NICE Community Coordinating Council
Meeting Minutes
September 22, 2021 | 3:30-5:00 p.m. ET

I. **Introduction and Ground Rules**

NICE Program Manager Susana Barraza opened the meeting and reviewed the ground rules for the call.

II. **Opening Remarks**

a. **Industry Co-Chair** – Jon Brickey, Senior Vice President, Mastercard

In the ongoing effort to evangelize for NICE, Jon spoke with the Society for Human Resource Management (SHRM) for an article that will be published in their newsletter. Additionally, he recently engaged executive-level HR staff at his company on issues regarding the NICE Framework.

With regard to proposed cybersecurity-related legislation, he has never seen so much activity. In talking with staffers on Capitol Hill, it's clear that more people are going to be needed to deal with potential new laws that require more reporting, compliance, and policy coordination.

b. **Academic Co-Chair** - Marni Baker-Stein, Chief Academic Officer and Provost, Western Governors University

There has been a lot of conversation around learning and employment records (LERs), which will encourage more transparent and powerful pathways to cybersecurity careers. In October, WGU will announce a coalition with the National Governors Association, IBM, and others to put together an open infrastructure for LERs and conduct a prototype in Indiana. They are developing an infrastructure that not only helps students and employers, but also can serve as the start of a national interoperable infrastructure.

c. **Government Co-Chair** - Rodney Petersen, Director of NICE

The White House hosted a [summit on cybersecurity](#) August 25, where the administration and private sector leaders discussed cybersecurity risks, opportunities, and challenges. The summit included a breakout session on the workforce, and a number of companies made commitments for training and partnering with educational institutions. Some of these commitments will be on the agenda at the NICE Conference & Expo in June of 2022.

There is a great deal of activity in Congress right now, including a lot of discussions about cybersecurity education, training, and workforce development. There is a lot of support from lawmakers on these issues.

Many events and activities are coming up over the next month, including:

- September 28: [FISSEA Fall Forum](#)
- October is [Cybersecurity Awareness Month](#)
- October 18-23: [Cybersecurity Career Awareness Week](#)

If you have ideas on how the NICE Framework should describe those who do security awareness and training, email Rodney - Rodney@nist.gov - or Karen Wetzel - karen.wetzel@nist.gov .

III. **Standing Items**

    a. **Report Roundup – Learning from Good Ideas**

Looking Ahead at the Cybersecurity Workforce at the Federal Aviation Administration
Presented by Dr. Diana Burley, co-chair, Committee on Cybersecurity Workforce of the Federal Aviation Administration
URL: https://www.nap.edu/catalog/26105/looking-ahead-at-the-cybersecurity-workforce-at-the-federal-aviation-administration

Statement of Task: Pursuant to Section 549 of the FAA Reauthorization Act of 2018, a National Academies consensus study committee will (1) examine the Federal Aviation Administration's (FAA's) cybersecurity workforce challenges, (2) review FAA's current strategy for meeting those challenges, and (3) provide recommendations related to strengthening the FAA's cybersecurity workforce, including consideration of its size, quality, and diversity.

The FAA is finalizing its response to Congress on recommendations provided in the report.

The National Academies' reports provide findings, conclusions, and recommendations. They identified five major challenges in this report:

- Expansion of the FAA's digital footprint also increases vulnerability and risk, and so, increases the need for more robust cybersecurity due to these potential new threats
- The cybersecurity labor market is highly competitive within the federal sector, nationally, and globally—and likely to become more so.
- The FAA faces a future wave of retirements in its cybersecurity workforce.
- To achieve greater diversity within the cybersecurity workforce and meet its future needs, the agency must make better use of existing programs that promote workforce diversity.
- The FAA's current recruitment capabilities are not robust enough to meet future demand in an increasingly competitive environment.

