DoD INSTRUCTION 8140.02

IDENTIFICATION, TRACKING, AND REPORTING OF CYBERSPACE WORKFORCE REQUIREMENTS

Originating Component:	Office of the DoD Chief Information Officer
Effective:	December 21, 2021
Releasability:	Cleared for public release. Available on the Directives Division Website at https://www.esd.whs.mil/DD/.
Approved by:	Dr. Kelly E. Fletcher, Performing the Duties of the DoD Chief Information Officer

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Purpose: In accordance with the authority in DoD Directives (DoDDs) 5144.02 and 8140.01 and Sections 303 and 304 of Public Law 114-113, this issuance establishes policy, assigns responsibilities, and provides guidance for the identification, tracking, data collection, and reporting requirements of DoD Cyberspace Workforce Framework (DCWF) work roles.

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SECTION 1: GENERAL ISSUANCE INFORMATION

1.1. APPLICABILITY.

This issuance:

a. Applies to:

(1) OSD, the Military Departments (including the Coast Guard at all times, including when it is a Service in the Department of Homeland Security by agreement with that Department), the Office of the Chairman of the Joint Chiefs of Staff (CJCS) and the Joint Staff, the Combatant Commands, the Office of Inspector General of the Department of Defense, the Defense Agencies, the DoD Field Activities, and all other organizational entities within the DoD (referred to collectively in this issuance as the "DoD Components").

(2) All DoD cyberspace positions required to perform cyberspace work, including:

(a) DoD civilian employees.

(b) Active duty, National Guard, and Reserve Component military members (referred to collectively in this issuance as "military").

b. Does **not** apply to contracted services support. Requirements governing the tracking and reporting of qualifications of personnel contracted to provide services that include the performance of cyber work roles are issued in supporting guidance, currently under development.

1.2. POLICY.

a. All positions requiring the execution of cyberspace work must be coded, pursuant to DoDD 8140.01 and this issuance. Cyberspace work comprises work executed by personnel assigned to workforce elements, including:

(1) Information technology (IT).

(2) Cybersecurity.

(3) Cyberspace effects.

(4) Intelligence workforce (cyberspace).

(5) Cyberspace enablers.

b. DoD Components will maintain a total force management perspective when sourcing DoD cyberspace positions with qualified DoD military personnel and civilian employees.

c. The DCWF:

(1) Is the:

(a) Authoritative reference for the identification, tracking, and reporting of DoD cyberspace positions.

(b) Foundation for developing enterprise baseline cyberspace workforce qualifications.

(2) Can be found online at https://cyber.mil/cw/dcwf/.

d. The cyberspace workforce must be:

(1) Fully qualified.

(2) Identified in authoritative manpower and personnel systems, pursuant to:

(a) DoDD 8140.01.

(b) This issuance.

(c) Supporting issuances.

e. Positions that include more than solely cyberspace work execution may be affected by this issuance. Questions on position eligibility, as it pertains to this issuance, should be brought to the attention of the owning component for determination, in accordance with Section 2.

f. Nothing in this issuance replaces or infringes on the responsibilities, functions, or authorities of the DoD Component heads or other OSD officials, as:

(1) Prescribed by law or Executive order.

(2) Assigned in chartering DoDDs.

(3) Detailed in:

(a) Other DoD issuances; or

(b) Director of National Intelligence policy issuances, as applicable.

1.3. INFORMATION COLLECTIONS.

The routine coordination required in this issuance does **not** require licensing with a report control symbol, in accordance with Enclosure 3, Paragraph 1.b.(9) in Volume 1 of DoD Manual 8910.01.

SECTION 2: RESPONSIBILITIES

2.1. DOD CHIEF INFORMATION OFFICER (DOD CIO).

In addition to the responsibilities in Paragraph 2.9., the DoD CIO leads:

a. The integration of DoDD 8140.01 and this issuance into management policies, procedures, and manpower requirements for the IT, cybersecurity, and cyberspace enabler workforce.

b. Collaboration with the DoD Component heads to:

(1) Identify IT, cybersecurity, and cyberspace enabler positions and personnel.

