"As in all facets of human existence, COMMUNICATION is an essential element that bridges understanding and bonds people together. In disaster setting, COMMUNICATION plays a vital role that could determine the success or failure of an operation... a life saved or left behind. COMMUNICATION is as important as food, water, medicine, and shelter . . . COMMUNICATION is AID."

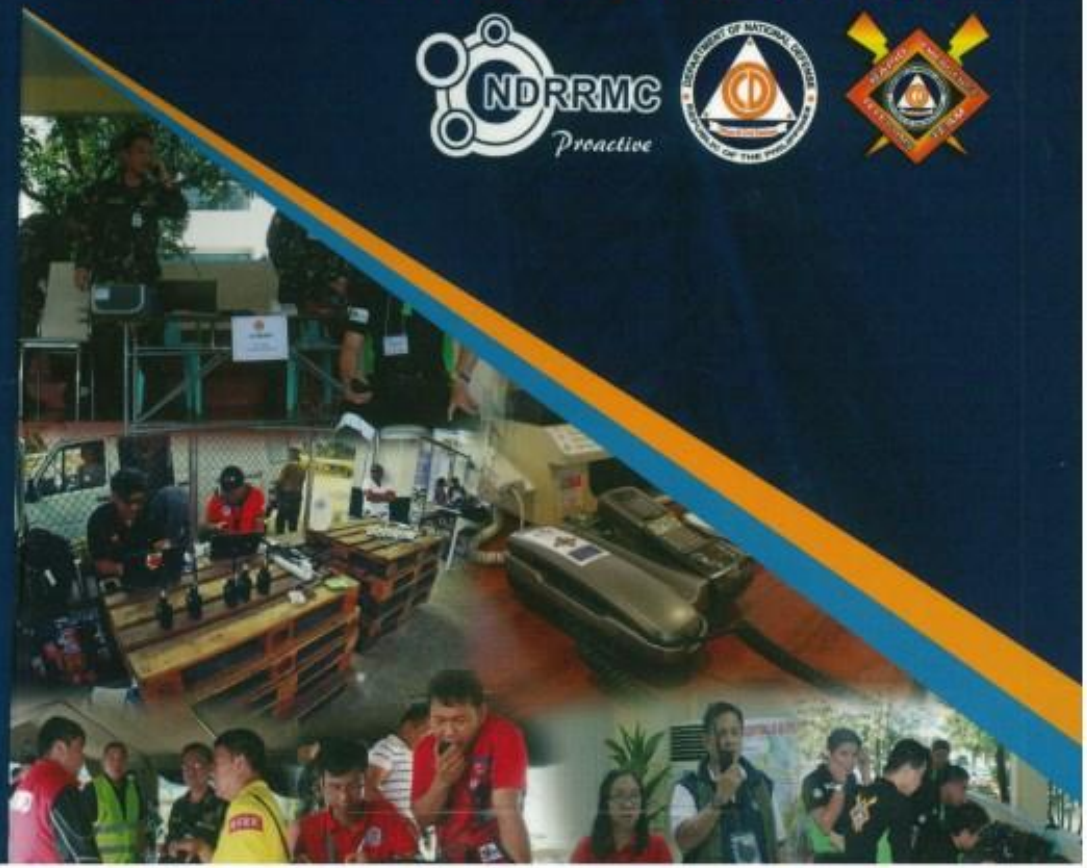
EMERGENCY TELECOMMUNICATIONS CLUSTER

RETT

Rapid Emergency Telecommunications Team

HANDBOOK
OPERATIONS MANUAL

NDRRMC
Proactive



REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF NATIONAL DEFENSE
Camp General Emilio Aguinaldo, Quezon City, Metropolitan Manila

MESSAGE

An integrated communications flow between the national and local disaster risk reduction and management councils (DRRMCs) is considered as an important element in the achievement of our ultimate goal: to save lives. It is vital to the cause of delivering fast and timely response as well as efficient decision making in emergency situations. Always bearing this in mind, the National Disaster Risk Reduction and Management Council has been keen in enhancing its systems in all the thematic areas of disaster management.

This handbook complements the country's National Disaster Response Plan focusing on information and communications technology (ICT). I am confident that this will be of great help to key actors and decision makers in effectively using ICT and dealing with related challenges during emergencies. Through this handbook, a clearer and more in-depth understanding in the operation of the Rapid" Emergency Telecommunications Team and the ICT system can be attained.

Our congratulations to the inter-agency working group led by the Office of Civil Defense on the successful development of this important document. Let us continue to nurture synergy in our effort to provide greater service to our people as we bravely face the challenges of disasters.

The challenge of building a safer, climate-change adaptive and resilient Philippines still remains. Let this Operations Manual be another push for the continuous improvement of our national DRRM effort to ensure inclusive growth and sustainable development for all our communities across the archipelago.

VOLTAIRE T. GAZMIN
Secretary

Republic of the Philippines
Department of Social Welfare and Development
Batasan Complex, Constitutional Hills, Quezon City,
Metro Manila

MESSAGE

In his visit to the Philippines in December 2013, United Nations Secretary General Ban Ki-moon said, *"The Philippines is among the most vulnerable nations to natural disasters. But it is also showing leadership in improving preparedness and building resilience…"*

When Typhoon Yolanda hit the country, it ravaged many vulnerable communities that have been struggling with poverty for so long. In these communities, thousands of families grieved the loss of their loved ones, the destruction of their homes, and the ruins left by a disaster that altered the rhythm of their everyday lives.

Yolanda left a mark on us as a people. We have learned from it many lessons which we, to this day, endeavor to transform into more proactive policies and programs that translate to better preparedness in future calamities. One of the areas we are improving on is the challenge of communication in times of disasters.

Communication is the nerve center of all relief and rehab operations. Thus, when all means of communication are shut down, chaos and doubt become a likely consequence among the survivors, the relief responders, and the public as a whole. The simple lack of communications or hampered communications invites fears and anxieties brought on by not knowing whether help will come, or if and when survivors will be relieved of their situation.

Learning from this, the Office of Civil Defense through the National Disaster Risk Reduction and Management Council has mobilized the Rapid Emergency Telecommunications Team (RETT).

The RETT takes the lead in the conduct of installation, operations, and maintenance of ICT systems and equipment to identified Emergency Operations Centers (EOCs) and/or Incident Command Posts (ICPs) in disaster affected areas.

This RETT Manual defines deployment and implementation of communication services by the OCD. While OCD continues to cover general NDRRMC and Response Cluster communication services requirements, RETT's preparedness to respond at the regional, provincial, municipal and local levels lessens limitations and inconsistencies in information sharing and coordination, poor communication and collaboration among agencies at the local level.

As NDRRMC Vice Chairperson for Disaster Response, I look forward to seeing the successful implementation of this initiative, as we rebuild lives, build the resilience of our communities, and strengthen our preparedness for disaster response.

CORAZON JULIANO-SOLIMAN
Secretary

REPUBLIC OF THE PHILIPPINES
DEPARTMENT OF NATIONAL DEFENSE
OFFICE OF CIVIL DEFENSE
Camp General Emilio Aguinaldo, Quezon City, Metropolitan Manila

MESSAGE

One of the tasks falling within OCD's mandate is to take the lead in the Emergency Telecommunications Cluster, as prescribed in the National Disaster Response Plan. In pursuit of this mandate, initiatives had been undertaken to enhance information and communications technology (ICT) in its application to disaster response. These entailed efficient information exchange among key players and contributed to the success of a number of our previous disaster operations.

This Rapid Emergency Telecommunications Team handbook comes at a most opportune time as we strive to further improve our use of ICT in disaster risk reduction and management (DRRM), particularly during response operations. A better system of communications between the national and local DRRM Emergency and Operations Centers (EOC) can be made through this comprehensive reference in ICT.

My congratulations to the entire inter-agency working group for their collaborative effort in the formulation of this significant document. This is a clear testament of the advantage of nurturing cooperation between government and private sector to further improve our DRRM systems and processes.

The challenge of building a safe, climate-change adaptive and resilient Philippines remains. Let us not tire in doing our level best to serve our people and, through the efficient use of ICT, insure inclusive growth and sustainable development for all communities across the Philippine archipelago.

USEC ALEXANDER P PAMA
Civil Defense Administrator and Executive Director,
National Disaster Risk Reduction and Management Council

ACKNOWLEDGMENT

Publishing this manual would not have been possible without the combined efforts of various people and agencies. While it is not possible to name all of them, we wish to mention some of them.

We wish to extend our gratitude to the NDRRMC, especially to Undersecretary Alexander P. Pama whose concept of ***Whole of Society Approach*** became the nucleus of Information Communications Technology (ICT) - Bayanihan; to the Response Cluster Operations Team headed by DSWD Undersecretary Vilma "Che-Che" B. Cabrera, who adapted the Rapid Emergency Telecommunications Team (RETT) through the Emergency Telecommunications Cluster (ETC) in all mobilizations after Super Typhoon Yolanda; to **LTC EDWIN C SADANG GSC (SC) PHILIPPINE ARMY** for writing this handbook and his significant contribution in the realization of the ICT Bayanihan to the various OCD Regional Centers; and to all the noble men and women of various government agencies who brought to life the concept of RETT.

On the same breath, we thank our civilian partners who selflessly stepped forward in response to the bugle call of ***BAYANIHAN*** bringing with them the strength of their organizations or families, personal expertise, and material resources.

Special gratitude goes to the Operations Division, OCD Team who tirelessly and invisibly worked behind the limelight, doing the nitty gritty of daily coordination and clerical work from drafting to publication.

While it seems eerie to think that Philippines will be hit by natural hazards each passing year, it is uplifting to realize that each passing hazard brings the best in the Filipino, as a nation and people. ETC-RETT is one concrete manifestation. ***Mabuhay!***

RAPID EMERGENCY TELECOMMUNICATIONS TEAM (RETT) HANDBOOK

Operations Manual on The Use of Rapid Emergency Telecommunications Team in Disaster Management and Response Operations

Edition 1, June 2016

The aftermath of recent natural disasters highlighted the need to develop guidelines that will influence National DRRMC-member agencies, the Regional DRRMCs and local DRRMCs, as well as Response Clusters and humanitarian partners in establishing and institutionalizing a rapid emergency telecommunications immediately following a disastrous event in the country.