They identified seven major opportunities:

- Leverage FAA's compelling mission as a recruitment tool.
- Broaden the talent pipeline by building sustainable relationships with educational and industry partners and enhancing college recruitment.
- Enhance diversity by leveraging existing best practices.
- Leverage federal hiring programs, non-salary financial incentives, and flexibilities to attract and retain talent.
- Promote and invest in training and reskilling.
- Anticipate the coming wave of retirements
- Ensure that the FAA's CISO has sufficient authority and access to agency leadership. This is a critical place to make sure the messaging gets to the administrator.

b. **Strategy Stories – New Developments that align to NICE Strategic Plan**

Black Cybersecurity Association Partnership with RangeForce
Roger Whyte, Board Chairman, Black Cybersecurity Association

BCA's mission is to provide training and guidance to under-served populations that are struggling to get the necessary skills for a career in cybersecurity. BCA wants to provide a clear path, skills, training, and equipment. BCA programs are free to anyone who joins the organization.

BCA uses RangeForce to help candidates with interview skills and training. They offer comprehensive, cloud-based training covering every aspect of cybersecurity. There are free and paid versions of the training.

URL: https://blackcybersecurityassociation.org/

URL: https://www.rangeforce.com/

c. **Framework Feature – Applications and Uses of Workforce Framework for Cybersecurity**

Highmark Health Career Paths
Presented by Jon Smiley, Sr. Program Manager, Highmark Health

Problem: InfoSec staff did not have an easy way to the view the essential KSAs and formal learning recommended for their position.

Solution: They created a visual map of each role's "career path."

- Reviewed the NICE Framework work roles and mapped them to their roles
- Extracted essential KSAs
- Worked with each manager to determine what KSAs were recommended for various levels (associate, intermediate, senior)
- Communicated the benefit and outcomes to all InfoSec staff
    o Career Paths are integrated into annual InfoSec refresher course for InfoSec staff and new hires.
    o Career Paths help drive Individual Development Plans (a requirement).
    o It allows the workforce to be mobile.
    o It provides the InfoSec staff a guideline to promotion.

This tool has made it easy for the staff to understand their career progression.

d. **Research Review**

Closing the Gap: Exploring Barriers to Cybersecurity Careers for Women Veterans in the U.S.
Presented by Dr. Costis Toregas, representing the research arm of The George Washington University.

Problem: Cybersecurity careers are dominated by males; women vets have difficulty finding jobs; national security needs strengthening. To examine the problem, they sponsored a virtual conference. There were 80 attendees. There were pre-conference papers written to stimulate ideas.

They looked at three dimensions of the problem:

- Is the gap related to gender?
- Is the gap related to the transition?
- Is the gap related to cyber pathways?

Key Observations:

- The value that women vets bring to the table is not appreciated.
- The transition phase needs to be recognized as three: pre-transition, during transition and post-transition.
- A wealth of information and resources is available to help women veterans, but it is stove-piped, overwhelming and intimidating recommendations.

Outcomes to Pursue a Set of National Endeavors:
- Support active network of individuals committed to make a difference.
- Establish annual reporting of statistics to show progress.
- Launch a clearinghouse of resources and a navigation tool.
- Launch research network of universities and research centers.

IV. **Working Group Updates**

a. **Promote Career Discovery**
Co-chairs: Roland Varriale II, Cybersecurity Analyst, Argonne National Laboratory; Monica Gomez, Cisco

The Promote Career Discovery Working Group is starting to look at potential projects. Its first effort will be to create a graphical series (posters) with different aspects of the career framework in a way that is understandable to the younger generation. It will target different age groups.

b. **Transform Learning Process**
Co-chairs: Richard Spires, Instructor, Learning Tree

At their next meeting, the Transform Learning Process Working Group will discuss the kind of role they want to play in implementing their objectives and strategies. They want to brainstorm how to rank projects and what other roles can they play. There is a lot of work going on elsewhere, and they want to examine how they, as a working group, can be involved in work going on in LERs, among other things. Now is a good time to get involved in this working group. If you are interested, contact Richard or Rodney.

c. **Modernize Talent Management**
Co-chairs: Kevin Perry, Chief Cyber Training, DoD Cyber Crime Center/Cyber Training Academy; Melissa Woo, Executive Vice President for Administration, Michigan State University; Lynsey Caldwell, Leidos

The Modernize Talent Management Working Group will begin forming projects to implement the group's objectives. The group is always looking for interested participants.