(2) Execute coding efforts for DoD civilian and military positions.

2.2. UNDER SECRETARY OF DEFENSE FOR PERSONNEL AND READINESS (USD(P&R)).

In addition to the responsibilities in Paragraph 2.9., the USD(P&R) issues guidance to support implementation of this issuance pursuant to DoD Instruction (DoDI) 7730.64.

2.3. UNDER SECRETARY OF DEFENSE FOR ACQUISITION AND SUSTAINMENT.

In addition to the responsibilities in Paragraph 2.9., the Under Secretary of Defense for Acquisition and Sustainment integrates the requirements of DoDD 8140.01 and this issuance into the management policies, procedures, and requirements for the acquisition and sustainment workforce positions that require the execution of cyberspace work.

2.4. UNDER SECRETARY OF DEFENSE FOR RESEARCH AND ENGINEERING.

In addition to the responsibilities in Paragraph 2.9., the Under Secretary of Defense for Research and Engineering integrates the requirements of DoDD 8140.01 and this issuance into the management policies, procedures, and requirements for the research and engineering workforce positions that require the execution of cyberspace work.

2.5. UNDER SECRETARY OF DEFENSE FOR INTELLIGENCE AND SECURITY (USD(I&S)).

In addition to the responsibilities in Paragraph 2.9., the USD(I&S):

a. Integrates the requirements of DoDD 8140.01 and this issuance into the management policies, procedures, and requirements for positions within the intelligence and security workforce positions required to operate in or support the cyberspace domain.

b. Oversees the identification and codification of DoD cyberspace workforce positions within defense intelligence organizations, in accordance with Section 4.

c. Uses information provided by the DoD Components to help monitor compliance with this issuance, in support of the DoD cyberspace workforce.

2.6. UNDER SECRETARY OF DEFENSE FOR POLICY.

In addition to the responsibilities in Paragraph 2.9., the Under Secretary of Defense for Policy serves as a standing member of the Cyberspace Workforce Management Board (CWMB).

2.7. ASSISTANT SECRETARY OF DEFENSE FOR HOMELAND DEFENSE AND GLOBAL SECURITY.

Under the authority, direction, and control of the Under Secretary of Defense for Policy, the Assistant Secretary of Defense for Homeland Defense and Global Security, in their role as the Principal Cyber Advisor:

a. In collaboration with the DoD Components, in accordance with the authority of applicable laws, and in agreement with CWMB, recommends workforce management requirements and qualification standards for positions and personnel required to perform cyberspace effects work roles.

b. Collaborates with the DoD CIO, the USD(P&R), the USD(I&S), the Secretaries of the Military Departments, the Commandant of the U.S. Coast Guard, and the CJCS to:

(1) Establish metrics for the cyberspace effects workforce to monitor.

(2) Confirm compliance as an element of mission readiness.

2.8. DOD COMPONENT HEADS AND COMMANDANT OF THE U.S. COAST GUARD.

DoD Component heads and the Commandant of the U.S. Coast Guard:

a. Identify and code cyberspace workforce positions in accordance with:

(1) DoDD 8140.01.

(2) DoDI 1100.22.

(3) Section 4 of this issuance.

b. Designate an office for coordinating DoD Component cyberspace workforce activities.

c. Configure authoritative manpower and personnel systems to meet the identification, tracking, and reporting requirements of:

(1) DoDD 8140.01.

(2) This issuance.

(3) Supporting issuances.

d. Ensure that:

(1) Authoritative manpower and personnel systems are properly configured to capture the quantitative data requirements in Section 5 of this issuance.