The Office of Civil Defense (OCD) through National Disaster Risk Reduction and Management Council (NDRRMC) is the lead enabler of the NDRRM Plan 2011-2028. It is a framework that provides guidelines in strengthening the capacity of the national government and all key players in enhancing disaster preparedness and response capabilities. This field manual provides direction for stakeholders' engagement between key players of disaster risk reduction specifically for emergency response preparedness and disaster response which is focused on the field of Information, Communications, and Technology (ICT). It looks into the elements that are necessary to achieve greater information sharing, tasks division, operational planning, creation of unified efforts and the institutionalization of the most important element of disaster management cycle – the ICT in the disaster management program. This will be implemented through a conglomeration of key players of the Emergency Telecommunications Cluster (ETC) through the Rapid Emergency Telecommunications Team (RETT) that are regularly in contact with each other that will promote convergence, unified actions and provide better working relationships.

The Office of Civil Defense (OCD), as stipulated in Section 8 of Republic Act 10121, shall have the primary mission to administer a comprehensive National Civil Defense and DRRM Program. It will provide leadership in the continuous development of strategic and systematic approaches as well as measures to reduce the vulnerabilities and risks to hazards and manage the consequences of disasters. It has the power and function to establish standard operating procedures on the communications system among provincial, city, municipal, and barangay disaster risk and reduction and management councils, for purposes of warning and alerting them and for gathering information on disaster areas before, during and after disasters.

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Introduction

Key Terms and Definitions

The following terms are essential for establishing a common understanding of the terminologies used by the guidelines in this document.

1. *Collaboration* – in this document, is operationally defined as the process of sharing common objectives of two or more groups with corresponding services acting together to generate a collective effort to attain a specific purpose.

2. *Communications Interoperability* - in this document, is operationally defined as "the capability of communications equipment to talk to any similar communications equipment operating in the same electromagnetic spectrum."

3. *Coordination* – is operationally defined as the synchronization of action to achieve mutual goals. It starts with an assumption of dissimilarities.

4. *Disaster Response* – as defined in the RA 10121, is the provision of emergency services and public assistance during or immediately after a disaster in order to save lives, to reduce health impacts, to ensure public safety and to meet the basic survival needs of the people affected. Disaster response is predominantly focused on immediate and short-term needs and is sometimes called "disaster relief".

5. *Disaster Risk Reduction and Management (DRRM)* – is the systematic process of using administrative directives, organizations, and operational skills and capacities to implement strategies, policies, and improved coping capacities in order to lessen the adverse impacts of hazards and the possibility of disaster. Prospective disaster risk reduction and management refers to risk reduction and management activities that address and seek to avoid the development of new or increased disaster risks, especially if risk reduction policies are not put in place. RA 10121, p.7

6. Emergency Telecommunications Cluster (ETC) – as defined in the National Disaster Response Plan for Hydro-Met, is one of the sub-clusters of the National Response Cluster. The lead agency for the ETC is the Office of Civil Defense (OCD). It will be responsible for coordinating the deployment and implementation of communications services and must fulfill the role of "Provider of Last Resort". It will be the provider of communications, electronics and information system support

services for the identified Emergency Operations Centers (EOCs) and/or Incident Command Posts (ICPs).

7. *Humanitarian Assistance and Disaster Response (HADR) operations* - is operationally defined in this document as the actions of state actors and other stakeholders in the generally mitigated actions intended for victims such as typhoons, landslides, flooding, earthquakes, or human-induced disasters.

8. *Information Communications Technology (ICT)* - is defined operationally in this document as the universal term that includes any communications, electronics, and information systems and services.

9. *Incident Command System (ICS)* – as defined in the Memo Circular 04, s. 2012, is a standardized, on-scene, all hazard incident management concept that allows its users to adopt an integrated organizational structure to match the complexities and demands of single or multiple incidents without being hindered by jurisdictional boundaries. ICS is a non-permanent organization and is activated only in response to disasters and emergencies.

10. *Key Players* (actors, players, responders, enablers). This term is generally used in this paper to refer to an individual, organization, agency, government, private or business that is involved in a HADR with other key entities.

11. *Operational Protocol* – is operationally defined in this document as a procedural process on how to approach operational activities. It is the standard rules that governs all disaster management operators.

12. *Rapid Emergency Telecommunications Team (RETT)* – is defined operationally as a rapid deployment team equipped with ICT resources; both human and equipment. It is organized to address the communications, electronics and information needs of the Emergency Operations Centers (EOCs) and/or Incident Command Posts (ICPs) in a disaster area for command and control mechanism.

13. *State of Calamity* - a condition involving mass casualty and/or major damages to property, disruption of means of livelihoods, roads and normal way of life of people in the affected areas as a result of the occurrence of natural or human-induced hazard.

Objective

14. The aim of the present Operations Manual on the Use of Rapid Emergency Telecommunications Team (herein referred to as RETT Handbook) is to serve as guidelines for strengthening the effectiveness and efficiency of Information and Communication Technology (ICT) during disaster response operations under the leadership of the Emergency Telecommunications Cluster (ETC). It shall be intended to provide assistance at the Regional and Local DRRMC EOCs for coordination with the National level through the Rapid Emergency Telecommunications Team (RETT). Also, this will serve as basis of decision makers at the different levels of command whenever there is a need of ICT resources deployment during emergencies and disasters.

Scope and Extent

15. The "RETT Handbook" addresses the use of the members' ICT resources following devastation from natural disasters and national emergencies, as well as mobilization in times of peace. This document does not encompasses the principles, mechanisms and procedures concerning government agencies participating in disaster response operations or the delivery of disaster relief in situations of armed conflict.

16. The handbook covers the use of ICT assets of the different members of government, and private, and volunteer organizations – as well as other volunteer assets that may be available. These other groups on other missions are referred to as "other responders".

17. This handbook is primarily intended for use of the National / Regional / Provincial / Municipal Emergency Operations Centers of the Disaster Risk Reduction and Management Councils in support of the Emergency Telecommunications Cluster/Sectors in disaster affected areas.

18. This could also be used by decision-makers in national and local organizations when considering the use of ICT assets to provide assistance to populations in times of peace.

19. This document focuses on the use of RETT in disaster response and relief operations. The foundation for effective coordination during recovery and rehabilitation is often established during the early recovery phase. However, recovery and rehabilitation activities are beyond the scope of this document.

Status

20. The Emergency Telecommunications Cluster (ETC) members and government agencies including private partners and volunteer groups have agreed to this handbook. The ETC through RETT implementing and operational partners are urged to follow this guidance. The handbook is considered a living document and may be reviewed and updated as appropriate in the future.

21. This handbook will not, in anyway, affect the rights, obligations or responsibilities of each RETT member organization or individual under the existing laws. This includes, but not limited to, the obligation to allow and facilitate rapid and unimpeded delivery of technical and/or CEIS services, and facilitate their rapid utilization.

Configuration

22. The remainder of the document is divided into two parts. The first section contains principles that guide the use of RETT and its assets in disaster response and relief operations. The second section describes the tasks and responsibilities of key actors in situations where RETT is used and in situations when other deployed ICT responders are requested by N/R/P/M/C DRRMC to support humanitarian activities. Ten (10) Annexes are attached to the document:

    - Annex I: Abbreviations
    - Annex II: Philippine ETC Members
    - Annex III: RETT Members Focal Persons / Contact Details
    - Annex IV: RETT Members' Resources
    - Annex V: Network Diagrams
    - Annex VI: Terms of Reference (TOR)
    - Annex VII: RETT Line of Operations
    - Annex VIII: RETT Logo
    - Annex IX: RETT Uniform and Identification
    - Annex X: RETT Composition
    - Annex XI: Declaration of Commitment

Comments, Recommendations and Future Changes

23. This document is prepared under the auspices of the OCD ICT "Bayanihan" Program. It complements the existing "National Disaster Response Plan" and the Cluster Approach System in support of the Philippine humanitarian activities. Comments should be directed to the Focal Office, CEIS Division, Office of Civil Defense, Camp General Emilio Aguinaldo, Quezon City. Proposed changes will be brought forward in the Technical Management Group, NDRRMC meeting and incorporated in consultation with the Response Cluster through the Lead, Emergency Telecommunications Cluster.

Principles and Concepts

Core Principles

24. Emergency telecommunications during disasters is a specialized field within the wider sphere of emergency communications. Emergency communications covers all technical means and modes for DRRM agencies at all levels of government to perform their daily routine and specific communications.

25. Disaster emergency communications applies to those technical resources required to provide and maintain operable and interoperable communication before, during, and after emergencies and disasters.

26. Effective and timely emergency telecommunications services support Response Clusters in carrying out their respective mandates safely and efficiently following the principles of 5Cs (communications, coordination, cooperation, collaboration and commitment).

27. Emergency Telecommunications Cluster under NDRRMC Memorandum No. 23 series of 2014, dated 20 October 2014 will respond in all major emergencies when requested and where the scale of the emergency is beyond the capacity of local government units.

28. The key players involved in disaster response and relief operations subscribe to these principles and have incorporated these concepts in their respective mandates and operational guidelines.

Complementarity

29. ETC and RETT assets should be seen as a tool complementing existing ICT resources in order to provide specific support to specific requirements, in response to the acknowledged ICT gap between disaster needs.

Responsibility and Management

30. RETT can be mobilized and deployed as part of the *Rapid Deployment Team (RDT) of the N/R/P/M/CDRRMC* or independently based on the level of response operations. All movement should be provided at the instruction of the Chairperson or Executive Director of NDRRMC and/or Chairpersons, R/P/M/CDRRMC or with the consent of the *Affected LGUs.*

31. All RETT actions remain as the overall responsibility of Lead, Emergency Telecommunications Cluster and are complemented by local sector and international Emergency Telecommunications Clusters.

Costing and Funding

32. RETT assistance should be provided at no cost to the *Affected LGUs.*

33. Decision-makers adopting to employ its RETT must consider the cost/benefit ratio of such operations compared to available alternatives. In principle, the cost involved in using RETT on disaster operations at local level should be covered by their respective funds other than those available for national disaster response activities.

