**NICE Working Group**

**Meeting Minutes**

**Date: January 25, 2017 Time: 3:30 PM EST**

**SharePoint Page:** <https://nistgov.sharepoint.com/sites/NICEProgram/NICEWG>

**Strategic Plan for NICE:** <http://csrc.nist.gov/nice/about/strategicplan.html>

1. **Roll Call and Ground Rules**

* Danielle Santos, NICE Program Manager, welcomed members to the meeting.
* During this meeting the Adobe Connect chat box feature should be utilized to provide feedback and ask questions.
* Danielle noted that participation in the NICE Working Group (NICEWG) is not intended for advertising and promotional purposes and to keep this in mind when participating and using the chat feature.

1. **NICE Program Office Updates**

* Rodney Petersen, Director of NICE, welcomed everyone to the first meeting of 2017. NICE is a public-private partnership effort between industry, academia, and government.
* During this presidential leadership transition, effort will not slow down. The [NICE Strategic Plan](http://csrc.nist.gov/nice/about/strategicplan.html), approved last year, is what our work is based on. We continue to make progress and appreciate your partnership.

1. **Opening Remarks**
   1. Industry Co-Chair Andre Thornton thanked everyone for their time and stressed how much work there is to be done through the year.
2. **Standing Items** 
   1. **Fun Facts -** Kevin Powers, Boston College, spoke about “The Best and Worst Masters Degrees for Jobs in 2016”.  
      This article shows cybersecurity ranked at #11 which is not anywhere near the worst. We also know that cybersecurity cannot be lumped into just one category.

* Kevin conveyed that he receives calls for internships that cannot be filled. There is a market and a need that cannot be met.
* The solution is a true collaboration between academia, industry and government. Working together helps with job placement and bridging the gap.
* Find out more here: [http://www.forbes.com/sites/kathryndill/2016/08/12/the-best-and-worst-masters-degrees-for-jobs-in-2016/#74cac7183129](http://www.forbes.com/sites/kathryndill/2016/08/12/the-best-and-worst-masters-degrees-for-jobs-in-2016/%2374cac7183129)
  1. **Report Roundup** - Clarence Williams, NICE lead for Government Engagement, spoke about “Cybersecurity Recommendations to the President”.
* Recommendations areprimarily geared toward workforce development.
* Regarding the incoming administration, Rudy Giuliani has been identified as a cybersecurity advisor. He will be leading a ninety day review.
* For this discussion, three reports were reviewed, each having many recommendations. Most notable are those that relate to workforce development and education.
* Some of the various recommendations include:
  + A need for academia to deem cybersecurity as a core part of curriculum.
  + Developing incentives to encourage a career in cybersecurity such as loan forgiveness and additional scholarships.
  + Promoting cybersecurity as innovative in national service and keeping pace with cutting edge technology.
  + Bridging the skills gap through pipelines, fellowships and apprenticeships.
  + Creating a fundamental cybersecurity education baseline.
  + Developing a model for training and educational institutions. Encourage courses.
  + Increasing funding supporting cybersecurity.
  + Focus on veterans such as establishing a cyber-specific job program.
* An overview of the report summaries include:
  + Cybersecurity should be part of the core curriculum.
  + Incentives should be provided to encourage cybersecurity.
  + Public and private partnerships can work together to address the skills gap.
* In summary, there is a strong focus on incentivizing and strengthening the workforce. Leveraging or creating a core concept is advised.
* A NICEWG member asked if there is a repository listing existing apprenticeship opportunities. Rodney mentioned the [Department of Labor](https://www.dol.gov/featured/apprenticeship/find-opportunities) and a previously held [NICE webinar on apprenticeships](https://events-na1.adobeconnect.com/content/connect/c1/2209463749/en/events/event/shared/2215980905/event_landing.html?sco-id=2215975096&_charset_=utf-8).
* See attached presentation for more information.
  1. **Event Engagement** – Danielle Santos, NICE Program Manager, spoke about connecting with NICE at RSA 2017.
* The RSA 2017 Conference is scheduled for February 13-17 in San Francisco.
* NICE will be present at the NIST booth. NICE will have office hours where the staff will be available to talk about training, education and workforce development.
* If any NICEWG members are attending, please stop by and introduce yourself.
* NICE will do a meet and greet, a demonstration of the NICE Cybersecurity Workforce Framework and a demo of the [CyberSeek](http://cyberseek.org/) interactive map and career pathway.
* See the attached presentation for office hours.
  1. **Strategy Stories -** Patty Buddelmeyer, SOCHE spoke about “Regional Partnerships for Cybersecurity”. This topic aligns to the NICE Strategic Plan objective 3.3: Facilitate state and regional consortia to identify cybersecurity pathways addressing local workforce needs.
* As a Regional Alliances and Multistakeholder Partnerships to Stimulate (RAMPS) awardee, our focus is on data collection to understand community needs and to create qualified candidates. We will collaborate with schools and universities.
* We’ve partnered with OC3 to build a mission of providing an environment for private, public and military organizations. We do look at current and future needs.
  1. **Metric Moment -** Matt Barrett, NIST Program Manager, spoke about the NIST Cybersecurity Framework (CSF) 1.1 Metrics.   
     Proposed updates for the CSF draft v1.1 were released. The open comment period begins today. A workshop will likely be scheduled in mid to late May. This version of the framework is compatible with v1.0.
* A new section on cybersecurity measurement has been added. At a high level the topics reference the correlation between business and risk mitigation, metrics vs measures in sec 4.0 and 4.1 derived from previous work, and leading vs lagging.
* The goal is to unify a taxonomy. What properties describe how an organization behaves? The core outcomes are ways to measure ourselves. The categories are close-ended and are outcome oriented. We’re trying to leave it flexible for customization. The lower level has a discreet process that fuels cybersecurity management.
* Other updates include supply chain risk management.
* Feedback is appreciated and welcome.
* For the workshop, monitor the nist.gov/cyberframework site for when and where this will be held.
* See presentation attached and find out more here: [https://www.nist.gov/cyberframework](https://www.nist.gov/cyberframework%20%20%20)