(2) All coded positions have the applicable work role(s) annotated in the associated position description.

e. Oversee the identification, coding, tracking, and reporting processes of their Component's military and civilian personnel.

f. Use the cyberspace workforce data collection and reporting requirements in Section 5 of this issuance to provide DoD cyberspace workforce managers with a quantifiable basis to manage workforce development and performance.

g. Track compliance with DoDD 8140.01 and this issuance.

h. Provide representation to the CWMB and other DoD cyberspace workforce governance forums and working groups, where appropriate.

i. Allocate resources to sustain DoD Component authoritative manpower and personnel systems supporting cyberspace workforce identification, tracking, and reporting data requirements and processes.

2.9. OSD COMPONENT HEADS.

The OSD Component heads:

a. Identify and code cyberspace workforce positions in accordance with:

(1) DoDD 8140.01.

(2) DoDI 1100.22.

(3) Section 4 of this issuance.

b. Designate an office for coordinating Component cyberspace workforce activities.

c. Oversee the identification, coding, tracking, and reporting processes of their Component's military and civilian personnel.

d. Ensure that all coded positions have the applicable work role(s) annotated in the associated position description.

e. Use the cyberspace workforce data collection and reporting requirements in Section 5 of this issuance to provide DoD cyberspace workforce managers with a quantifiable basis to manage workforce development and performance.

f. Track compliance with DoDD 8140.01 and this issuance.

g. Provide representation to the CWMB and other DoD cyberspace workforce governance forums and working groups, where appropriate.

2.10. CJCS.

In addition to the responsibilities in Paragraph 2.8., the CJCS:

a. Identifies, documents, and tracks joint staff positions and personnel assigned to cyberspace workforce positions in authoritative manpower and personnel systems.

b. Facilitates coordination of military and civilian positions at the Combatant Commands.

2.11. COMMANDER, UNITED STATES CYBER COMMAND.

In addition to the responsibilities in Paragraph 2.8., the Commander, United States Cyber Command coordinates with the Principal Cyber Advisor to:

a. Integrate the requirements of DoDD 8140.01 and this issuance into the management policies, procedures, and requirements for positions within the cyberspace effects workforce.

b. Uses information provided by the DoD Components to help monitor compliance with this issuance in support of the DoD cyberspace workforce.

SECTION 3: DCWF

3.1. GENERAL.

The DCWF:

a. Describes the work performed by the full range of the DoD cyberspace workforce, as defined in DoDD 8140.01 and this issuance.

b. Serves as a building block for the development of qualification standards and individual career planning.

c. Helps organizations recruit, train, educate, and retain a qualified cyberspace workforce.

3.2. DCWF STRUCTURE.

a. Structure.

The DCWF has a hierarchical structure with categories, specialty areas, and work roles. Each work role has a definition; a list of core and additional tasks; and knowledge, skills, and abilities (KSAs) that describe what is needed to execute critical functions. The DCWF provides the DoD standard naming and numbering conventions and provides descriptions of individual DoD cyberspace work roles, tasks, and KSAs.

b. Work Role.

Work roles:

(1) Provide a common foundation for managing the cyberspace workforce that reflects grouped KSAs required by personnel to perform specific cyberspace functions or tasks.

(2) Are used:

(a) As an additional occupational descriptor, along with:

1. Civilian occupational series.

2. Military occupational codes.

3. Specialty codes.

(b) For identification, tracking, and reporting of cyberspace workforce positions, in accordance with:

1. DoDD 8140.01.

2. Sections 4 and 5 of this issuance.

(c) To identify the workforce elements (IT, cybersecurity, cyberspace effects, intelligence workforce (cyberspace), and cyberspace enablers) identified in DoDD 8140.01.

(3) Do **not** align with a specific occupation.

(4) May:

(a) Align with more than one occupational or career management field.

(b) Be used alone or in conjunction with other work roles.

(5) Are represented by a three-digit code within the DCWF.

(6) Align with specific cyberspace qualification standards identified in issuances authorized by DoDD 8140.01.

c. KSAs.

