



**PUNONGHIMPILAN TANOD BAYBAYIN NG PILIPINAS**  
**(HEADQUARTERS PHILIPPINE COAST GUARD)**  
139 25<sup>th</sup> Street, Port Area  
Manila

HPCG/CG-3

09 January 2017

CIRCULAR

NUMBER 02 - 17

**MISSION, FUNCTION AND ORGANIZATION OF COAST GUARD  
INFORMATION SYSTEM**

**I. PURPOSE:**

This Circular prescribes and defines the mission, functions and organizational structure of the Coast Guard Information System.

**II. MISSION:**

To plan, develop, repair, maintain and secure the Network Infrastructure, Critical Applications, Administrative Support Systems, and other Information Communication Technology (ICT) projects and equipment of the Philippine Coast Guard.

**III. FUNCTION:**

a) To plan, develop and maintain the Critical Applications that is designed for the safety and security of maritime stakeholders – one of the major functions of the Philippine Coast Guard;

b) To plan, develop and maintain the Administrative Support Systems like PCG DATACORE and PCG Integrated Information System (IIS) that is tailored to the internal operations of the Offices and Units of the Philippine Coast Guard;

c) Operate, repair and maintain the major network infrastructure of the PCG such as local area network and data center at HPCG, data recovery facility at HCGWCEIS Mandaluyong and other LAN of CG Bases;

d) To provide field services, repairs and maintenance support related to the Information Communication Technology (ICT) in all CG Units afloat and ashore when the derangement or technical problem is beyond the capability of the remote CGWCEISC Stations;

e) To oversee all network infrastructure and information systems and related project development in the Philippine Coast Guard in reference to the PCG Information System Strategic Plan (PCG-ISSP); and

f) To defend and secure the network infrastructure, server farm, and logical service application of the PCG in any kind of threats like malware, hacking, denial-of-service (DDOS) etc.

#### IV. **ORGANIZATION:**

The Coast Guard Information System is a Support Unit of Coast Guard Weapons, Communications, Electronics and Information System Command headed by Commanding Officer and shall be assisted by the Deputy Commanding Officer, CGIS and Chief of Staff, CGIS. The following shall constitute as the Staff Offices and Support Branches of CGIS, namely:

##### A. CGIS Staff Offices:

- a. Staff for Admin and Personnel
- b. Staff for Operations
- c. Staff for Logistics and Supply
- d. Staff for Maintenance and Repair
- e. Staff for Research and Development

##### B. System administrator

##### C. CGIS Support Offices:

- a. Communication Management Branch
- b. Cybersecurity Branch
- c. Information Management Branch
- d. Regional Offices

#### V. **FUNCTIONAL RELATIONSHIP:**

The CGIS is one of the Support Unit of CGWCEISC. The Commanding Officer, CGIS is under the administrative and operational control of the Commander, Coast Guard Weapons, Communications, Electronics and Information System Command.

#### VI. **DUTIES AND RESPONSIBILITIES:**

##### a.) Commanding Officer, CGIS

- 1) Responsible for the management of the systems design and implementation for network infrastructure, critical applications

and administrative support systems development of the Philippine Coast Guard in reference to the PCG Information System Strategic Plan;

- 2) Responsible for the supervision of repair and maintenance of the VSAT equipment, major local area network of all CG bases, datacenters, and all telecommunication equipment that utilize the Internet Protocol (IP) as standard;
- 3) Responsible for the overall project relating to Information System, conduct risk analysis and devise counter measures to mitigate and avoid the projected problems of the IS projects;
- 4) Conduct periodic conference on all matters, objectives, plans and policies pertaining to mission of the CGIS;
- 5) Exercise over-all supervision of the administrative and operational concerns of the CGIS; and
- 6) Perform such other duties as the C, CGWCEISC may direct.

