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United States Coast Guard

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COMDTINST 5401.5  
AUG 27, 2004

COMMANDANT INSTRUCTION 5401.5

Subj: ESTABLISHMENT OF THE CG-6 DIRECTORATE AND ASSOCIATED DUTIES

Ref: (a) The Coast Guard Organization Manual, COMDTINST M5400.7 (series)

1. PURPOSE. This Instruction establishes the authority, roles, and responsibilities of the Assistant Commandant for Command, Control, Communications, Computers and Information Technology (CG-6), designates this officer as the Chief Information Officer (CIO), and establishes the CG-6 directorate. The role of the CG-6 directorate is to enhance Coast Guard mission performance through efficient and effective application of Command, Control, Communications, Computers, and Information Technology (C4&IT). CG-6 accomplishes this by providing C4&IT assets that deliver accurate information to the right people to effectively accomplish their mission. CG-6 responsibilities include all Coast Guard operational, business, and infrastructure C4&IT assets.
2. ACTION. Area and district commanders, commanders of maintenance and logistics commands, commanding officers of headquarters units, assistant commandants for directorates, Chief Counsel, and special staff offices at Headquarters shall ensure that all Coast Guard and contractor support personnel or organizations involved in the planning, acquisition, development, operations, maintenance, management and use of Coast Guard C4&IT assets, comply with the provisions of this Instruction. Internet release authorized.
3. DIRECTIVES AFFECTED. None.
4. CG-6 DIRECTORATE DUTIES AND RESPONSIBILITIES. The CG-6 Roles and Responsibilities Framework emphasizes the need to maintain a customer-focused, results-oriented, system perspective when developing and delivering C4&IT assets. Primary responsibilities of CG-6 include:
  - a. C4&IT Stewardship. CG-6 provides stewardship and oversight for certain C4&IT assets. Proper management and oversight ensures C4&IT assets meet Coast Guard missions' requirements and goals. Key CG-6 stewardship responsibilities include:

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- (1) System Development Life Cycle (SDLC). The SDLC is the core process that manages delivery of Coast Guard C4&IT systems. It is critical to the success of all C4&IT. The C4&IT SDLC consists of seven phases, and is described in detail in the SDLC Policy.
  - (2) Enterprise Architecture. This responsibility involves creating and maintaining the Coast Guard's C4&IT Enterprise Architecture Program to maximize the use of C4&IT resources, promote interoperability, eliminate redundancy, support C4&IT investment management activities, and ensure compliance with Federal directives.
  - (3) Enterprise C4&IT Requirements Management. This responsibility involves collecting, maintaining, monitoring, and evaluating C4&IT functional requirements in an enterprise requirements management repository.
  - (4) Investment Management. CG-6 is responsible for the management of the enterprise-wide C4&IT investment resources tied to both the long-term C4&IT capital planning strategy and the routine management of C4&IT financial resources. C4&IT policies and practices will align budget decisions with Coast Guard strategic goals, prioritize and approve the right mix of C4&IT capability, and monitor and report on the effective use of approved funding.
  - (5) Human Resources Management. CG-6 is responsible for the subject matter oversight and management of billets for all Coast Guard personnel allocated to C4&IT and will coordinate management with Coast Guard personnel resource managers. This includes C4&IT competencies at all levels, senior leadership awareness of C4&IT, properly skilled acquisition, development, maintenance and support personnel, capable and qualified C4&IT systems operators, and a capable and competent end user community who use C4&IT systems properly and effectively in the completion of their roles and missions.
- b. C4&IT Sponsor. CG-6 serves as Sponsor (and Program Manager) for select Coast Guard C4&IT programs and systems. In the role of Sponsor for these programs and systems, CG-6 is responsible for defining organizational goals, acquiring and managing proper resources, programs, and policies, as shown in Figure 1 (page 5), the CG-6 Roles and Relationships Framework. CG-6 is the Sponsor for the following C4&IT programs:
- (1) Telecommunications Program. CG-6 is responsible for telecommunications and radio frequency spectrum management. This includes establishing requirements for all Coast Guard National level telecommunications systems (both classified and unclassified) to include voice, message, data and image transport services to Coast Guard units, including connection to external agencies and the civil maritime community. In addition, CG-6 is responsible for administration and management of Coast Guard Communications Security (COMSEC), COMSEC Material System, Communications Tactical (COMTAC), and North Atlantic Treaty Organization (NATO) communications programs. CG-6 will collaborate with G-O to ensure that mission objectives are being met with an effective telecommunications program.
  - (2) C4&IT Infrastructure. CG-6 is responsible for acquiring, developing, deploying, and supporting the Coast Guard's C4&IT infrastructure, including voice, record message and data telecommunications systems, Standard Workstation, electronic mail, and directory services. C4&IT Infrastructure policy and practices identify how C4&IT systems are designated as infrastructure, how they are operated, and how they are managed and