V. **Community of Interest Updates**

a. **Apprenticeships in Cybersecurity**
Co-chairs: Tony Bryan, Executive Director, CyberUp; Jennifer Oddo Executive Director, Strategic Workforce Education and Innovation, Youngstown State University

There is a lot of discussion in the Apprenticeships in Cybersecurity COI around building out an ROI/How To Guide for Employers. The COI would love to have additional members.

On October 26, there will be a Federal Cybersecurity Workforce Webinar on *Introducing Cybersecurity Apprenticeships in Federal Environments*.

b. **Cybersecurity Skills Competitions**
Co-chairs: Amelia Phillips, Highline College; Brad Wolfenden, EmberSec

The Cybersecurity Skills Competitions COI is prepping for Cybersecurity Career Awareness Week, when they will sponsor a panel discussion run by Brad.

There are a lot of competitions coming up, including the US Cyber Games. The International Cyber Competition has been moved to June of 2022 because of COVID.

c. **K12 Cybersecurity Education**

Co-chairs: Terrance Campbell, CCTE Cybersecurity Teacher, Shelby County Schools; Laurin Buchanan, Secure Decisions; Thomas Trevethan, Palo Alto Networks Continuing socialization of K12 Roadmap. Brainstorming on activities to wrap into CCAW.

At their last meeting, the K12 Cybersecurity Education COI discussed developing a video to link back to K12 teacher resources. They also are developing projects to help raise awareness nationally, enhance the CCAW site, and support faculty with additional resources.

The NICE K12 Education Conference in December has a great line-up, including a poster session, and the COI is developing an intro for it.

d. **NICE Framework Users**
Karen Wetzel, Manager of the NICE Framework

Join the NICE Framework Users' conversation: https://www.nist.gov/itl/applied-cybersecurity/nice/about/community-coordinating-council/nice-framework-users

VI.   **Project Progress Reports**

a. **Cybersecurity Career Awareness Week – October 18-23, 2021**
Presented by Davina Pruitt-Mentle, Lead for Academic Engagement, NICE
URL: https://www.nist.gov/itl/applied-cybersecurity/nice/events/cybersecurity-career-awareness-week

- Add your event/activity to the commitment portal.
- There will be many week-long events, including:
  o Careers in Cybersecurity Poster Contest (which will run beyond the week, through November 12)
  o Capture the Flag Competition
  o Plus scavenger hunts; escape room activities, webinars, podcasts; career fairs; summits, workshops

b. **NICE K12 Cybersecurity Education Conference (Virtual) – December 6-7, 2021**
Presented by Felicia Rateliff, Director of Operations & Programs, iKeepSafe
URL: https://www.k12cybersecurityconference.org/

- Early Bird Registration is open through October 31.
- The Pre-Conference Workshop line-up is live. You can add workshops to your registration if you are already registered.
- There will be a limited number of no-cost stipends for eligible K12 grade educators. Complete the online application by October 25. Winners will be notified October 26.
- Conference organizers are looking for sponsors and exhibitors. Virtual booths offer a lot of opportunity, and attendees can view them during the conference and for 6 months afterward. Email Felicia if you're interested: conference@ikeepsafe.org

c. **NICE Conference and Expo (Atlanta, Georgia) – June 6-8, 2022**
Presented by Paola Hechavarria, Florida International University
URL: https://niceconference.org/

- Hotel reservations for the conference are available. The Call for Proposals is now open through December 5, 2021. Proposals for the fourth track have an extended deadline of March 6, 2022.
- The NICE Symposium: A Coordinated Approach to Supply Chain Threats, on November 16, will feature several special speakers, including Commerce Secretary Gina Raimondo and National Cyber Director Chris Inglis. Registration is open.
- The inaugural RICET (Regional Initiative for Cybersecurity Education and Training) Conference took place virtually September 14. The event was hosted by Florida International University and the Organization of American States in cooperation with NICE. A recording of the event is available for viewing.

d. **Centers of Academic Excellence (CAE) in Cybersecurity Community**
Presented by Tony Coulson or Amy Hysell, Cybersecurity Center, California State University, San Bernardino
URL: https://www.caecommunity.org/

The National Cybersecurity Virtual Career Fair took place September 17. Results by the numbers:
- More than 50 employers vying for talent
- 1353 attendees
- Average 355 visits per booth
- 29,000 content views
- Average time spent at the career fair: 3 hours

e. **US Cyber Games**

Presented by Jessica Gulick, CEO, Katzcy
URL: https://www.uscybergames.com/

- Draft Day October 5: Coaches will announce the top 20 cyber athletes who will be part of the First US Cyber Team. The event will be livestreamed on Twitch.
- The International Cybersecurity Challenge (ICC) in Athens, Greece, has been moved from December 2021 to June 2022 because of vaccination rates among countries represented.