**b.) Deputy Commanding Officer, CGIS**

- 1) Assist the Commanding Officer, CGIS in the performance of his duties and responsibilities;
- 2) Implement the instructions of the Commanding Officer, CGIS and ensure that it was carried out by Unit;
- 3) Assume the duties and responsibilities of Commanding Officer, CGIS in the absence of the incumbent;
- 4) Ensure that the welfare of CGIS personnel such as equal opportunity to training, career advancement is observed, as well as rewards and punishments are judiciously rendered;
- 5) Ensure that the functions of every branch Offices are properly accomplished; and
- 6) Perform another task as directed.

**c.) Chief-of-Staff, CGIS**

- 1) Acts as the principal staff adviser to the CO, CGIS;
- 2) Supervises the members of CGIS staff in the implementation of their plans and programs;

- 3) Responsible in the formulation of command policies and guidance in coordination with cognizant staff for approval of CO, CGIS; and
- 4) Performs other functions as CO, CGIS and Deputy Commanding Officer, CGIS may direct.

**d.) Chief Master-At-Arms, CGIS**

- 1) Act as the principal non-officer advisor of CO, CGIS;
- 2) Responsible for the indoctrination of newly assigned non-officers;
- 3) Assist CO, CGIS in enhancing the morale, welfare, discipline and performance of non-officers;
- 4) Ensure that good order and discipline is kept by the CGIS members both ashore and afloat; and
- 5) Handle the preparation of all discipline reports, and assist the Commanding Officer in conducting punishment procedures as the case maybe.
- 6) Perform other function as directed.

**e.) Staff for Admin and Personnel (IS-1)**

- 1) Assists the CO, CGIS in carrying-out the administrative and personnel functions of CGIS;
- 2) Assist and advise CO, CGIS on matters pertaining to the morale, welfare and discipline of non-officers;
- 3) Formulate administrative and personnel policies and standards and monitor their implementation;
- 4) Publish, authenticate and distribute orders, directives, memoranda, messages and instructions issued by CO, CGIS and higher headquarters;
- 5) Responsible for generating and compiling all of the instructions and policies that the CGIS must follow;
- 6) Responsible in handling all official correspondence, publications, and documents for the Command; and

7) Perform other function as directed.

**f.) Staff for Operations (IS-3)**

- 1) Advise the CO, CGIS with regards to the operation and maintenance of Info system, trainings conducted by CGIS;
- 2) Advise the CO, CGIS with regards to the development of Info system and other activities;
- 3) Responsible for the evaluation and dissemination of operational information required for the PCG to fulfill its assigned mission;
- 4) Oversees all Division Officers and their respective divisions in the performance of their duties; and
- 5) Perform other function as directed.

**g.) Staff for Logistics and Supply (IS-4)**

- 1) Responsible for general supply staff functions;
- 2) Responsible for the speedy requisitioning of supplies, spare parts and other pertinent logistics items needed by the CGIS;
- 3) Responsible for coordination with higher supply agencies for the procurement of items needed by the CGIS;
- 4) Responsible for the systematic receipt, storage and issuance of supplies and materials within CGIS;
- 5) Manage the logistics requirements and financial resources as well as the distribution of supplies among different branches of offices of CGIS Office;
- 6) Ensures spare parts, consumable items and repair services are provided to the CGIS;
- 7) Maintain and operate the assigned vehicles and other equipment aboard CGIS Office;
- 8) Responsible for the smooth functioning of the Supply Group; and
- 9) Perform other function as directed.

#### **h.) Staff for Maintenance and Repair**

- 1) Advises the CO, CGIS in matters pertaining to repair and maintenance of IT equipment ashore and afloat in order to support the CGWCEISC mission;
- 2) Assist CO, CGIS in implementing plans, doctrines, SOP's, Circulars and policies pertaining to the maintenance and repair of IT Equipment;
- 3) Conduct inspection and render technical assistance in all PCG units ashore and afloat on maintenance and repair of IT equipment; and
- 4) Perform other tasks as directed.

#### **i.) Staff for Research and Development**

- 1) Advises the CO, CGIS in matters pertaining to research and development of info system in order to support the CGWCEISC mission;
- 2) Responsible for the conduct of research, system analysis, re-engineering and development of Administrative Supports Systems tailored to the requirements of the CG Units or Office;
- 3) Responsible for conduct of research, system analysis, re-engineering and development of Mission Critical Application which is intended for the maritime stakeholders in compliance to IMO and local regulatory agency such as MARINA and NTC; and
- 4) Perform other tasks as directed.