maintained. The C4&IT Systems Inventory provides the inventory of Coast Guard C4&IT systems, and identifies which systems have been designated as C4&IT Infrastructure.

(3) Research and Development (R&D). CG-6 is responsible for the development, management, and oversight of the Coast Guard's R&D and technology management program. This program shall include coordination and management of research, development, test and evaluation. It also includes technology responsive to Coast Guard long-range objectives, the requirements of operating and support programs, and the technological opportunities for new or improved systems, equipment, methods and procedures. CG-6 will oversee and manage R&D investments designed to exploit emerging technologies that have the potential to close performance gaps in Coast Guard operations and missions. CG-6 will partner with industry and other government agencies, as needed, in matters pertaining to R&D (foreign and domestic).

c. Enterprise C4&IT Doctrine. CG-6 has the responsibility and authority to establish and publish enterprise-wide policy and practices for C4&IT assets. Section 5 describes the policy and practices framework in detail. In brief, policy issued by CG-6 establishes the purpose, scope, responsibility, applicability, and authority for the various disciplines of C4&IT. Practices issued by CG-6 provide specific direction on the implementation of policy.

d. CG-6 Concept of Operations. CG-6 is responsible for development, maintenance, and communication of the CG-6 Concept of Operations (CONOPS), which outlines C4&IT policies and practices and is reviewed routinely to ensure alignment and currency with Coast Guard and Department of Homeland Security (DHS) strategic goals, Federal C4&IT regulations, and changes in technology.

e. Innovation and the Enterprise. The establishment of the CG-6 directorate consolidates all C4&IT policy and practice into a single organizational element - a highly centralized organizational model. This approach is vital for minimizing total cost of ownership through coordinated and disciplined investment and development management. However, there is also extraordinary value with innovation - employees apply an entrepreneurial spirit to improve their work processes by using technology as a performance enabler. These two concepts, which may appear to be at odds, in fact work hand in hand to yield better outcomes for the Coast Guard, its employees, and the taxpayer. Innovation is a vital tool for improvement and is encouraged within the fundamental policies that support the CG-6 Roles and Responsibilities Framework.