Each DCWF work role has identified associated KSAs.

d. Tasks.

Each work role in the DCWF has identified associated tasks.

e. Alignment of Cyberspace Work Roles to Cyberspace Workforce Elements.

For accountability, oversight, and reporting, each DCWF work role is assigned to a cyberspace workforce element. Initial alignment of work roles to cyberspace workforce elements:

(1) Will be updated under the authority of the CWMB.

(2) Is available on the DoD Cyber Exchange Website at https://www.cyber.mil.

3.3. MANAGEMENT AND GOVERNANCE.

The CWMB standing members, in accordance with DoDD 8140.01, develop:

a. Policies and procedures to manage cyberspace workforce identification, tracking, data collection, and reporting requirements.

b. Cyberspace workforce metrics to support:

(1) Cyberspace workforce management.

(2) The requirements of DoDD 8140.01 and this issuance.

3.4. DCWF CONTENT MANAGEMENT.

a. Location.

The DCWF is available to help with content management on the DoD Cyber Exchange Website at https://www.cyber.mil.

b. Website Content Requirements.

The DoD Cyber Exchange Website will include:

(1) The DCWF containing a list of all cyberspace:

(a) Work roles.

(b) Associated tasks.

(c) KSAs.

(2) A matrix outlining qualification requirements for each DCWF work role.

(3) Change management processes for modifying the DCWF.

(4) Key governance documents.

(5) Alignment of DCWF work roles with cyberspace workforce elements.

c. Website Content Oversight.

The DoD Senior Information Security Officer identifies requirements for DoD Cyber Exchange Website content and the CWMB approves the requirements.

SECTION 4: POSITION IDENTIFICATION

The DCWF serves as the DoD's cyberspace coding structure for authoritative manpower and personnel systems, pursuant to DoDD 8140.01.

a. Position Identification Requirements.

(1) The DoD Components:

(a) Will review all positions to decide whether they require the performance of cyberspace work. DoD Components are responsible for determining primary and additional duties requiring the execution of cyberspace work. Personnel in positions performing limited or infrequent cyberspace tasks should be evaluated to determine whether positions require cyberspace coding.

(b) Identify all cyberspace positions by one or more of the DCWF work roles based on analysis of the requirements for the position, regardless of whether the position is filled or vacant. Selection of one or more DCWF work role codes should be determined based on analysis of the requirements of the position and the proficiency level required. Proficiency levels describe the levels of a capability required to perform work successfully. This issuance does not require any connection between proficiency level and the rank or grade of the individual. Designation of proficiency levels should be determined by a supervising official. The three proficiency levels to define performance expectations are:

1. Basic. The role requires an individual to have familiarity with basic concepts and processes and the ability to apply these with frequent, specific guidance. An individual must be able to perform successfully in routine, structured situations.

2. Intermediate. The role requires an individual to have extensive knowledge of basic concepts and processes and experience applying these with only periodic high-level guidance. An individual must be able to perform successfully in non-routine and sometimes complicated situations.

3. Advanced. The role requires an individual to have an in-depth understanding of advanced concepts and processes and experience applying these with little to no guidance. An individual must be able to provide guidance to others; and the work must be performed as a primary or additional work role, pursuant to Paragraph 4.1.b.

(c) Evaluate all positions designated with a recognized cyberspace occupational descriptor by the CWMB within the cyberspace workforce. A list of recognized cyberspace occupations is maintained on the DoD Cyber Exchange Website at https://www.cyber.mil.

(2) Any civilian position with a designated cyber occupational series is expected to have a designated cyberspace work role. Exemptions must have documented justification for non-cyberspace coding.

b. Work Role Coding.

Selection of one or more work role codes is decided by analyzing the requirements of the position and reviewing the DCWF to select the appropriate work role code(s). DoD Components:

(1) Must assign at least one work role code and proficiency level to each DoD cyberspace position.

(2) May authorize up to three work role codes, with proficiency levels, for each cyberspace position.