#### **j.) System Administrator**

Responsible for designing, organizing, modifying and supporting the PCG computer system. Design and install LANs, Intranet system, and network segments.

The following are the detailed System Administrator function:

- i. Support LANs, WANs, Network Segments, Internet and Intranet system;
- ii. Maintain System Efficiency;

- iii. Ensure design of system allows all components to work properly together;
- iv. Troubleshoot problem reported by network administrator/members/users;
- v. Make recommendation for future upgrades;
- vi. Maintain Network and System Security;
- vii. Analyze and isolate issues;
- viii. Monitor network to ensure security and availability to specific users;
- ix. Evaluate and modify system's performance;
- x. Identify the users need;
- xi. Maintain the integrity of the network, server deployment, and security;
- xii. Ensure network connectivity of PCG LAN/WAN infrastructure;
- xiii. Design and deploy networks;
- xiv. Perform network address assignment;
- xv. Assign routing protocols and routing table configuration;
- xvi. Assign configuration of authentication and authorization of directory services;
- xvii. Maintain network facilities in individual machine, such as drivers and settings of personal computers as well as printers;
- xviii. Maintain network servers such as file server, VPN Gateways, Intrusion detection system; and
- xix. Administer servers, desktop computers, printers, routers, switches, firewalls, phone, personal digital assistants, smartphones, software deployment, security updates and patches.

### **k.) Communication Management Branch (CMB)**

- 1) Perform the technical, procedural and electrical measure of physical layer based on the approved information and communication policy of the command;
- 2) Ensure that the organization staff, policies, practices, and technologies particular in layer 2 connection must protect, secure and maintain;
- 3) Perform the function of Network administrator by designing, planning, setting up, maintaining and expanding the network;

The following are the detailed network administrator function:

- i. Making the decision about the type of the network when it comes in designing the network. (Planning TPC/IP network);
  - ii. Setting up and configuring network (TCP/IP Administration);
  - iii. Adding new host machine to the network;
  - iv. Administering network security;
  - v. Administering network services;
  - vi. Troubleshooting network problem;
  - vii. Setting up a new network and connecting it to the existing network using a machine functioning as a router, thus creating an internetwork;
  - viii. Configuring machine in user's home or in a remote office sites and enabling users in the network to retrieve information from other systems throughout the world; and
  - ix. Configuring UUCP communication, enabling users to exchange files and electronic mail with a remote machine.
- 4) Manage and secure multiple server roles with the Server Manager console that provides single source for managing the server's identity and system information, displaying server status, identifying problems with server role configuration and managing all roles installed on the server; and
  - 5) Perform the software and application development that provide best data flow of an entire organization.



## **l.) Information Management Branch (IMB)**

- 1) Advises the CO, CGIS in matters pertaining to Information Management of info system in order to support the CGWCEISC mission;
- 2) Responsible for the development, maintenance and update of the administrative support systems or Database Management System in reference to the Systems Design of System Planning and Development;
- 3) Responsible for the development, maintenance and update of the Critical Applications of the PCG that is specifically designed for maritime stakeholders;
- 4) Responsible for the website development, security configuration and maintenance of the PCG website domains;
- 5) Perform research and development in particular issues and concern of all related services of CGIS;
- 6) Perform graphic design and standard presentation tools to support the function of CGWCEISC;
- 7) Perform the software and application development that provide best data flow of an entire organization; and
- 8) Perform other tasks as may be directed.

## **m.) Cyber Security Branch**

- 1) Ensure that the organization staff, policies, practices, and technologies proactively protect, shield and defend the enterprise from cyber threats, and prevent the occurrence and recurrence of the cybersecurity incidents commensurate with the organization's risk tolerance.
- 2) Ensure that the organization staff, policies, practices, and technologies monitor the on-going operations and actively hunt for and detect adversaries, and report instances of suspicious and unauthorized events as expeditiously as possible.
- 3) When the cybersecurity incident occurs, minimize its impact and ensure that the organization's staff, policies, and processes, practices and technologies are rapidly deployed to return the assets to normal operations as soon as possible. Assets include technologies, information, people, facilities, and supply chains.