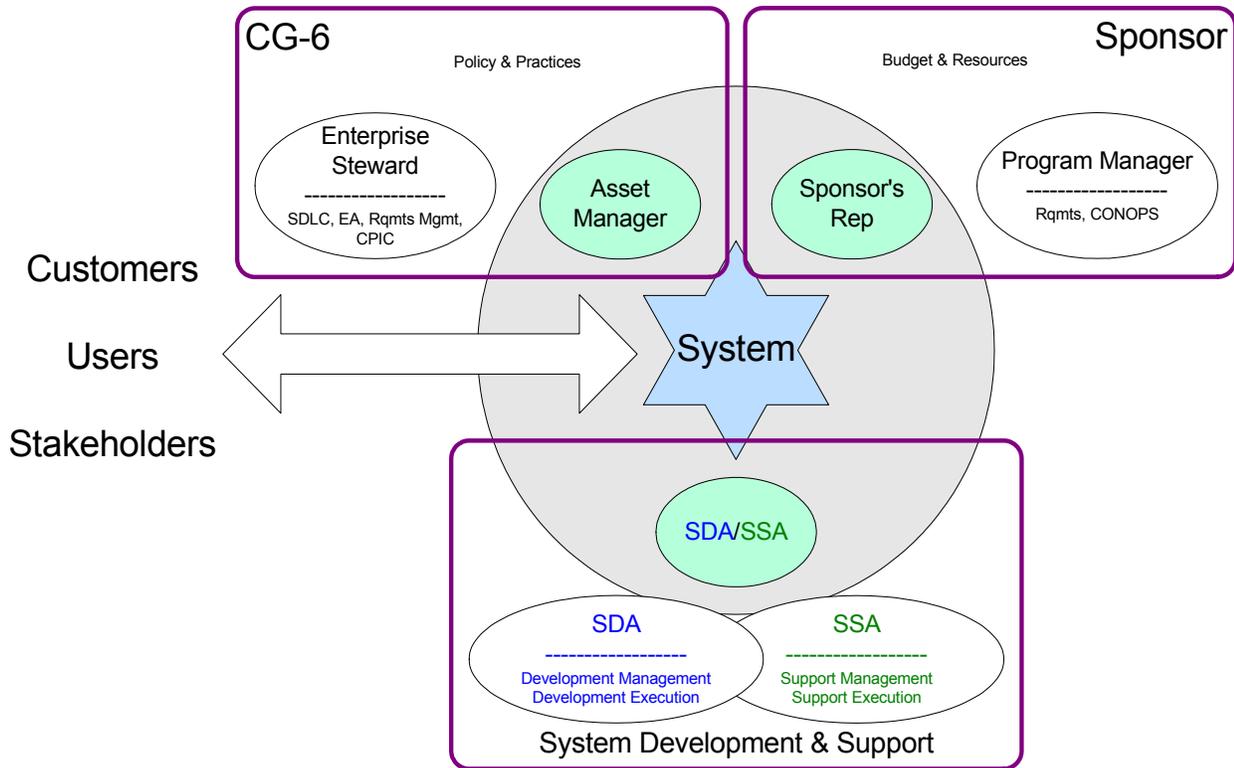
## 5. C4&IT FRAMEWORK.

a. Mission Accomplishment. The overarching criteria for the CG-6 directorate is its ability to deliver C4&IT assets that enhance the effective execution of all Coast Guard operations. The CG-6 directorate, C4&IT headquarters units, and C4&IT organizational elements are structured around the principle of unity of effort to ensure the rapid flow of information up and down the chain of command, facilitating rapid and informed operational decision making. CG-6 provides a systems view of our world of work and accelerated information flow, enabling more rapid decision-making and singular focus on successful mission performance.

b. System-Centric. CG-6 delivers mission-enhancing C4&IT assets by fostering strategic relationships and maintaining strong links with stakeholders. The CG-6 Roles and Relationships Framework (Figure 1) establishes roles, relationships, and coordination of C4&IT assets. This Framework is a system-centric view with the primary goal of various groups working together to plan, acquire, deploy, support, and operate systems in the most efficient and effective manner.

C4&IT systems and services created through these policies and practices must provide capabilities that are highly reliable, available, easy to use, interoperable, affordable, and supportable. The Asset Manager, Sponsor's Representative, and System Development and Support Agents (SDA and SSA), shown in the shaded circle, are the team responsible for working with users, stakeholders and customers to deliver successful, supportable, and easy to use C4&IT systems. CG-6 will designate these assignments, in writing, to specific Coast Guard or other organizations, or individuals, as necessary, to ensure clean organizational alignment and clear accountability for each initiative.