Identification and Security

34. In principle, RETT personnel deployed in disaster management operations mission will be in uniforms. The overall responsibility for providing adequate security remains with the Philippine National Police (PNP) and/or the Armed Forces of the Philippines (AFP).

Legal Status

35. On the basis of the approved *"Terms of Reference"*, individual RETT personnel, mobilized and deployed at the request of N/R/P/M/CDRRMC may be granted the status of operational control (OPCON) and administratively control (ADCON) by their respective mother units and/or offices.

Key Operational Concepts for use of RETT

36. On orders by the National Disaster Risk Reduction and Management Council (NDRRMC), through the Vice-Chairperson for Response, the Emergency Telecommunications Cluster through the Rapid Emergency Telecommunications Teams (RETT) will take the lead in the conduct of installation, operations, and maintenance of ICT systems and equipment in the identified Emergency Operations Centers (EOCs) and/or Incident Command Posts (ICPs) in disaster affected areas. The RETT is the implementing and supporting arm of the existing Emergency Telecommunications Cluster (ETC).

    At the regional level down to the provincial, municipal and barangays levels, the leadership in the conduct of RETT mission shall be determined by the Local DRRMCs as mandated in the RA 10121 based on the Rule 11, Section 1 IRR of RA 10121, "The LDRRMCs shall take the lead in preparing for, responding to, and recovering from the impacts of disasters."

    RETT operations will be conducted through coordinated operations with other support agencies, local and international volunteers in coordination with the Rapid Deployment Team (RDT) of the N/R/P/M/CDRRMC. This aims to establish an effective and efficient ICT systems and equipment connectivity from affected areas to national level and vice versa during disaster response operations. It is primarily intended for use by the EOCs, responders and the ICPs.

    The RETT will accomplish its mission by employing its national, regional, and local teams from the N/R/P/M/CDRRMC member agencies, volunteer groups and private partners with support from the RDT of the NDRRMC.

    Supporting the RETT in ICT operations are the following agencies: Department of Social Welfare and Development (DSWD), Department of Interior and Local Government (DILG), Department of Science and Technology (DOST), National Telecommunications Commission (NTC), Armed Forces of the Philippines (AFP), Philippine National Police (PNP), Philippine Coast Guard (PCG), Bureau of Fire Protection (BFP) and such other volunteer groups and agencies as may be called upon by the OCD.

    The condition/s that will activate the RETT missions will result from of the risk assessment provided by the Pre-Disaster Risk Assessment (PDRA) Core Group. When necessary, its deployment for ICT operations will coincide with the deployment of the Rapid Damage Assessment and Needs Analysis (RDANA) Teams to be conducted at the affected areas

    in coordination with other government agencies. Result of ICT DANA shall be immediately provided to the Response Cluster through the Emergency Telecommunications Cluster (Communications, Electronics and Information Systems Division, OCD) to determine what ICT systems and equipment capabilities are still needed.

    Critical in the conduct of RETT operations is the availability of assessment result (PDRA and/or RDANA). Decisive in RETT operations is the immediate identifications of needed resources and location of EOCs and/or ICPs at the disaster affected areas and the availability of transport assets for the deployment of RETT. At the end of the RETT operations, the use of Information Communication Technology (ICT) in disaster response and relief operations is strengthened, and made more effective and efficient.

    Aside from the above- mentioned concepts, the use of RETT shall be anchored on and guided by the following standards:

    a. Mobilization and deployment of RETT must be made by the Chairperson or Executive Director, NDRRMC based on the context of National State of Calamity;

    b. RETT should be employed by the national leadership as a last resort, i.e. only in the absence of any other available means/alternative to support emergency needs in the time required;

    c. Emergency Telecoms Cluster must retain its mandated mission even with the presence of RETT. Since RETT will remain under the overall authority and control of the designated Incident Commander. This does not infer any organizations' command and control facilities; and

    d. RETT mandated mission will only be terminated once commercial telecommunications are functional and ICT infrastructures in the disaster affected areas have been restored and operational.

37. ICT implementing and operational partners, members of civil society organizations, and other similar institutions are expected to adhere to these core principles and are encouraged to adopt the RETT guidelines.

Avoiding Reliance on Civilian Resources

38. The services and personnel provided by RETT members are explicitly for EOCs and extended ICPs only and should not be used for other purposes. Meaning, the utilization of ICT resources of ETC and other

counterparts are only temporary in nature. Therefore, as a general principle, RETT members must avoid becoming dependent on other resources. Government RETT members are encouraged to invest in increased individual capacity instead of the ad hoc use of civilian counterparts to support EOCs, ICPs and responders.

Operational Protocol for the local Emergency Operations Centers (EOCs) and Incident Command Posts (ICPs)

39. To be effective, the direction and coordination of the RETT effort requires the leadership of a Professional Electronics Engineer (PECE), Electronics Engineer or senior communicators. The ultimate safety and security of these assets are the responsibility of the designated EOCs and ICPs Commanders.

40. The RETT involvement with the EOCs and ICPs is direct assistance to its disaster management operations. Its activities should only focus on the three (3) discipline of; communications, electronics and information systems.

41. The RETT personnel employed should be clearly distinguished from those groups engaged in actual disaster operations. The markings of the RETT are its authorized uniform with NDRRMC, OCD, RETT and respective organizations' logo.

Operational Protocol in relation with the Emergency Telecommunications Cluster (ETC)

42. Other government agencies, private and volunteer organizations may also provide ICT support to EOCs and ICPs through RETT when requested by OCD-NDRRMC as necessary. These additional assets will be under the control of the ETC through the RETT.

43. RETT will undertake and reconcile actions in coordination with the Emergency Telecommunications Cluster as the need arises. This will enable the linkages of EOCs and ICPs with the other responders' group on the ground during disaster operations.

44. As a guiding principle, RETT is the force for the EOCs and other extended ICPs, while Emergency Telecoms Cluster is the ICT provider for the Response Clusters.

Operational Protocol in relation with the Co-Lead, Emergency Telecommunications Cluster

45. Anchored on the guiding principle of – *"RETT is for the EOCs and ICPs, while Emergency Telecommunications Cluster is for the responders and other ICT requirements of the Response Clusters"*, World Food Programme (WFP) as the Co-Lead of the Emergency Telecommunications Cluster - Humanitarian Country Team (HCT) is for foreign responders. However, this does not prohibit them from providing assistance with the Affected State Emergency Telecommunications Cluster requirements.

46. For the effective ways to share critical information, task division, and operational planning and achievement of the 5Cs (communication, coordination, cooperation, collaboration and commitment) in the disaster areas, RETT will be in parallel with the UN Emergency Telecommunications Cluster in accomplishing its mandated functions. This means, complementing actions is encouraged for its interoperability and commonality.

47. The figure below shows the graphical representation of the relationship between RETT and World Food Programme (WFP) as Co-Lead, Emergency Telecommunications Cluster.

Figure 1. Chart representing the relationship of RETT with Co-Lead, Emergency Telecommunications Cluster (ETC)

Tasks and Responsibilities

Structural Organization of RETT

48. Though all RETT members are highly technical in nature, their task is synonymous to the organization of Incident Command System (ICS). This will enable them to function both administratively and operationally. When deployed independently, the RETT organization will be organized as shown in Figure 2. However, when deployed under the command and control of Rapid Deployment Team (RDT) of the N/R/P/M/CDRRMC, it will only become one of the section supporting the Incident Management Team (IMT) as reflected in Figure 3.

RAPID EMERGENCY TELECOMMUNICATIONS TEAM ORGANIZATIONAL STRUCTURE

Figure 2. Organizational structure of RETT when deployed independently

Organizational Structure
NDRRMC, Rapid Deployment Team with RETT

Figure 3. Organizational structure of national RETT when deployed as part of the TEAM NDRRMC Rapid Deployment Team

Response Cluster, N/R/P/M/CDRRMC

49. The Response Cluster, N/R/P/M/CDRRMC through the Emergency Telecommunications Cluster (ETC) is primarily responsible for the deployment and mobilization of the RETT in disaster areas. It has the right to decline its use on a case-to-case basis, even though N/R/P/M/CDRRMC may have been requested by the *Affected LGUs*.

50. The Response Cluster, at all levels through the Emergency Telecommunications Cluster (ETC) is the provider of the RETT, while the Incident Commander on the grounds is the RETT employer. In so doing, is responsible for the drafting of RETT Handbook through the respective Technical Working Group (TWG) of ICT Bayanihan. The Handbook includes the fundamentals and standards that all ICT key players will follow. It answers the question "HOW" they will operate.

51. In parallel with the Cluster Lead, Emergency Telecommunications Cluster, the OCD acts as the principal coordinator in the activation and deactivation of the RETT.

Office of the Civil Defense (OCD)

52. Within the jurisdiction of the NDRRMC and NDRRMC the main responsibility of the OCD as the lead agency for ETC is to establish, maintain and operate the RETT in a disaster response and relief operations.

53. It shall be responsible in the doctrine, organization, training, material, personnel, leadership and facilities of the National and Regional RETT. This is anchored on the 5Cs (communication, coordination, cooperation, collaboration and commitment) among ICT key players.

54. National and Regional RETT deployment and mobilization is in the authority of OCD upon approval of the Response Cluster and/or Chairperson, N/RDRRMC. The RETT will respond to all major emergencies when requested and where the scale of the emergency is beyond the capacity of local government units.

55. It shall be responsible for the regular meetings and simulation exercises of the RETT members at least four (4) times annually to develop and strengthen working relationships.

56. OCD shall be responsible for the operational support of the national and Regional RETT by providing basic necessities in disaster areas like food, water, medicines, fuel, and temporary shelters.

Rapid Emergency Telecommunications Team (RETT)

57. Support response and coordination among EOCs and ICPs teams by providing vital ICT services to help carry out operations efficiently and effectively, and to save more lives.

58. Provide communications, electronics and information system support services through the basic communications services and shared voice and internet connectivity to EOCs and ICPs key players in the field.

59. Responsible for coordinating the deployment and implementation of data communications services and must fulfill the role of "First ICT Responders".

60. To provide a predictable, well-coordinated emergency communications capability in response operations that addresses the populations affected by disasters.

61. Maintains a database for the permanent contact persons, contact details, list of optimal ICT resources of all members.

