

# Using Cyber Frameworks to Define and Grow a Workforce



*Experiences from  
across the U.S.  
Department of Defense*



The overall classification of this briefing is:

**UNCLASSIFIED**

# Panelists

## Office of the Department of Defense (DoD) Chief Information Officer (CIO)

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## U.S. Cyber Command

- Jamie Chapp, *Division Chief, J72, US Cyber Command*

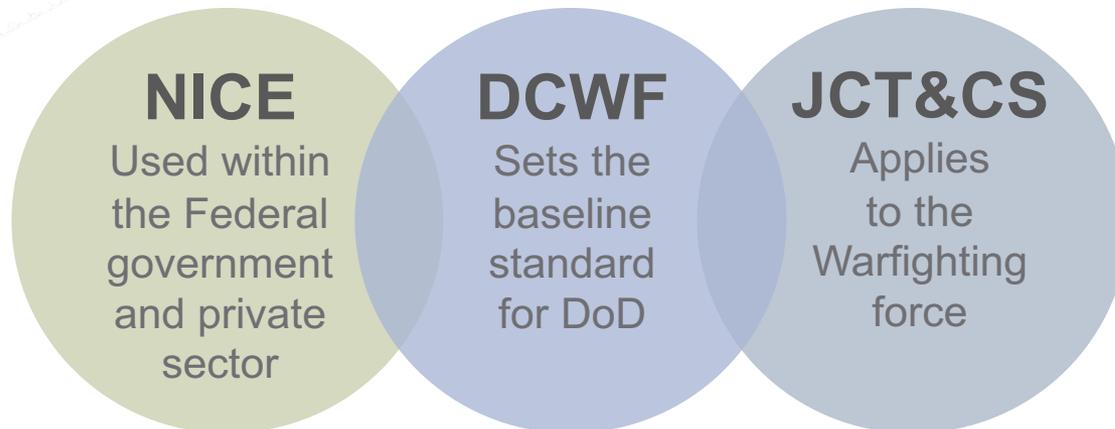
## DoD Personnel & Readiness

- Fred Engle, *Director, Military Training and Ranges in the Office of the Assistant Secretary of Defense for Readiness, Office of the Secretary of Defense*



# Cyber Workforce Frameworks

- Three cyber workforce frameworks are used to standardize cyber work and support talent management activities across the Federal government, DoD, and the private sector
- The Frameworks originated from the same initial research and are organized in a similar manner
- Differences exist primarily in the respective workforces they each apply to, as well as a few unique work roles and associated content



# Frameworks are Tool Supporting All Phases of the Human Capital Lifecycle and its Associated Practices

Business and Legislative Environment

Organizational Strategy

Human Capital Strategy

Planning

Selecting

Developing

Motivating

Sustaining



# Examples



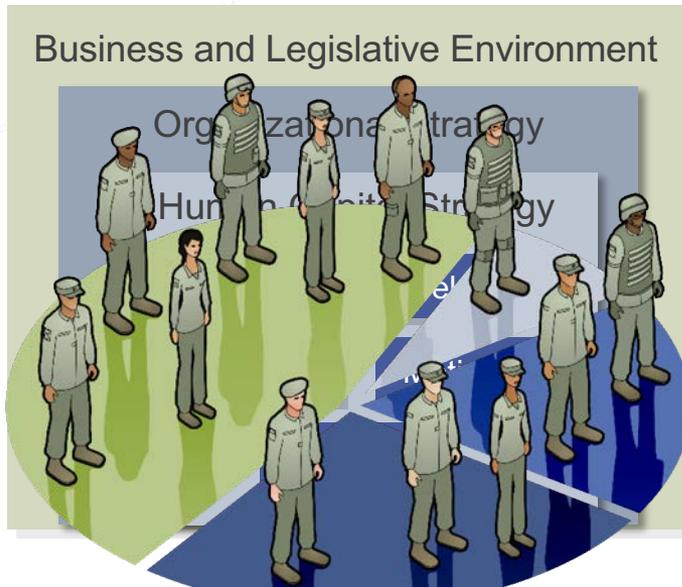
# DoD CIO: Securing and Supporting the DoD Cyber Workforce

- Cyber Excepted Service is an overhaul to the government's personnel system and supports the human capital life cycle for civilian employees engaged in cyber-related missions
- Phase III of CES implementation will leverage DCWF coding information to identify conversion opportunities
- CES promotes a major culture shift, hiring and advancing a workforce based on mission requirements and employee capabilities



# USCYBERCOM: Building the Cyber Force

- In 2009, USCYBERCOM was stood up by Congress and the President—this involved building a cyber fighting force from scratch
- A cyber workforce framework was used to define the skill requirements of the force, assemble a training pipeline from existing courses across the government, and train and certify thousands
- Today, the cyber force is fully operational



## Lessons Learned – How do we use the frameworks?

An example of the process for using the Frameworks to identify training needs:

1. Define the problem or purpose – *why does this job/team exist?*
2. Determine nature of the cyber work performed – *what do they actually do?*
3. Map the work to the appropriate framework and work roles – *where does a job/set of jobs align to the frameworks?*
4. Dive deep into the work roles – *What tasks are performed, what KSAs needed?*
5. How are people selected – *What are selection criteria; what can and can't they do at entry?*
6. Identify training gaps and solutions – *What specific training is needed to close the gap?*

*The end result ties directly back to the frameworks: The training requirements tie directly to the standards for the work and the worker*



# Benefits – Why the Frameworks Matter

Using a common way to organize, describe, and analyze cyber work and personnel, these Frameworks enable:

- Informed decision making for leaders to...
  - Identify cyber personnel for strategic workforce planning
  - Provide a basis for determining performance criteria
  - Identify critical gaps in staffing / capability
  - Streamline training paths
- “Interoperability” on a grand scale
  - Facilitates communication and coordination using a standard lexicon
  - Trains people to a common standard across sectors and nations, enhancing global security
  - Facilitates recruitment and employment of cyber personnel who meet standards recognized across agencies, organizations, nations



**Questions?**



# Additional Resources

- Cyber Seek (Career Paths):  
<https://www.cyberseek.org/index.html>
- 'Push Button' Position Description tool':  
<https://niccs.us-cert.gov/workforce-development/cybersecurity-resources/dhs-pushbuttonpd-tool>
- Cyber One Stop (CES):  
<https://www.cpms.osd.mil/Subpage/CyberOneStop/CyberHome>