- c. Policy. C4&IT Policy is a two-tiered framework providing guidance in the form of *Policy*, and detailed implementation procedures in the form of *Practices*.
    - (1) Policy conveys high-level direction and guidance tied to C4&IT assets. Policy is normally developed by the CG-6 program staff with participation and input from affected offices, organizations and units. CG-6 policy will go through the appropriate policy clearance processes before being signed by CG-6 and issued Coast Guard wide. Policies will be reviewed routinely to ensure alignment and currency with Coast Guard, DHS, and Department of Defense strategic goals, Federal C4&IT regulations, and changes in technology.
    - (2) Practices are documents, websites, or information in other media that provide detailed procedures and processes for implementing C4&IT policy. Subject matter experts will develop practices. These subject matter experts are designated by CG-6 and are responsible for developing, evaluating, and routinely updating CG-6 practices. Practices are reviewed and evaluated by CG-6, and appropriate peers, before being signed by CG-6 and issued Coast Guard wide. Practices are "de-coupled" from the policy so they can be reviewed, revised, and updated in a timely and effective manner. An agile practice review and update procedure enables taking advantage of enhanced processes and procedures, leveraging best practices when identified, applying up-to-date technology, and flexibly incorporating changes to practices associated with changes in applications, tools, and technologies.
  - d. C4&IT Systems Inventory and Enterprise C4&IT Lexicon. Shall be maintained within the Enterprise Architecture. These products will serve to integrate and align all of the CG-6 policies and practices.
6. C4&IT ROLES AND RESPONSIBILITIES. Roles and responsibilities are organized into four key groups. All roles in the C4&IT Roles and Responsibilities Framework work together in a systems-centric model as described in paragraph 4.b. The CG-6 Group is guided by a philosophy centered on collaboration. CG-6 staff work to assist other roles in understanding C4&IT system development requirements, and to help them locate specialty knowledge within the CG-6 organization. The four key groups are: CG-6 Group, Sponsor Group, System Development and Support Group, and User, Stakeholder, and Customer Group.



**Figure 1: CG-6 Roles and Relationships Framework**

- a. **CG-6.** The role of the CG-6 organization is to enhance Coast Guard mission performance through efficient and effective application of C4&IT assets. The CG-6 staff is responsible for establishing, maintaining, and reviewing policies and practices for C4&IT assets. Key CG-6 responsibilities include:
- (1) Strategic planning, systems management, and system performance measurement for C4&IT.
  - (2) SDLC oversight, management, and coordination, including standardized development and configuration management practices for C4&IT assets.
  - (3) Designating and maintaining a record of designation for the Asset Manager, SDA, SSA and Sponsor's Representative (based on a recommendation from the Sponsor of the C4&IT system) for each C4&IT system.
  - (4) Investment life cycle decision support and management, and resource management (AFC30, 42, 77, AC&I funds, billets, Human Resources, etc.).
  - (5) C4&IT Enterprise Architecture development and maintenance.
  - (6) Enterprise-wide C4&IT infrastructure management.
  - (7) Information assurance.