VII.   Featured Topic

NICE Strategic Plan - Implementation Plan
Presented by the NICE Community Coordinating Council Leadership Team

Goal 1: Promote the Discovery of Cybersecurity Careers and Multiple Pathways

The Promote Career Discovery Working Group brainstormed strategies for five objectives:

- Identify and share effective practices for promoting cybersecurity career awareness and discovery to diverse stakeholders
- Increase understanding of multiple learning pathways and credentials that lead to careers that are identified in the Workforce Framework for Cybersecurity (NICE Framework)
- Develop and utilize proven tools and resources to identify individuals most likely to succeed in a cybersecurity career
- Provide information and tools about cybersecurity-related career options to those who influence career choices (e.g., teachers and faculty, school counselors, career coaches, career development personnel, mentors, and parents or guardians)
- Galvanize employers to promote discovery and exploration of cybersecurity career opportunities and work-based learning experiences

Goal 2: Transform Learning to Build and Sustain a Diverse and Skilled Workforce

- The Transform Learning Working Group brainstormed strategies for six objectives. They spent a lot of time on the objective "Improve the quality and availability of credentials (e.g., diplomas, degrees, certificates, certifications, badges) that validate competencies." There isn't a good alignment of credentials to the NICE Framework today, and one key strategy is to articulate a common definition of credentials. A lot of credentials are relatively expensive, so the group looked at ways to increase accessibility and affordability as well as how to measure the value of a credential.
- Another objective they spent a great deal of time on is "Facilitate increased use of performance-based assessments to measure competencies and the capability to perform NICE Framework tasks." Many people feel that assessments are more knowledge-based than performance-based. They want to try to shift this in the academic realm and in the training realm. One strategy is to partner with product and service companies. There are other organizations already working on this.

Goal 3: Modernize the Talent Management Process to Address Cybersecurity Skills Gaps

- The Modernize the Talent Management Working Group brainstormed strategies for six objectives. They spent a good deal of time on the objective "Enhance the capabilities of organizations and sectors to effectively recruit, hire, develop, and retain the talent needed to manage cybersecurity-related risks." One of the strategies they developed is to identify barriers that exist to effective recruitment, hiring, and retention. They want to promote interventions to get rid of barriers impeding a more diverse workforce.
- Another objective they spent a great deal of time on is "Promote the establishment of more entry-level positions and opportunities that provide avenues for growth and advancement."

Goal 4: Expand Use of the Workforce Framework for Cybersecurity (NICE Framework)

The NICE Framework Users Group will work closely with the community to expand the use of the Framework. Their objectives include:

- Find out how it is being used and how to share it more widely
- Align it with other frameworks
- Establish a regular update process
- Apply new tools and existing tools to make the Framework interactive
- Anticipating how automation might have an impact on the Framework
- Expand the international use of the Framework

Goal 5: Drive Research on Effective Practices for Cybersecurity Workforce Development

Goal 5 has four objectives:

- Collaborating with stakeholders to curate research
- Expand to include societal and global issues
- Prioritize research on
- Disseminate research to encourage

The working groups and communities of interest will be queried about what research could support their efforts. If there is enough interest in working on this goal, they can think about creating a working group for it.

VIII.   Closing Remarks and Next Meeting Reminder

- The Strategic Plan is not something NICE can accomplish alone – it is a community-wide effort. The Implementation Plan will be available for viewing online. Over the coming months, a few high-priority, cross-cutting projects will be identified. Additionally, working groups may each tackle other projects.

- The next NICE Council Meeting will be **October 27, 2021**, at 3:30 p.m. ET.