62. Facilitates communications, collaboration, cooperation, coordination and commitment among EOCs and ICPs teams.

63. Conduct repair and maintenance activities as needed.

64. Prepare the documentation for RETT ICT requirements, lesson learned, and best practices every after disaster mobilization, be it an operation, training or any form of exercise.

RAPID EMERGENCY TELECOMMUNICATIONS TEAM (RETT) COMPOSITION

A rapid deployment team equipped with ICT resources; both human and equipment that is organized to address the communications, electronics and information needs of the Emergency Operations Center (EOC) and/or Incident Command Posts (ICPs) in a disaster area.

RETT Members – Government Agencies

65. Provide communications, electronics and information system support services to the RETT in terms of basic communications services whatever is available.

66. Provide at least four (4) personnel with equipage to join the deployment and mobilization in disaster areas.

67. Alert respective established Operations Centers of all organic organizations in the disaster areas.

68. Act as the single focal point with their respective organizations either national and/or local government authorities on behalf of the EOCs and ICPs for all radio, voice and data communications related matters including frequency allocation, communications network diagrams, and mobilization of ICT resources.

69. Provide a directory services containing the contact information of their respective organization in disaster areas implied in a specific humanitarian mission.

70. Conduct repair and maintenance activities as needed.

71. Prepare the documentation for RETT ICT requirements, lesson learned, and best practices every after disaster mobilization, be it an operation, training or any form of exercise.

RETT Members – Private / Volunteer Organizations

72. As part of their respective mandate and Corporate Social Responsibilities (CSR), provide support services to the RETT through the basic communications services whatever is available.

73. Provide at least four (4) personnel with equipage to join the deployment and mobilization in disaster areas.

74. Act as the single focal point with their respective organizations either national and/or local government authorities on behalf of the EOCs and ICPs for all radio, voice and data communications related matters including frequency allocation, communications network diagrams, mobilization of ICT resources and public information.

75. Provide a directory services containing the contact information of their respective organizations in disaster areas implied in a specific humanitarian mission.

76. Conduct repair and maintenance activities as necessary.

77. Prepare the documentation for RETT ICT requirements, lesson learned, and best practices every after disaster mobilization, be it an operation, training or any form of exercise.

Annexes

Annex I –Abbreviations

AFP	Armed Forces of the Philippines
BFP	Bureau of Fire Protection
CSR	Corporate Social Responsibility
CEIS-OI	Communications, Electronics and Information System -Operating Instruction
CIE	Collaborative Information Environment
EOCs	Emergency Operations Centers
ETC	Emergency Telecommunications Cluster
ICPs	Incident Command Posts
ICT	Information Communications Technology
ICS	Incident Command System
LGU	Local Government Unit
NTC	National Telecommunications Commission
NDRRMC	National Disaster Risk Reduction and Management Council
OCD	Office of the Civil Defense
PCG	Philippine Coast Guard
PECE	Professional Electronics Engineer
PNP	Philippine National Police
RA	Republic Act
RDT	Rapid Deployment Team
RETT	Rapid Emergency Telecommunications Team
5Cs	Communication, Coordination, Cooperation, Collaboration and Commitment

ANNEX II – PHILIPPINE ETC MEMBERS

TELECOMMUNICATIONS COMPANIES
PRIVATE GROUPS
VOLUNTEER GROUPS
CIVIL SOCIETY ORGANIZATION

ANNEX III: RETT MEMBERS FOCAL PERSONS / CONTACT DETAILS

Public Information Technical Team

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Radio Spectrum Team

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ANNEX IV: RETT MEMBERS' RESOURCES

A. RADIO SPECTRUM TEAM

AFP RADIO COMMUNICATIONS EQUIPMENT

HF/SSB Radio

TYPE OF RADIO	FREQUENCY RANGE	REMARKS
HARRIS RF5800H MP	1.6 MHz to 59.9999 MHz	
URC 187 HF/SSB Transceiver Radio	2-11.999 MHz	
HARRIS RF2301 HF/SSB Transceiver Radio	1.6 to 30 MHz	

VHF Radio

TYPE OF RADIO	FREQUENCY RANGE	REMARKS
AN/PRC 77 VHF/ FM Transceiver Set	Low Band 30.00MHz – 52.95MHz High Band 53.00MHz – 75.95MHz	
AN/PRC 1077 VHF/ FM Transceiver Set	30-87.975 MHz	
RF-5800V-HH VHF Handheld Radio RF2301 HF/SSB Transceiver Radio	30.0 MHz to 107.99999 MHz	

UHF/FM Radio

TYPE OF RADIO	FREQUENCY RANGE	REMARKS
GM300 UHF/FM Base Radio	403-433 Mhz; 438-470 Mhz; 465-495 Mhz; 490-520 Mhz	
GM300 VHF/FM Base Radio	136-162 Mhz; 146-174 Mhz	
GM338 UHF/FM Base Radio	29.7-36Mhz, 36-42Mhz, 42-50Mhz, 136-174Mhz, 403-470Mhz, 450-527Mhz (1-25W)	
GR500 UHF/FM Repeater System	136-162 / 146-174 / 403-433 / 438-470 Mhz	
GP2000 UHF/FM HH Radio	350-390Mhz, 403-440Mhz, 435-480Mhz	
GP3188 UHF/FM HH Radio	403-440 Mhz, 438-470 Mhz, 465-495 Mhz	

PNP RADIO COMMUNICATIONS EQUIPMENT

TYPE OF RADIO	FREQUENCY RANGE	REMARKS
HF SSB Radios	8.000 MHz – 9.000 MHz	Central Office and Regions
VHF Radios	152.000 MHz – 155.000 MHz	Provinces and Municipalities
UHF Radios	400.00 MHz – 450.000 MHz	Provinces and Municipalities
UHF Trunking Radio	801.00 .00 MHz – 856.00 MHz	NCR

BFP RADIO COMMUNICATIONS EQUIPMENT
UHF/FM Radio

TYPE OF RADIO	FREQUENCY RANGE	REMARKS
Digital Portable Handheld Radios	380 - 400 MHz	
Digital Portable/ Man Pack Repeater	380 - 400 MHz	

REACT RADIO COMMUNICATIONS EQUIPMENT
UHF/FM Radio

TYPE OF RADIO	FREQUENCY RANGE	REMARKS
HF Base Radios		For Dispatch Note: Hybrid Power Supply (Gen set and Solar Panel)
HF Base Radios	7.425 USB (Designated Frequency)	
VHF Base Radio	145.20 MHz (Designated Frequency)	

NTC RADIO COMMUNICATIONS EQUIPMENT
HF Radio

TYPE OF RADIO	FREQUENCY RANGE	REMARKS
HF/SSB - deployed in 8 regional offices	3 - 30 MHz	

B. ELECTRONICS TEAM

UNIT/OFFICE/AGENCY	EQUIPMENT/ MANPOWER	CAPABILITY
CEISSAFP	Communications Van w/ CEIS Team	HF, VHF, UHF, Airband, PA System
	Tools & Test Equipment	
	Technicians	
PAF	Communications Vans w/	HF, VHF, UHF, Air band, PA

	CEIS Team	System
PN	Communications Van w/ CEIS Team	HF, VHF, UHF, Sea band, PA System
	Tools & Test Equipment	
	FLIP Surveillance Camera	
PA	Communications Van w/ CEIS Team	HF, VHF, UHF, BGAN, Sat phone, Airband, PA System
	Tools & Test Equipment	
	Technicians	
PNP	Communications Van w/ CEIS Team	HF, VHF, UHF, Airband, PA System
	Tools & Test Equipment	
	Technicians	
PCG	Communications Van w/ CEIS Team	HF, VHF, UHF, Sea band, PA System
	Tools & Test Equipment	
	Technicians	
DILG	High Breed Computers	
IECEP	SME	
TRITEC	Power System	

C. SPECIAL EQUIPMENT TEAM

EQUIPMENT	QUANTITY
Sat Phones for Voice Links 11 Channels	6
BGAN – for Fax and Handheld Radios	30 Units UHF/VHF (136Mhz – 174Mhz)
Base Radio	1 UHF and 1 VHF
Mobile Repeater	1 UHF
Lenovo Tablet	10
Wireless Router	1
Outdoor Access Point	1
Communications Integrator	1 (2 ports) plus IP
VIDYO Server	1
Dual Band 2 way Radio	20

D. VSAT/SATELLITE PHONE TEAM

UNIT/OFFICE/AGENCY	EQUIPMENT/ MANPOWER	CAPABILITY
SMART	5 Mobile Satellite Phones	voice and SMS
	2 Fixed Docking Unit for mobile satellite phone	
	1 Mobile Satellite Broadband Device	
	2 Rechargeable Solar Chargers	minimum of 5,000 mAH
AFP	1 satellite phone	voice and SMS

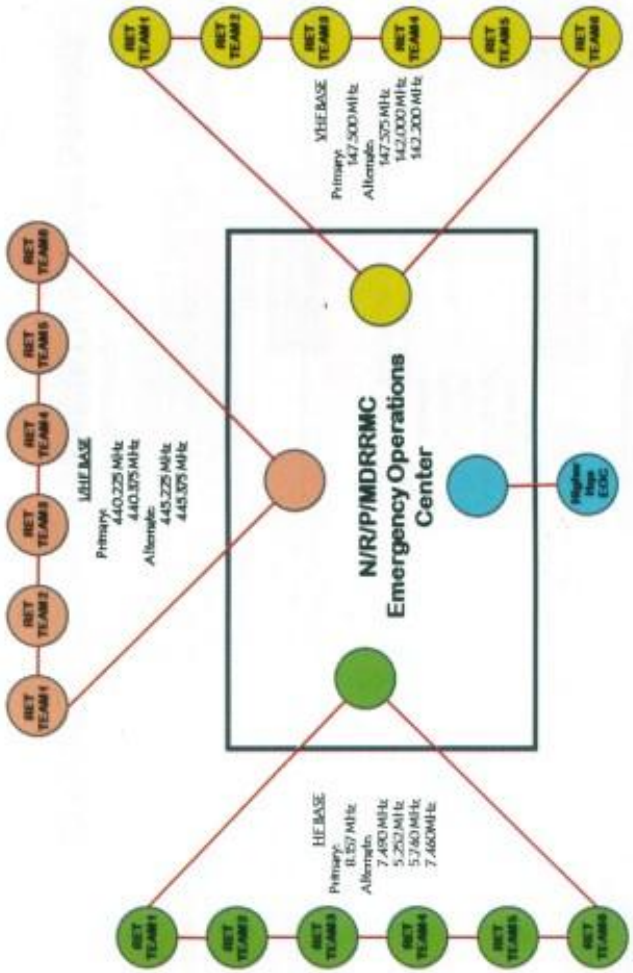
	1 BGAN Mobile Satellite Broadband Device	