- (8) Telecommunications and radio frequency spectrum management.
  - (9) Agency Information and records management.
  - (10) Research & Development program management.
- b. Enterprise Steward. CG-6 serves as steward for several enterprise wide C4&IT resources, impacting all users, customers, and stakeholders throughout the Coast Guard.
- (1) In the role as steward for these enterprise C4&IT functions, CG-6 serves as the focal point, setting direction, defining policies and practices, and measuring the effectiveness of these enterprise resources. CG-6 Enterprise Steward responsibilities include:
    - (a) Sponsoring, developing, reviewing, evaluating and improving policies and practices for C4&IT.
    - (b) Proactively communicating, educating and training the entire C4&IT community to execute C4&IT policies and practices properly, and to successfully develop, deploy, and support C4&IT assets.
    - (c) Providing the appropriate tools, guidance and authority to ensure adherence to C4&IT policies and practices.
    - (d) Managing the C4&IT System Inventory.
  - (2) CG-6 is the Coast Guard Enterprise Steward for:
    - (a) C4&IT System Development Life Cycle
    - (b) C4&IT Enterprise Architecture
    - (c) C4&IT Enterprise Requirements Management
    - (d) C4&IT Infrastructure Management
    - (e) C4&IT Investment Management
    - (f) C4&IT Human Resource Management
- c. Asset Manager. The CG-6 Asset Manager is responsible for the overall life cycle management of specific C4&IT assets. A C4&IT asset is a system, product, data, service, capability or resource that is available, managed, delivered, applied, supported or sustained on an enterprise scale by the CG-6 organization in collaboration with its supporting program sponsor, program manager, customers, external stakeholders, SDA and SSA. Along with the Sponsor's Representative, SDA, and SSA, the Asset Manager is part of a team responsible for working together, and with customers, users, and stakeholders, to deliver successful, supportable, and easy to use C4&IT systems. The Asset Manager has the following responsibilities:
- (1) Developing, reviewing, evaluating and improving overall C4&IT policies and practices.
  - (2) Coordinating, collaborating, and communicating with the Sponsor's Representative, SDA, SSA and CG-6 to ensure that funding and resource estimates are realistic, adequate, have considered all phases of the SDLC, and deliver the requested C4&IT asset.
  - (3) Maintaining a set of performance measures to ensure mission and business objectives are met.

- (4) Coordinating with other CG-6 and Program Manager offices in managing assigned C4&IT assets.
  - (5) Staying current with mission and business practices and concepts of operation.
- d. Sponsor. The Sponsor is the individual, headquarters office, or organization (internal or external to the Coast Guard) responsible for the mission or business line. Responsibilities include:
- (1) Defining, maintaining, and articulating organizational mission and business goals and validating requirements established by the Program Manager.
  - (2) Acquiring appropriate budget and resources needed to develop and support C4&IT assets, considering total operating and life cycle costs.
  - (3) Designating the Program Manager for each C4&IT system.
  - (4) Recommending the Sponsor's Representative for each C4&IT system.
- e. Program Manager. The Program Manager is the Sponsor's designated manager who is responsible for development and production of program requirements. The Program Manager advocates the end user's concerns and establishes and maintains mechanisms that ensure the user's needs are being addressed throughout the life cycle. The Program Manager has the following responsibilities:
- (1) Managing mission or business programs and decisions as designated by the Sponsor.
  - (2) Defining, maintaining, evaluating, and articulating program requirements for C4&IT assets.
  - (3) Developing, deploying, evaluating and updating program policies, practices, and concepts of operations as they relate to C4&IT.
  - (4) Addressing and coordinating user input, technology, resources, and other issues as they relate to C4&IT within the program, and providing end user feedback to the appropriate entities within the CG-6 Roles and Responsibilities Framework.
  - (5) Developing, updating, and establishing infrastructure doctrine, policies, and associated CONOPS, including operational or end user training requirements for C4&IT assets.
  - (6) Ensuring that C4&IT training is defined, resourced, and provided to end users and developers who are building interfaces to the infrastructure, and to the operations and maintenance community. The Program Manager will periodically review effectiveness of the various training programs and adjust them as appropriate.
- f. Sponsor's Representative. The Sponsor's Representative is designated by the Sponsor to serve as the liaison and interface for the Sponsor and the Program Manager to the other key roles involved in production, delivery, and support of a C4&IT asset. Along with the Asset Manager, SDA, and SSA, the Sponsor's Representative is part of a team responsible for working with customers, users, and stakeholders, to deliver successful, supportable, and easy to use C4&IT systems. Responsibilities for the Sponsor's Representative include:
- (1) Coordinating concept approval for development of any new or existing C4&IT asset with CG-6 and the Sponsor.
  - (2) Articulating requirements for the Program Manager, Sponsor, users and stakeholders.