- 4) Ensure that the organization's leadership, staff, policies, processes, practices, and technologies provide ongoing oversight, management, performance measurement, and course correction of all cybersecurity activities. This function includes ensuring compliance with all external requirements and mitigating risk commensurate with the organization's risk tolerance.
- 5) CSB define in four organizational units reporting to CGIS as well as areas of work that it units encompasses:
  - i. **Program Management:** Project management office; governance, risk and compliance; workforce and supplier management; interface with the organization.
  - ii. **Security Operation Center:** situational awareness, ongoing monitoring, security helpdesk, computer incident response.
  - iii. **Emergency Operations and incident management:** high-impact incidents; Planning for incident response, business continuity, disaster recovery; test, exercises and drills, incident post mortems; investigations.
  - iv. **Security engineering and asset security:** security engineering, application security, host and network security, information assets and security and physical access control.
- 6.) Perform other tasks as may be directed.

**n.) REGIONAL OFFICES:**

- 1) Network administrator
  - i. Manage and maintain layer 2 and 3 network particular continuity and security of every host on the network;
  - ii. Give some recommendation for the improvement and enhancement of network of the assigned unit to the system administrator based reference of the approved;
  - iii. Making the decision about the type of the network when it comes in designing the network. (planning TPC/IP network);
  - iv. Setting up and configuring network Transmission Control Protocol/Internet Protocol Administration (TCP/IP Administration);
  - v. Adding new host machine to the network;
  - vi. Administering network security;

- vii. Administering network services;
- viii. Troubleshooting network problem;
- ix. Setting up a new network and connecting it to the existing network using a machine functioning as a router, thus creating an internetwork;
- x. Configuring machine in user's home or in a remote office sites and enabling users in the network to retrieve information from other systems throughout the world; and
- xi. Configuring Unix-to-Unix Copy Protocol (UUCP) communication, enabling users to exchange files and electronic mail with a remote machine.

## 2.) Data administrator

- i. Assisting database design;
- ii. Updating and amending existing database;
- iii. Setting up and testing new databased and data handling system;
- iv. Monitoring database efficiency;
- v. Sustaining the security and integrity of data;
- vi. Creating complex query definitions that allow data to be exhausted; and
- vii. Train the colleagues in how to input and extract data.

## 3.) Web administrator

- i. Collaborate with development teams to discuss, analyzed, or resolve usability issues;
- ii. Identify of address interoperability requirements;
- iii. Tract, comply and analyzed website usage data;
- iv. Document application and website changes or change procedures;
- v. Develop or document style guidelines for website content;
- vi. Set-up or maintain tools on web servers or websites; and

vii. Test back-up and recovery plans and resolve any problem.

4.) IT Technician

- i. Diagnose computer problems;
- ii. Monitor computer processing system;
- iii. Install software and perform test on the computer equipment and programs; and
- iv. Repair computer parts ordering.

VII. **RESCISSION CLAUSE:**


All PCG previous publications not in conformity with this Circular are hereby rescinded.

VIII. **EFFECTIVITY:**

This Circular shall take effect upon approval.

**BY COMMAND OF COMMODORE GARCIA:**

**OFFICIAL:**

  
LIEZEL B. BAUTISTA  
LCDR PCG  
Coast Guard Adjutant  
21/02/1728

**ALLEN T TORIBIO**  
**CAPT PCG**  
Acting Chief of Coast Guard Staff

Annex: Proposed CGIS Organizational Chart

# COAST GUARD INFORMATION SYSTEM

## Organizational Chart

**Recapitulation:**  
**OFFICERS: 13**  
**ENLISTED PERSONNEL: 104**  
**CIVILIAN EMPLOYEE: 59**  
**TOTAL STRENGTH: 158**