Note:
1. Equipment to be provided by SMART
2. Deployment of Smart VSAT subject to assessment of restoration timeline

E. INFORMATION TECHNOLOGY TEAM

UNIT/OFFICE/AGENCY	EQUIPMENT	QUANTITY
Emergency Response Integration Center (E.R.I.C)	Laptops (Pentium i5)	5
	Tablets	10
	Laser Printer	1
	Wireless Router	1
Office of Civil Defense (OCD)	THURAYA KIT (BGAN, Printer, Laptop, Power Box)	1
	Handheld Satellite Phone	4
	HF Harris Radio	3

ANNEX V: NETWORK DIAGRAMS



RAPID EMERGENCY TELECOMMUNICATIONS TEAM (RETT)
OPERATIONAL INTEGRATED RADIO NET DIAGRAM

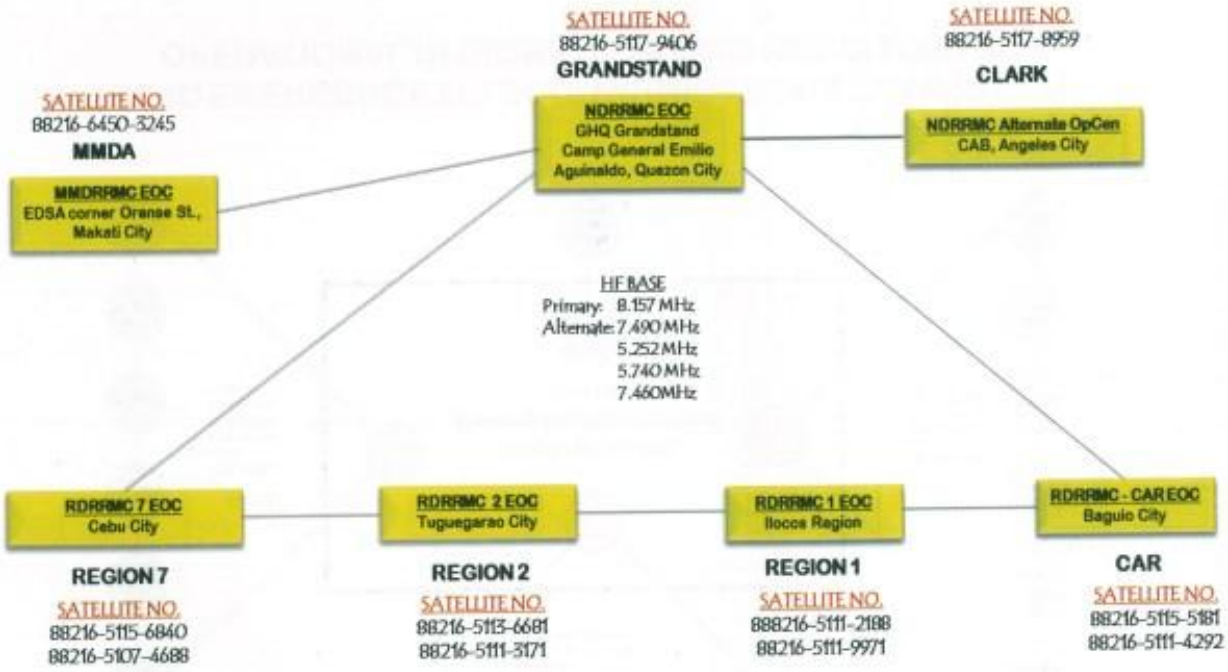


Diagram of Radio and Satellite Operations Network

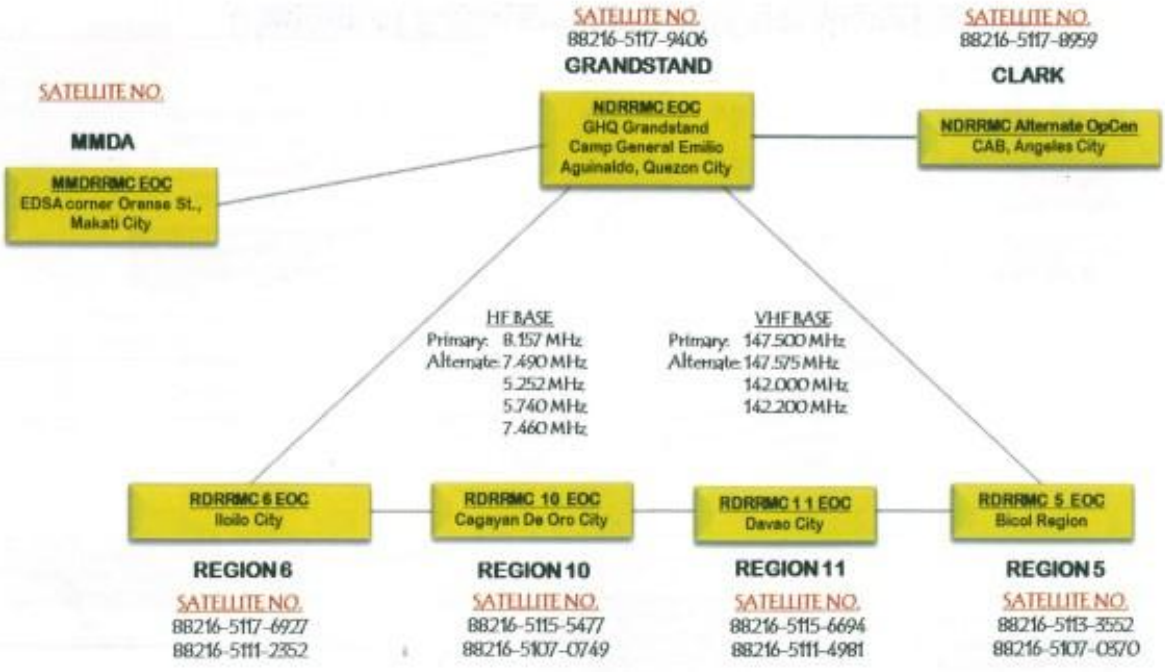


Diagram of Radio and Satellite Operations Network

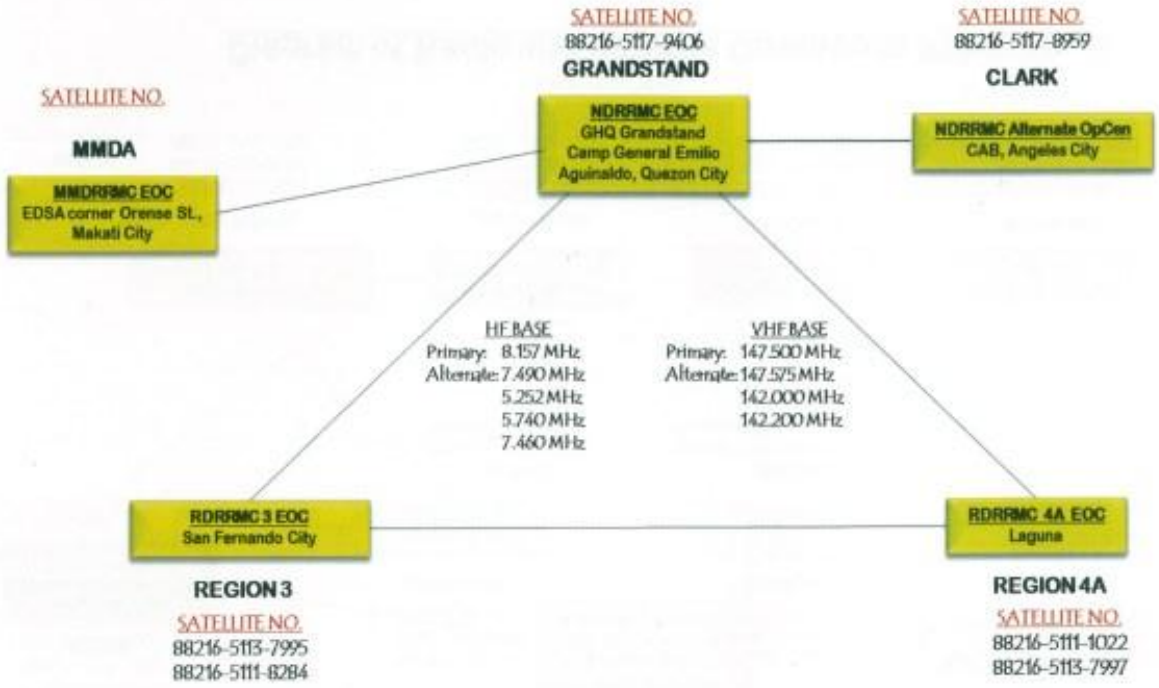


Diagram of Radio and Satellite Operations Network

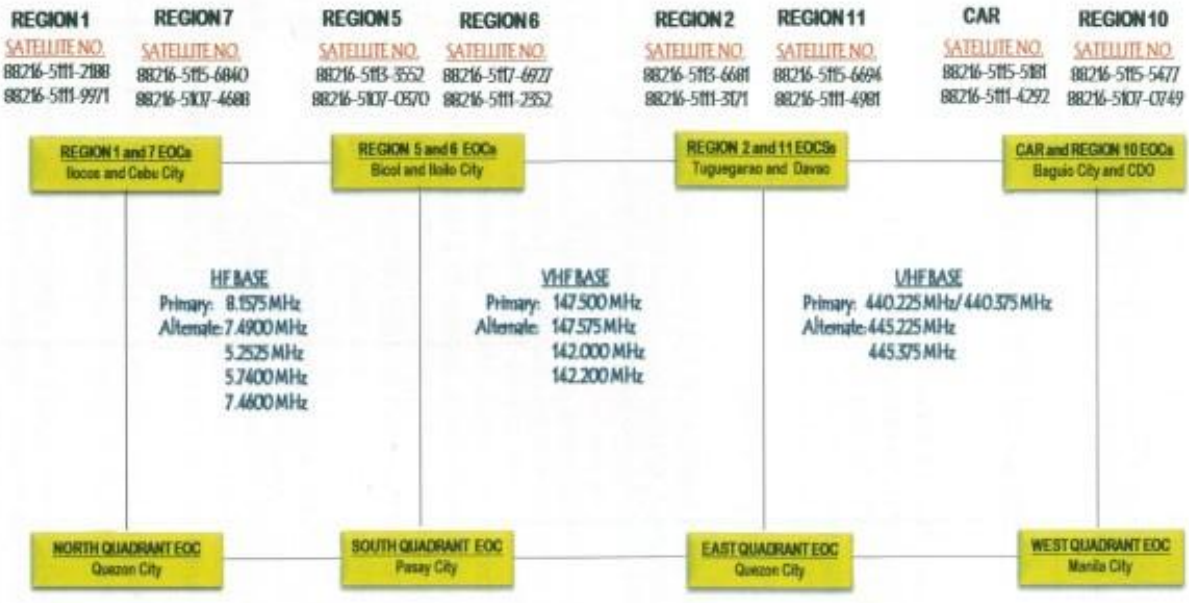


Diagram of Radio and Satellite Operations Network

ANNEX VI: TERMS OF REFERENCES (TOR)

Implementation of the Rapid Emergency Telecommunications Team (RETT) through the Emergency Telecommunications Cluster Summit: ICT "BAYANIHAN"

TERMS OF REFERENCE

A. REFERENCES:

1. Memorandum No. 23 dated 20 October 2015, National Disaster Response Plan (NDRP) for Hydrometeorology.
2. Republic Act 10121, Section 6 and 9 of the Philippine Disaster Risk Reduction and Management Act of 2010.
3. National Disaster Risk Reduction and Management Plan 2011-2018.

B. BACKGROUND AND RATIONALE:

In view of the recent disasters in the country, both natural and human-induced, the importance of emergency telecommunications which can be deployed immediately upon the impact of disaster is necessary.

Emergency telecommunications during disaster is an expert field within the wider sphere of emergency communications. Emergency communications covers all technical means and modes for DRRM agencies at all levels of government to perform their routine, daily and response communications. Disaster emergency communications applies to those technical means and modes required to provide and maintain operable and interoperable communication before, during, and after emergencies and disasters. This is accomplished through:

- The provision of an immediate local operable and interoperable voice, data, video, and information systems for Response Clusters;
- The establishment of a functional and usable command and control communications frameworks for the Emergency Operations Centers (EOCs) and Incident Command Posts (ICPs) and other identified locations in disaster areas; and
- And the fostering of communications interoperability and commonality from national down to barangay emergency response providers.

The Office of Civil Defense (OCD) as stipulated in Section 8 of Republic Act 10121, shall have the primary mission to administer a comprehensive National Civil Defense and DRRM Program by providing leadership in the

continuous development of strategic and systematic approaches as well as measures to reduce the vulnerabilities and risks to hazards and manage the consequences of disasters. It has the power and function to establish standard operating procedures on the communications system among provincial, city, municipal, and barangay disaster risk and reduction and management councils, for purposes of warning and alerting them and for gathering information on disaster areas before, during and after disasters.

Also, OCD as the Lead Agency for the Emergency Telecommunications Cluster as stipulated in the NDRP for HydroMet has the primary objective of strengthening ICT capacities at the national Clusters level down to local levels to prepare for, respond to and recover from the impacts of disasters.

In the recent aftermath of natural disasters, we have highlighted the need to develop guidelines that will influence NDRRMC-member agencies, the Response Clusters and humanitarian partners as well as RDRRMCs and local DRRMCs, in establishing and institutionalizing a rapid emergency telecommunications immediately following a disastrous event in the country.

Thus, a core implementing group through the Rapid Emergency Telecommunications Team (RETT) under the leadership of the Emergency Telecommunications Cluster (ETC) is recommended to be created to focus on the ICT operations before, during and after disaster. The plan is to organize all technical experts of the ETC members including partner civilian counterparts to address the two (2) important thematic areas of DRRM; Preparedness and Response. The program will be based from the concept of ICT Bayanihan.

The ETC's ICT Bayanihan will focus on the unity of efforts of all ICT key players using the existing domestic and international legal frameworks, guidelines, agreements and programs in the country. It will be established to address the concern on communications interoperability, commonality, and inter-compatibility. This will be instituted to the national level and will be cascaded down to regional, provincial, city, municipal and barangay level.

It will follow the Emergency Response Preparedness (ERP) process of risk analysis and monitoring, minimum preparedness actions, and operational planning.

C. OBJECTIVE:

a. Strategic Objectives

We have two strategic objectives in order to institutionalize all efforts of the NDRRMC and its member agencies in ICT: first, it will be anchored on the