- (3) Compiling and providing to the Asset Manager a set of performance measures monitoring accomplishment of mission and business objectives.
  - (4) Working with CG-6 to ensure any new or existing C4&IT system aligns with the Enterprise Architecture.
  - (5) Developing cost estimates in collaboration with the CG-6 Asset Manager, who collects and assimilates appropriate SDA and SSA input.
  - (6) Preparing the business case and other justification for the Sponsor to use in the acquisition of resources.
  - (7) Communicating and resolving issues identified with C4&IT system planning, development, operation, or support with the SDA, SSA, Sponsor, and Program Manager.
  - (8) Staying abreast of changes in technology as they may pertain to meeting mission requirements.
  - (9) Communicating with end-users to gather input, feedback and relay results.
- g. System Development Agent (SDA). The SDA is the individual, unit, firm, agency, or organization that performs, or has the responsibility for, the design, development, implementation, and support of a C4&IT system, as well as the acquisition of C4&IT products or services. Along with the Asset Manager, Sponsor's Representative, and SSA, the SDA is part of a team responsible for working with customers, users, and stakeholders, to deliver successful, supportable, easy to use C4&IT systems. Responsibilities include:
- (1) Planning, acquiring, designing, developing, and deploying C4&IT systems or services when designated by CG-6.
  - (2) Coordinating and communicating with the CG-6 Asset Manager, the Sponsor's Representative, and the SSA, during all appropriate stages within the C4&IT SDLC, to ensure all requirements, issues, and items are properly addressed.
  - (3) Compiling and providing to the Asset Manager metrics to monitor the development progress and adherence to time, budget and resource estimates.
- h. System Support Agent (SSA). The SSA is the individual, unit, firm, agency, or organization responsible for maintenance, support, and availability of a C4&IT system or service. Along with the Asset Manager, Sponsor's Representative, and SDA, the SSA is part of a team responsible for working with customers, users, and stakeholders, to deliver successful, supportable, easy to use C4&IT systems. Responsibilities include:
- (1) Maintaining, supporting, and configuration management of C4&IT assets as they are used in the field and within Coast Guard programs.
  - (2) Coordinating and communicating with the CG-6 Asset Manager, the Sponsor's Representative, and the SDA during all appropriate stages within the SDLC to ensure all support requirements and issues are properly addressed.
  - (3) Together with the SDA, ensuring C4&IT systems are built to improve mission performance and sustain availability with the lowest total ownership cost, taking into account the supportability requirements and costs associated with sustaining enterprise C4&IT assets.

- (4) Compiling and providing to the Asset Manager a set of metrics to reflect the availability and sustainability of a system.
- i. User. The user is the individual, unit, or organization that depends on and uses the C4&IT system to accomplish work, execute missions, or deliver products and services to Coast Guard members and external customers. The user provides feedback on existing C4&IT systems, suggests enhancements to existing C4&IT systems, or identifies new system requirements via the Sponsor's Representative.
  - j. Customer. A customer is any person or organization that benefits from C4&IT systems or services. An internal customer is a person or organization inside the Coast Guard for which the C4&IT system or service is being provided. An external customer is a person or organization outside the Coast Guard for which the C4&IT product or service is being provided. The customer provides feedback on existing C4&IT systems and services, suggests enhancements to existing C4&IT systems and services, or identifies new system or service requirements via the Sponsor's Representative.
  - k. Stakeholder. A stakeholder is any person, group, or organization (e.g., customers, employees, suppliers, owners, Office of Management and Budget, DHS, or other agencies, and Congress) that can place a claim on, or influence, a C4&IT asset, is affected by that asset, or has a vested interest in or expectation for a C4&IT asset. The stakeholder provides feedback on existing C4&IT assets, suggests enhancements to existing C4&IT assets, or identifies new C4&IT asset requirements via the Sponsor's Representative.
7. ENVIRONMENTAL ASPECT AND IMPACT CONSIDERATIONS. Environmental considerations were examined in the development of this Instruction and have been determined to be not applicable.
8. FORMS/REPORTS. None.

T. W. ALLEN  
Chief of Staff