(a) The first work role is called the primary work role.

(b) Second and third work roles are called additional work roles. No prioritization is required for additional work roles.

(c) The primary work role code identifies the work role that includes the majority of a position's responsibilities and its most significant requirement (e.g., the most time-consuming requirement).

(3) Must use the code "000" for non-cyberspace positions, in accordance with Office of Personnel Management guidance, if the position does not require cyberspace tasks as the primary duty. If a DoD Component uses the code "000," the DoD Component must provide at least one additional cyberspace work role code.

(4) May use a specific cyberspace work role code only one time for each position. Each assigned code must be unique.

(5) Must:

(a) Document an explanation for positions in a recognized cyberspace occupational series that will be coded with a primary code of "000."

(b) Identify and code positions occupied by individuals outside DoD military and civilian cyberspace descriptors (e.g., North Atlantic Treaty Organization personnel occupying DoD cyberspace positions).

(c) Use a cyberspace code for any position requiring designation as an IT privileged user.

SECTION 5: REPORTING AND METRICS

5.1. GENERAL.

a. To manage the cyberspace workforce, the DoD must know:

(1) Its manpower requirements (information about the position or billet).

(2) The extent of its cyberspace workforce (the personnel filling these positions or billets), their qualifications, and where they are employed.

b. The reporting requirements and workforce metrics in this section support the current and long-term management of critical cyberspace resources.

c. To implement DoDD 8140.01 and meet statutory reporting requirements, the DoD Senior Information Security Officer requires the DoD Components to provide excerpts of data elements from authoritative manpower and personnel systems. These excerpts can be shared in a manual fashion (e.g., sending physical spreadsheets) or via automated interface.

5.2. CYBERSPACE WORKFORCE METRICS.

At least annually, the DoD Components provide updates to the CWMB to aid the DoD in managing the health, welfare, and maturity of the cyberspace workforce.

a. Data Elements Requirements.

The required data elements for manpower data and personnel data should correspond to individual positions.

(1) Manpower data.

(a) Position or billet identification number or unique identification.

(b) DCWF work role code—Primary.

(c) DCWF work role code—Additional 1.

(d) DCWF work role code—Additional 2.

(e) Position requires designation as an IT privileged user —Yes or No.

(f) Organization that reserves position or billet.

(2) Personnel data.

(a) Organization that employs the person filling a position or billet.

(b) Unique personal identifier in accordance with DoDI 1000.30 (e.g., electronic data interchange personal identifier).

(c) Position or billet identification number or unique identification of position held.

(d) DCWF work role code of position or billet held—Primary.

(e) DCWF work role code of position held—Additional 1.

(f) DCWF work role code of position held—Additional 2.

(g) IT privileged user designation requirement met—Yes or No.

b. Outcomes Driving Requirements.

The required data elements listed in Paragraph 5.2. allow the DoD CIO to generate the statistics on the cyber workforce, including, but not limited to, the total number of military and civilian cyberspace positions, by:

(1) Work role, including filled and vacant positions.

(2) Primary work role.

(3) One additional work role.

(4) Two additional work roles.

(5) Other significant position descriptors, as defined by the CWMB. These position descriptors include:

(a) Military officer and enlisted personnel by:

1. Occupational category (e.g., designator, military occupation specialty, rating).

2. Work role.

(b) Civilian personnel by:

1. Occupational series.

2. Work role.

c. Qualification Status.

The qualification status of all the members of the cyberspace workforce personnel performing cyberspace services will be tracked and reported by work role. Qualification requirements will be identified in supporting issuances.

GLOSSARY

G.1. ACRONYMS.

ACRONYM	MEANING
CJCS	Chairman of the Joint Chiefs of Staff
CWMB	Cyberspace Workforce Management Board
DCWF	DoD Cyberspace Workforce Framework
DoD CIO	DoD Chief Information Officer
DoDD	DoD directive
DoDI	DoD instruction
IT	information technology
KSA	knowledge, skill, and ability
USD(I&S)	Under Secretary of Defense for Intelligence and Security
USD(P&R)	Under Secretary of Defense for Personnel and Readiness

G.2. DEFINITIONS.