Hyogo Framework for Action No. 5 which is to strengthen disaster preparedness for effective response at all levels. This will be done using their respective ICT tangible and intangible resources. Second, using ICT we will have to strengthen policy, technical and institutional capacities to create and establish an environment where people are secured and an effective and efficient delivery of government services and functions continue unabated.

b. Specific Objectives

1. To discuss the importance of compatibility, interoperability, commonality and the institutionalization of Information and Communications Technology (ICT) for an effective disaster management program through a centralized working organization;

2. To establish a framework for strengthening the effectiveness and efficiency of Information and Communication Technology (ICT) during disaster response operations under the leadership of the Emergency Telecommunications Cluster (ETC);

3. To formally organize a rapid deployment team of ICT key players to provide assistance at the Regional and Local DRRMC Operations Center for coordination at the national level;

4. To address the communications, electronics and information needs of the Emergency Operations Centers (EOCs) and/or Incident Command Posts (ICPs) in a disaster area for command and control mechanism.

D. EXPECTED OUTCOME:

1. The provision of an immediate local operable and interoperable voice, data, video, and information systems for Response Clusters;

2. The establishment of a functional and usable command and control communications frameworks for the Emergency Operations Center (EOC) and Incident Command Posts (ICPs) and other identified locations in disaster areas; and

3. And the fostering of communications interoperability and commonality from national down to barangay emergency response providers.

E. EXPECTED OUTPUT:

1. A national, regional, and local ***Rapid Emergency Telecommunications Team (RETT)*** as the rapid deployment team of the Emergency Telecommunications Cluster that is intended to provide assistance at the Regional and Local DRRMC Emergency Operations Center for coordination at the national and local level through the Rapid Emergency Telecommunications Team (RETT). The RETT is a rapid deployment team equipped with ICT resources; both human and equipment. It is organized to address the communications, electronics and information needs of the Emergency Operations Centers (EOCs) and/or Incident Command Posts (ICPs) in a disaster area for command and control mechanism. In addition, this will serve as basis of decision makers at the national, regional and at the local level whenever there is a need of ICT equipment deployment during emergencies and disasters;

2. Integration of all ICT Infrastructures that include system and equipment capabilities, permanent contact persons, contact details (landline, cellphone, email address, radio operating frequency assignment and satellite phone numbers);

3. Communications Protocol before, during and after disasters. This involves the drafting of each level RETT Handbook. The drafting of this will be the standard for ICT support services in disaster areas; and

4. The institutionalization of a nationwide communications system (HF, VHF, UHF Radios; Satellite Communications System; Communications Vehicle; Special Equipment; and Support Systems).

F. RELEVANCE OF THE INITIATIVE:

The Inter-Agency ICT empowerment through the Emergency Telecommunications Cluster in disaster risk reduction is crucial to foster DRR implementation at the national down to local levels. It will develop a sense of unity and provide the necessary venue for simulations, table-top exercises and drills. ICTs are increasingly recognized as an enablers of greater coordination in crisis response operations and national capacity building. It provides the means to link the constituent parts of an integrated response and the subsequent development and capacity-building efforts based on the concept of "whole-of-nation approach".

G. MEMBERSHIP

The ***ICT "BAYANIHAN"*** composition will follow the existing membership of the Emergency Telecommunications Cluster (ETC). It will be task organized following the structure of the organization of the Rapid Emergency Telecommunications Team (RETT) as shown below:

RAPID EMERGENCY TELECOMMUNICATIONS TEAM
ORGANIZATIONAL STRUCTURE

H. GOVERNANCE:

1. Structure

Senior Communicators: Senior ICT Executives of ETC
Technical Working Group: ICT staff and practitioners of ETC members

2. Membership:
DSWD, DILG, DOST, NTC, AFP, PNP, PCG, BFP and such other private companies, volunteer groups, and agencies as may be called upon by the OCD as Lead, Emergency Telecommunications Cluster.

I. CORE FUNCTIONS:

1. *Senior Communicators*

a. Composed of senior officials of ICT from N/R/P/M/CDRRMC, government agencies and ICT civilian partners to provide strategic directions for the project, including key decisions on annual programming of activities;
b. To communicate with the respective member agencies and civilian partners to designate their respective TWG members;
c. To provide overall guidance on administrative and operational aspects of the ICT "BAYANIHAN";
d. To preside over meetings of the program in rotation basis as requested by the program organizer; and

e. To provide leadership and facilitate TWGs in coordination with the Workshop Director.