1. **Subgroup Updates**
   1. **K-12** - Virginia Lehmkuhl, Dakhwe, co-chair, spoke on their last meeting which included an update from the NICE Program Office, presentations and project updates.

* The last meeting included Program Office updates and noted that comments on SP 800-181 have closed.
* Dan Manson spoke about cybersecurity competitions and on the webinar on cybersecurity games.
* There were presentations on cyber curriculum at the Pinckney Cyber Training Institute (PCTI) and Sentinel Center and a discussion on stimulating educational approaches from the Educational Technologies Group, Inc.
* The four goals contained within the National K12 Cybersecurity Implementation Plan were discussed.
* This subgroup is seeking feedback on how to narrow its focus for the upcoming year and once done, developing work plans.
  1. **Collegiate** –Heather Monthie, co-chair, spoke about the two projects and their deliverables this subgroup will focus on. Sub projects may also derive from this work.
* The topic for the first project is mapping curricula to the framework (KSA’s in Appendix B) and to create recommendations on the academic and work experience needed. The plan is to look at the DHS and DoD models as well as confer with Dr. Dave Tobi.
* The second project will articulate academic pathways to career job roles. There are misalignments between job requirements and what is really needed. CyberSeek provides what is requested by Human Resources. The subgroup will look at tools and technologies to demonstrate skill sets as well as existing resources such as SkillSmart AAC.
* Heather also spoke on partnering with SMEs to develop a white paper with action items for creating clubs (think toastmasters) where SMEs provide mentorship for students.
* Anyone interested in taking the lead on these efforts should contact the co-chairs. We hope to have at least one deliverable ready for the NICE 2017 conference.
  1. **Competitions** – Dan Manson, co-chair, talked about the webinar held earlier this month.
* Based on the white paper produced by this subgroup, and in association with KATZCY, “Cybersecurity Games: Building tomorrow’s workforce” was presented on January 18.
* Polls taken during webinar show that 70% responded “no” when asked if they’ve attended a competition. When asked if persons are more likely to hire based on competition performance, 90% responded “yes”. This shows a disconnect.
* We hope to get more people attending competitions.
* Link to the webinar and white paper here: [Competitions Webinar](https://events-na1.adobeconnect.com/content/connect/c1/2209463749/en/events/event/shared/2228773866/event_landing.html?sco-id=2228754628&_charset_=utf-8)
  1. **Training and Certifications** – Linda Montgomery, co-chair, let the group know that Ken Slaght, San Diego Cyber Center of Excellence (SDCCoE), has agreed to join as a co-chair.
* During the last meeting the group spoke about last year’s accomplishments and what to focus on for this upcoming year.
* The Cyber Range team, led by Chris Kelsall, completed a one-pager infographic discussing: who, what and where of cyber ranges. The Cyber Range team also produced a white paper which is available within the T&C SharePoint site. The white paper includes detailed definitions, goals and the focus of cyber ranges.
* The Skills-based Training & Performance-based Certifications team, led by Doug Rausch, developed a mapping spreadsheet utilizing information gathered from the C3, Navy, Army and Army National Guard. Vendor certifications were mapped to KSAs at entry, intermediate and advanced levels. The project team also developed a white paper discussing what mapping criteria they believed required clarification.
* The Supply and Demand/Training Gap team was led by Ken Slaght and Randi Parker. The team published a white paper on aligning cybersecurity academic supply and industry demand which is available on the SharePoint site.
* A new project team created called “Framework to certification” will take on the ongoing mapping of vendor credentials to the framework.
* The Supply and Demand will leverage the SCCoE model.
* Anyone interested in participating can contact the co-chairs for more information.
  1. **Workforce Management** - Maurice Uenuma, co-chair, provided an update for this subgroup.
* The subgroup remains focused on the role profiles/KSA effort and adapting and applying the framework for the financial sector. They’ve developed additional KSA’s to augment support and align with categories and specialty areas. The most common KSAs have been collected and the general knowledge areas will map to certifications and CAE knowledge units.
* The Human Factors team concentrated on human related risk amongst the enterprise. Weekly working sessions are ongoing to flesh out the construct for this model. There are seven business functions created each looking at proficiency, risk, mitigation strategies, and alignment with the framework. The goal is to have a draft model in March and the ability for comments directly after.
* The Literature review team researches current information that will support these two projects.
* Please reach out if you wish to contribute.