Unless otherwise noted, these terms and their definitions are for the purpose of this issuance.

TERM	DEFINITION
cybersecurity	Defined in Committee on National Security Systems Instruction No. 4009.
cyberspace	Defined in the DoD Dictionary of Military and Associated Terms.
cyberspace effects workforce	Defined in DoDD 8140.01.
cyberspace enabler workforce	Defined in DoDD 8140.01.
cyberspace occupational series	Every position within the occupational or career management field or program that is considered cyberspace.
cyberspace workforce	Defined in DoDD 8140.01.

TERM	DEFINITION
cyberspace workforce elements	Also referred to as "skill categories." The DoD cyberspace workforce is divided into five elements: IT, cybersecurity, cyberspace effects, intelligence workforce (cyberspace), and cyberspace enablers.
DCWF	The authoritative reference for the identification, tracking, and reporting of DoD cyberspace positions and the foundation for developing enterprise baseline cyberspace workforce qualifications.
intelligence workforce (cyberspace)	Defined in DoDD 8140.01.
IT privileged user	A user who has roles that allow read, write, or change access to manage IT systems including system, network, or database administrators and security analysts who manage audit logs. IT privileged user roles are generic to all IT infrastructure, including transport, hosting environments, cybersecurity, and application deployment.
KSAs	The attributes required to perform a job, typically demonstrated through qualifying experience, education, or training.
manpower data	Information about the cyberspace position or billet.
personnel data	Information about the person performing cyberspace work in the specified position or billet.
primary work role code	The primary work role code is used to identify a specific work role within the DoD cyberspace workforce and identifies the work role that encompasses the majority of a billet's responsibilities. If a primary work role code from 111 to 999 is used, this indicates that cyberspace work is the primary role of the billet.

TERM	DEFINITION
qualified	An established set of criteria aligned with the KSAs and tasks of a specific cyberspace work role that shows that an individual is capable of doing them. Qualification criteria may consist of one or more of the following requirements: Foundational (education, training, or personnel certification). Resident (on-the-job qualification and discretionary Component environment-specific requirements). Continuous professional development requirements.
task	An activity an employee performs on a regular basis to carry out the functions of the job.
total force	Defined in DoDD 5124.02.
work role	Defined in DoDD 8140.01.

REFERENCES

Committee on National Security Systems Instruction No. 4009, "Committee on National Security Systems (CNSS) Glossary," April 6, 2015

DoD Directive 5124.02, "Under Secretary of Defense for Personnel and Readiness (USD(P&R))," June 23, 2008

DoD Directive 5144.02, "DoD Chief Information Officer (DoD CIO)," November 21, 2014, as amended

DoD Directive 8140.01, "Cyberspace Workforce Management," October 5, 2020, as amended

DoD Instruction 1000.30, "Reduction of Social Security Number (SSN) Use Within DoD," August 1, 2012, as amended

DoD Instruction 1100.22, "Policy and Procedures for Determining Workforce Mix," April 12, 2010, as amended

DoD Instruction 7730.64, "Automated Extracts of Manpower and Unit Organizational Element Files," December 11, 2004

DoD Manual 8910.01, Volume 1, "DoD Information Collections Manual: Procedures for DoD Internal Information Collections," June 30, 2014, as amended

Office of the Chairman of the Joint Chiefs of Staff, "DoD Dictionary of Military and Associated Terms," current edition

Public Law 114-113, "Consolidated Appropriations Act, 2016," December 18, 2015

United States Office of Personnel Management, "Guidance for Assigning New Cybersecurity Codes to Positions with Information Technology, Cybersecurity, and Cyber-Related Functions," January 4, 2017