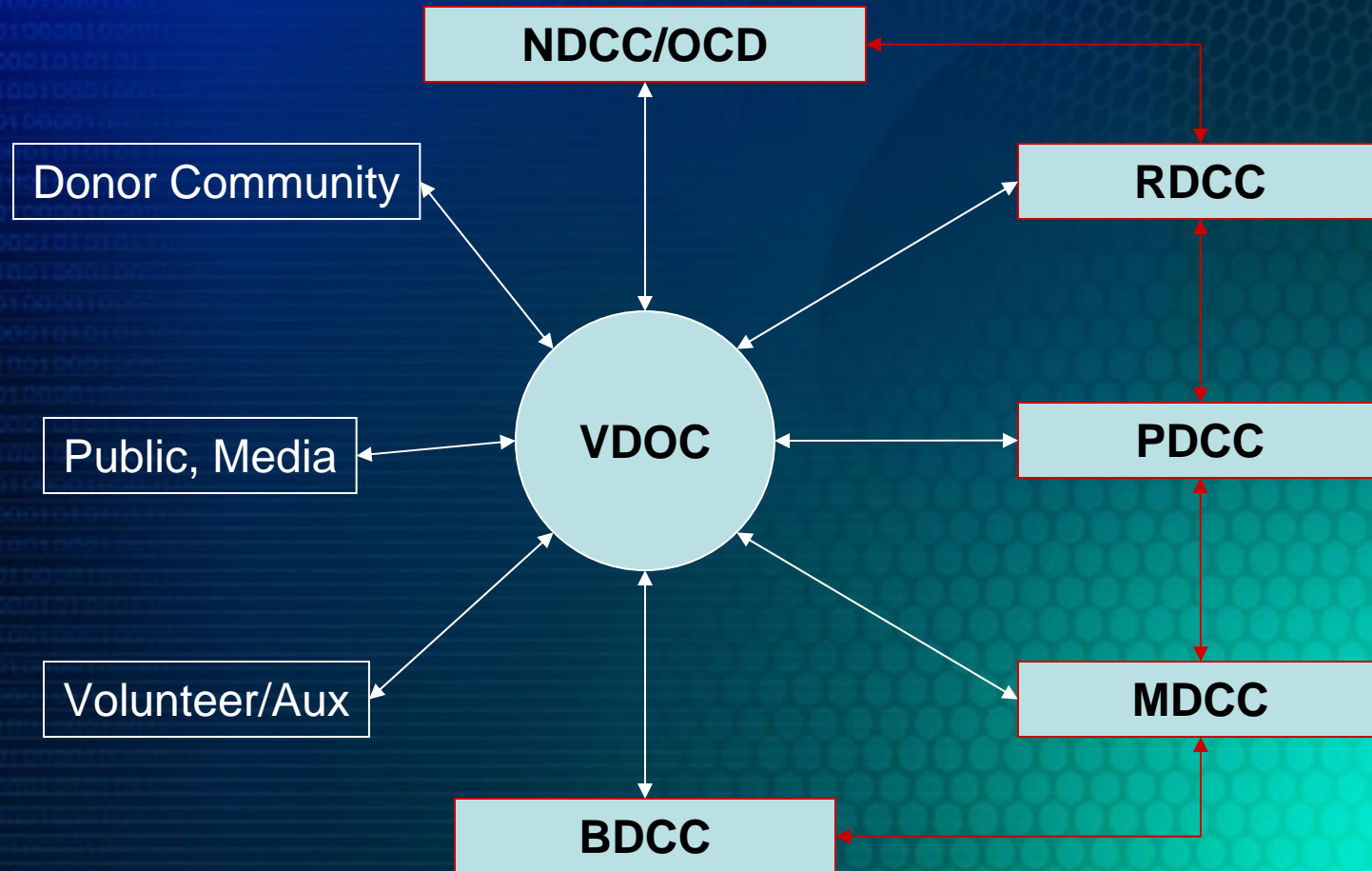
Modules in development

- **Linkage to existing disaster event database**
- **Web-GIS**
- **Linkage to existing SMS Alert and warning system**



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Data capture mechanisms



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OCD Online Disaster Flash Report - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites Media History Mail Print Edit Discuss Links

OCD Online Disaster Flash Report

[All](#) **Search** Selection Modify Details

New entry:

Origin of Report:

OCD control number:

What (Type of Disaster):

When (Date and Time of Occurrence): February 16, 2004, 15:57

Where (Estimated Location):

Why (Probable cause of the incident):

Who (# of affected population and responding agencies in the area):

How (How was the response carried out):

Reported by:

Search:

OCD control number:

When (Date and Time of Occurrence):

Done

Start Find: Files named agids open - Microsoft Outlook OCD Online Disaster ... Microsoft PowerPoint - [Pr...

Internet 4:03 PM



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OCD Online Disaster Flash Report - Microsoft Internet Explorer

Action	Origin of Report	OCD control number	What (Type of Disaster)	When (Date and Time of Occurrence)	Where (Estimated Location)	Why (Propable cause of the incident)	Who (# of affected population and responding agencies in the area)	How (How was the response carried out)	Reported by
Modify Delete	117. DOPCEN & PPO- ILOCOS NORTE	none	Missing Foreigners at sea	Wednesday, 11. February. 2004, 14:00	Along shoreline of Saud Beach, Pagudpud, Ilocos Norte.	The 2 Korean nationals (DONG JUN KIM and COEK HO LEE) went scuba diving at 1400H in the said beach. At 1600H they were reported missing.	Philippine Coast Guard-Currimao Detachment in Currimao, Ilocos Norte and local fishermen in the area.	Upon receipt of info from Duty-Dopcen, immediately informed PCG at around 1900H Feb 11, 2004 but the PCG already received the info from 117 at around 1500H and Currimao Detachment was alerted. ADDITIONAL INFO 121415H FEB 04: at 120900H Feb 04, Dong Jun Kim was recovered alive at the shoreline of Brgy Saoit, Burgos, Ilocos Norte and treated at Burgos Municipal Health Unit. Coordinated with the 5056th SAR Squadron in Laoag City for Aerial Survey as requested by PCG. SAR opns in progress and shoreline municipalities nearby were already alerted.	NIGEL B LONTOC, OCDRC-1
Modify Delete	PCG-MANILA	307	UPDATE RE ML/PIARY INCIDENT	Sunday, 21. December. 2003, 16:05	34 NM EAST OF BANGUEY ISLAND, MALAYSIA	STRONG WINDS AND BIG WAVES CAUSED THE VESSEL TO CAPSIZE.	TOTAL NO. OF PERSONS ON BOARD: 75 NO. OF CREW - 6 NO. OF PASSENGERS - 69 TOTAL NO. OF SURVIVORS: 27 RESCUED BY: M/V PACIFIC VALOR ON 221900H DEC 03 - 20 PERS RESCUED BY PCF 375: ON 24 DEC 03 - 4 PERS ON 25 DEC 03 - 3 PERS CASUALTY: 2 (MR. JADAL A. III, 22	THE FF ASSETS WERE DEPLOYED BY WESCOM FOR THE CONDUCT OF SAR OPNS: *PCG-PCG 3502 & 1 ISLANDER PLANE *PN-ISLANDER PLANE, PG 377 & PS 70 *PAF-2 OV 10 PLANE	DOPCEN

Home of the
www.ndcc.gov.ph
www.oed.gov.ph



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