1. **Project Progress Reports**
   1. **National K-12 Cybersecurity Education Conference** – Amber Lindsay, iKeepSafe, spoke about the 2017 conference.

* The conference is scheduled to be held from December 4-5 in Nashville, TN, at the Omni hotel.
* A “save the date” will be sent next week.
* Tracks have been identified and a draft proposal will be out in March.
* We are seeking recommendations on speakers.
* See attached presentation and find out more here: <https://www.k12cybersecurityconference.org/>
  1. **NICE Annual Conference** – Danielle Santos, NICE Program Manager, provided more details on the NICE conference.
* The conference is scheduled to be held from November 7-8 in Dayton, OH.
* The program committee has regular meetings and is working on a theme and tracks.
* The call for proposals will be open between March and May. Speakers will be selected shortly after.
* Find out more here: <https://www.fbcinc.com/e/nice/default.aspx>

1. **New Business**
   1. Presenter: Ben Scribner, Department of Homeland Security, spoke on the topic “Work Roles and Qualifications Analyses”

* The NICE Cybersecurity framework (NCFW) provided the building blocks for positions. The new version gives roles for such positions.
* There are 52 roles in the NCWF. Tasks, and KSAs help build positions but how to qualify persons for a position is not provided.
* DoD and DHS are bringing together focus groups to identify methods to use to qualify candidates and give reference and guidance for each role. This exercise is similar to the ongoing work of the T&C and Collegiate subgroups.
* DHS is reaching out to state and local groups, and various industry experts to have them replicate these focus groups.
* If you are part of a federal government organization or other organization and can participate, or nominate, let us know!
* A member of the working group asked if v1.1 uses KSAs. Ben replied that the newest version adds roles: these are the most common roles used to build cybersecurity positions.
* See attached presentation.
  1. Presenter: Phil Bond spoke about CyberUSA
* CyberUSA, led by Tom Ridge, launched at the end of October 2016, and involves many states. This was launched with existing cyber communities and affiliations to form CyberUSA.
* Our goal is to be affiliated with states and communities. Five additional states have been added since the launch.
* CyberUSA is a threat sharing and communications platform. There is an intention is to be populated by small and medium size businesses.
* The communications platform will knit together those that share an interest in workforce and education. This should be used to channel and convey content to be shared across the network.
* NICE will be promoted and the same can be true for company and academic programs.
* National members can buy different programming rights.
* Progress thus far is on building national founders and is focused on building out the network.
* See attached presentation and find out more here: [http://www.cyberusa.us/](http://www.cyberusa.us/%20)
  1. Presenter: Sara Saphos, OPM, spoke about the government cyber careers tool.
* Sara commented on the federal hiring freeze and stated that the M1717 memorandum says that positions needed to meet national security would not be subject to the freeze. The expectation is that cybersecurity positions will get an exemption.
* The website features information for job seekers and hiring managers. The job seekers page includes profiled federal employees. The hiring manager’s page presents information on hiring and compensation authorities, and tools and resources.
* The “About Us” page links to the workforce strategy.
* New content will be added on a monthly basis
* Find out more here: <https://www.cybercareers.gov/>

1. **Summary of Action Items** – meeting minutes along with the presentations will be sent to all members.The chat log will be uploaded to the SharePoint site.
2. **Other:** Ambareen Siraj let members know that the Women in Cybersecurity Conference and Job Fair (WiCyS 2017) registration is open.The conferenceis for students, educators and professionals in public/private sector. Find our more here: [www.wicys.net](http://www.wicys.net)
3. **Next Meeting Reminder** – The next NICEWG meeting is scheduled for February 22, 2017.