2. *Technical Working Groups*

a. ***TWG for Radio Bayanihan***

1) To take charge of the collection of all data related to the RF equipment and other systems on hand. These include radios operating in HF, VHF and UHF spectrum;
2) To conduct testing of all RF spectrum equipment and systems to attain interoperability, inter-compatibility and commonality.
3) To act as the focal point for the RF domain in coordination with other TWGs by maintaining a centralized database of contact persons and numbers; and
4) To perform other tasks as directed.

b. ***TWG for Frequency Bayanihan***

1) To take charge of the collection of all data in coordination with NTC in relation with the spectrum (frequencies) of all equipment and systems on hand;
2) To conduct testing of all operating frequencies of equipment and systems to attain interoperability, inter-compatibility and commonality.
3) To act as the focal point in spectrum/frequency allocations of all equipment and systems in coordination with proper authority in collaboration with other TWGs; and
4) To perform other tasks as directed.

c. ***TWG for Information Technology Bayanihan***

1) To take charge of the collection of all data related to the Information Technology of all equipment and systems on hand;
2) To conduct testing of all IT equipment and systems to attain interoperability, inter-compatibility and commonality;
3) To act as the focal point of IT related equipment and systems in coordination with proper authority in collaboration with other TWGs by maintaining a centralized database of all data with contact persons and numbers;
4) To perform public information dissemination of all official reports to the public through the Digital Infantry using social media platform in coordination with the TWG for Public Information; and
5) To perform other tasks as directed.

d. ***TWG for VSAT and Satellite Bayanihan***

1) To take charge of the collection of all VSAT and Satellite data such as BGAN systems, satellite phones, WiFi connectivity through VSAT, and other technologies that are significant to all TWGs;

2) To provide recommendation and guidance to all TWGs in the development of network diagrams, processing of data of all contact details, identification of the roles and responsibilities of VSAT and satellite key stakeholders, and training discipline required for rapid deployment;

3) To act as the focal point of the VSAT and satellite latest technology, equipment and systems in the market in coordination with other TWGs; and

4) To perform other tasks as directed.

e. ***TWG for Special Equipment Bayanihan***

1) To take charge of the collection of all special equipment data list such as mobile base terminal stations, drones/UAVs, and others that are significant to all TWGs and rapid deployment teams;

2) To provide recommendation and guidance to all TWGs in the development of network diagrams, processing of data of all contact details, identification of the roles and responsibilities of special equipment's key stakeholders, and training discipline required for rapid deployment;

3) To act as the focal point of the special equipment's latest technology, equipment and systems in the market in coordination with other TWGs; and

4) To perform other tasks as directed.

f. ***TWG for Electronics Bayanihan***

1) To take charge of the collection of all Electronics equipment and systems data list such as mobile public address systems, technicians' tools and test equipment, and other technologies that are significant to all TWGs and rapid deployment teams;

2) To provide recommendation and guidance to all TWGs in the development of connectivity diagrams, processing of data of all contact details, identification of the roles and responsibilities of TWG for Electronics' key stakeholders, and training discipline required for rapid deployment;

3) To act as the focal point of the electronics latest technology, equipment and systems in the market in coordination with other TWGs; and

4) To perform other tasks as directed.

g. ***TWG for Systems Support Bayanihan***

1) To take charge of the collection of all systems support data list such as portable generators, wind and solar panels, back-up power

supplies, and others that are significant to all TWGs and rapid deployment teams;

2) To provide recommendation and guidance to all TWGs in the development of connectivity diagrams, processing of data of all contact details, identification of the roles and responsibilities the TWG for Systems and Support's key stakeholders, and training discipline required for rapid deployment;

3) To act as the focal point of the systems support latest technology, equipment and systems in the market in coordination with other TWGs; and

4) To perform other tasks as directed.

h. ***TWG for Public Information Bayanihan***

1) To provide official information to the general public before, during and after disasters;

2) To act as the liaison officer for media affairs of the Emergency Telecommunications Cluster in coordination with the Public Information Agency (PIA), other media groups and Public Affairs Unit of OCD; and

3) To perform other task as directed.

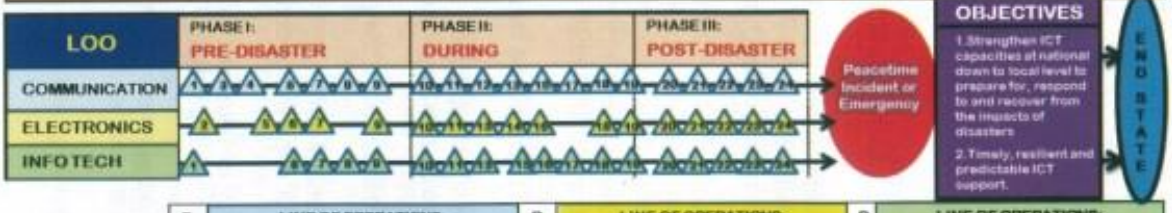
J. IMPLEMENTING GUIDELINES

1. The Emergency Telecommunications Cluster Summit: ICT "Bayanihan" Working Groups will work in close collaboration with other participants throughout the implementation of the activities;
2. Technical experts and participants in the TWGs will be designated by their respective Agencies;
3. The representatives of each agencies, companies, and other organizations must be be part of the decision-making process of their organization;
4. The RETT Operational Guidelines will be distributed to the participants' prior start of the Summit;
5. Participants must bring with them the nominal list of ICT equipment, systems, and services that they will bring for deployment during disaster response operations;
6. Participating organizations must be willing to take part and sign the Declaration of Commitment as member of the Rapid Emergency Telecommunications Team (RETT) of the Emergency Telecommunications Cluster of N/R/P/M/CDRRMC.

ANNEX VII: RETT LINE OF OPERATIONS

PRE- DISASTER

TASK: To respond in all major emergencies when directed by the NDRRMC, requested by other cluster members and where the scale of the emergency is beyond the capacity of local government units.
PURPOSE: To provide an overarching framework to have an effective and timely emergency telecommunications services to support other clusters in carrying out their respective mandates safely and efficiently.
OPERATIONAL END-STATE: A timely, resilient and predictable Information and Communications Technology (ICT) support provided.

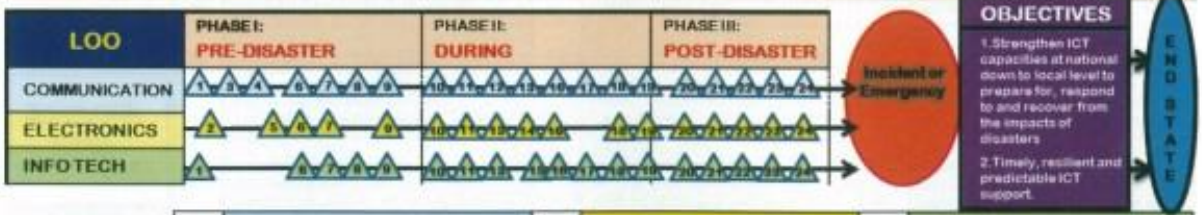


OWN COG
RETT
THREAT
Possible Incident or Emergency
PHASE I: PRE-DISASTER

DP	LINE OF OPERATIONS: COMMUNICATIONS TEAM	DP	LINE OF OPERATIONS: ELECTRONICS TEAM	DP	LINE OF OPERATIONS: INFORMATION TECHNOLOGY TEAM
1	Alert established OpCen and Rapid Emergency Telecoms Teams (RETT) of all Cluster Members.	2	Account and Test Public Address Systems.	1	Alert established Opn Centers and Rapid Emergency Telecoms Teams (RETT) of all Cluster Members.
3	Pre-programming of all radios to the assigned disaster frequencies on orders.	5	Provide directory services containing the contact information of the different ICT key players.	6	Provide standards for common ICT equipment and procedures.
4	Provide call sign management and allocation services.	6	Provide standards for common ICT equipment and procedures.	7	Provide ICT services support for other clusters as needed.
6	Provide standards for common ICT equipment and procedures.	7	Provide ICT services support for other clusters as needed.	8	Support by sending warning advisories to OCDRC/RDRRMC and LGUs, NDRRMC member agencies.
7	Provide ICT services support for other clusters as needed.	9	Collect information regarding the impending disaster and situations of preparedness by LGUs and related agencies and inform/report them to N/RDRRMCs.	9	Collect information regarding the impending disaster and situations of preparedness by LGUs and related agencies and inform/report them to N/RDRRMCs.
8	Support by sending warning advisories to OCDRC/RDRRMC and LGUs, NDRRMC member agencies.				
9	Collect information regarding the impending disaster and situations of preparedness by LGUs and related agencies and inform/report them to N/RDRRMCs.				

DURING DISASTER

TASK: To respond in all major emergencies when directed by the NDRRMC, requested by other cluster members and where the scale of the emergency is beyond the capacity of local government units.
PURPOSE: To provide an overarching framework to have an effective and timely emergency telecommunications services to support other clusters in carrying out their respective mandates safely and efficiently.
OPERATIONAL END-STATE: A timely, resilient and predictable Information and Communications Technology (ICT) support provided.



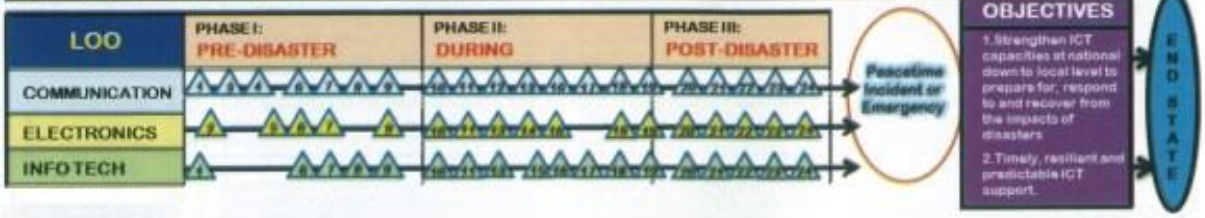
OWN COG
RETT
THREAT
Disaster Incident or Emergency
PHASE II: DURING DISASTER

DP	LINE OF OPERATIONS: COMMUNICATIONS TEAM	DP	LINE OF OPERATIONS: ELECTRONICS TEAM	DP	LINE OF OPERATIONS: INFORMATION TECHNOLOGY
10	Provide basic telecoms coverage around the main operational area.	10	Provide basic telecoms coverage around the main operational area.	10	Provide basic telecoms coverage around the main operational area.
11	Establish/maintain OpCen in disaster area through the deployment of RDTs.	11	Establish/maintain OpCen in disaster area through the deployment of RDTs.	11	Establish/maintain OpCen in disaster area through the deployment of RDTs
12	Programming of radios or other equipment belonging to individual responders, organizations and other key players in disaster areas.	13	Install/maintain internal ICT systems between clusters and individuals independent from national or local public services.	13	Install/maintain internal ICT systems between clusters and individuals independent from national or local public services.
13	Install/maintain internal ICT systems between clusters and individuals independent from national or local public services.	14	Provide a directory services containing the contact information of the different key players in disaster areas.	15	Establish a dedicated GSM/LTE mobile network to be used by the cluster workers in the operational area in partnership with TELCO(s).
16	Conduct repair and maintenance activities as needed.	16	Conduct repair and maintenance activities as needed.	16	Conduct repair and maintenance activities as needed.
17	Receive and consolidate reports.	18	Dispatch the RETT as per instruction from the NDRRMC.	17	Receive and consolidate reports.
18	Dispatch the RETT as per instruction from the NDRRMC.	19	Coordinate with the RETT on ground for updates and operational requirements.	18	Dispatch the RETT as per instruction from the NDRRMC.
19	Coordinate with the RETT on ground for updates and operational requirements.			19	Coordinate with the RETT on ground for updates and operational requirements.

TASK: To respond in all major emergencies when directed by the NDRRMC, requested by other cluster members and where the scale of the emergency is beyond the capacity of local government units.

PURPOSE: To provide an overarching framework to have an effective and timely emergency telecommunications services to support other clusters in carrying out their respective mandates safely and efficiently.

OPERATIONAL END-STATE: A timely, resilient and predictable Information and Communications Technology (ICT) support provided.



OWN COG	DP	LINE OF OPERATIONS: COMMUNICATION TEAM	DP	LINE OF OPERATIONS: ELECTRONICS TEAM	DP	LINE OF OPERATIONS: INFORMATION TECHNOLOGY
RETT	20	Coordination of the preparation of documentation for ETC requirements, lesson learned, and best practices.	20	Coordination of the preparation of documentation for ETC requirements, lesson learned, and best practices.	20	Coordination of the preparation of documentation for ETC requirements, lesson learned, and best practices.
THREAT	21	RETT to deactivate all emergency telecommunication systems as soon as full resumption of the LGU's communication system is achieved.	21	RETT to deactivate all emergency telecommunication systems as soon as full resumption of the LGU's communication system is achieved.	21	RETT to deactivate all emergency telecommunication systems as soon as full resumption of the LGU's communication system is achieved.
Peacetime/ Early Recovery	22	Coordinate PDANA activities in case it will be conducted by the National/Regional level.	22	Coordinate PDANA activities in case it will be conducted by the National/Regional level.	22	Coordinate PDANA activities in case it will be conducted by the National/Regional level.
	23	Receive and consolidate reports.	23	Receive and consolidate reports.	23	Receive and consolidate reports.
	24	Conduct After Activity Review as necessary	24	Conduct After Activity Review as necessary	24	Conduct After Activity Review as necessary
PHASE III: POST DISASTER						

POST DISASTER

ANNEX VIII: RETT LOGO

ANNEX IX: RETT UNIFORM AND IDENTIFICATION

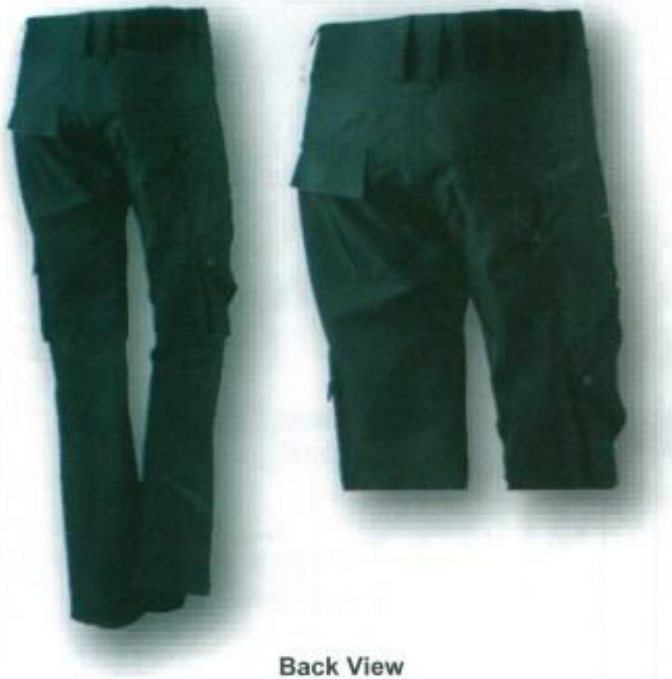
T Shirt Design

Front View

Back View

Cargo Pants Design

Front View



Back View

VEST Design

ANNEX X: RETT COMPOSITION

RAPID EMERGENCY TELECOMMUNICATIONS TEAM (RETT) COMPOSITION

A rapid deployment team equipped with ICT resources; both human and equipment that is organized to address the communications, electronics and information needs of the Emergency Operations Center (EOC) and/or Incident Command Posts (ICPs) in a disaster area.

ANNEX XI: DECLARATION OF COMMITMENT

LAUNCHING OF ICT BAYANIHAN PROGRAM: OPERATIONAL GUIDELINES IN THE CONDUCT OF JOINT RAPID EMERGENCY TELECOMMUNICATIONS TEAM (RETT)

25-26 June 2015
Tagaytay City, Philippines

DECLARATION OF COMMITMENT

WE the delegates to the ICT BAYANIHAN: Emergency Telecommunications Cluster Summit through the Rapid Emergency Telecommunications Team (RETT), affirm our commitment to strengthen, consolidate and expand multi-sectoral support to the effective implementation of the Operational Guidelines in the Conduct of Joint Rapid Emergency Telecommunications Team (RETT).

RECOGNIZING the urgent need to strengthen the effectiveness and efficiency of Information and Communication Technology (ICT) during disaster response operations to address the communications, electronics and information needs of the Emergency Operations Centers (EOCs) and/ or Incident Command Posts (ICPs) in a disaster area for command and control;

NOTING WITH APPRECIATION the growing consensus to address the underlying importance of compatibility, interoperability, commonality and the institutionalization of Information and Communications Technology (ICT) for an effective disaster management program through a centralized working organization anchored to the concept of "whole-nation approach";

REAFFIRMING the need to establish a framework for strengthening the effectiveness and efficiency of Information and Communication Technology (ICT) during disaster response operations under the leadership of the Emergency Telecommunications Cluster (ETC); and

EMPHASIZING FURTHER the strengthening of the Rapid Emergency Telecommunications Teams (RETT) for the provision of an immediate locally operable and interoperable voice, data, video, and information systems for Emergency Telecommunications Cluster as one of its priority mandates that will guide all ICT stakeholders in the country.

THEREFORE, to strengthen the capacities of both the national government and local government in cooperation with partner stakeholders to strengthen ICT capacities at the National Cluster level down to local level to prepare for, respond to and recover from the impacts of disasters, we further manifest on this day that we are fully committed to:

WORK in partnership with NDRRMC, Office of Civil Defense (OCD) and other stakeholders in helping build a nation of "Safe, Adaptive and Disaster-Resilient Filipinos" by vigorously implementing the National Disaster Response Plan (NDRP) through the Emergency Telecommunications Cluster (ETC);

ASSIST in mainstreaming of ICT in DRR process such as policy formulation, socioeconomic development planning, budgeting, and governance particularly in the areas of water, energy, health, education, and infrastructure among other;

SUPPORT competency and science-based capacity building activities and nurture continous learning through knowledge development and management of good ICT practices of the ground;

ADVOCATE for harmonization and strengthening of ICT in disaster risk reduction and climate change adaptation policies, practices, program, and projects for building resilience; and

PROMOTE effective ICTrisk governance for the benefit of the people and the nation as a whole.

FURTHERMORE, we abide by good governance principles within the context ICT protection and likewise sustain partnership towards effective delivery of this services to the citizenry, by working together through complementation of resources. Thus, engaging the participation of various stakeholders in government's ICT DRRM programs is part and parcel of the NDRP.

THEREFORE LET IT BE KNOW that we affirm this *Declaration of Commitment* to the effective implementation of the OPERATIONAL GUIDELINES IN THE CONDUCT OF JOINT RAPID EMERGENCY TELECOMMUNICATIONS TEAM (RETT) UNDER THE EMERGENCY TELECOMMUNICATIONS CLUSTER (ETC) on this 26th day of June 2015 here in Tagaytay City, Philippines.

Director Felino Castro
ICTMS, DSWD

Director Allan Tabell
Postal 117, DILG

VILMA B. CABRERA
Undersecretary, DSWD

Director Lolita S. Linson
ISTMS, DILG

Mr. Kelvin Art Ofracio
OIC, CEISD, OCD

LTC EDWIN C. SADANG GSC (SC) PA
Deputy Chief, CEISD, OCD

PSSUPT RAMON O PURUGGANAN
Deputy Director, CES PNP

PECE Rodrigo Tandio
ISTO, BJOST

PECE Lisa Maria Alvarado
BFP-FPMSA

LTC JERSOHAN C. DEVEZA GSC (SC) PA
C, CCOSEE, OJE, AFP

LTC ALLAN [illegible] GSC (SC) PA
Deputy Director, CEISSAFP

COL [illegible]
CHIEF PCG

Engr. Priscilla R. Davallion
Head, RSTD, NTC

Atty. Jose Sixto Dantes III
Commissioner, NTC

LTC JEFFREY [illegible] GSC (SC) PA
CEISSAFP, AFP

LTC EDWIN L. ROJO (SC) PA
CEISSAFP, AFP

Dr. Ma. Nancy [illegible], PhD
E-Sayahan, AJWAS

[illegible]
Managing Director, ERC

Mr. Telesforo Sun Buenaventura
President, TRIPTECH

PECE [illegible]
BJMP-DRDE

Engr. Glen Mark G. Uy
REACT Philippines

Mr. Zak Yuson
Rappler, Director MovePH

Mr. Darwin Flores
Head, Public Affairs Group, SMART

Mr. Arnel Penaverde
WFP

Mr. Jomel Gomez
Manila Water

Mr. [illegible]
SMS Global Tech.

Mr. Gil Arevalo
UNOCHA

Mr. Emmanuel Estrada
Globe Telecoms Inc.

Mr. [illegible]
Board Director, EBC

PECE Orman Vicente
IECEP

Mr. Irwin Gabriel Lopez
DRRM Specialist, PDRF

Mr. Johnny Yu
President, CDIAG