Research Security and Intellectual Property Committee

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John Ritter	Princeton University
Janna Tom	University of California
David Winwood	Louisiana State University
Kevin Wozniak	Georgia Institute of Technology
Robert Hardy	Director, COGR

NIST Update - iEdison

- Background
  - NIH legacy system
  - NIH: "iEdison makes it easy to learn about the law and its regulations and report an invention or patent funded by any of the agencies listed"
- Rebuild
  - RFI for redesign of system from ground up at NISH
- Next steps
    - Received many comments and will form stakeholder groups
    - Webinar in April
    - Award in November 2020
    - Operational system in 2022

NIST – Bayh-Dole Regulations

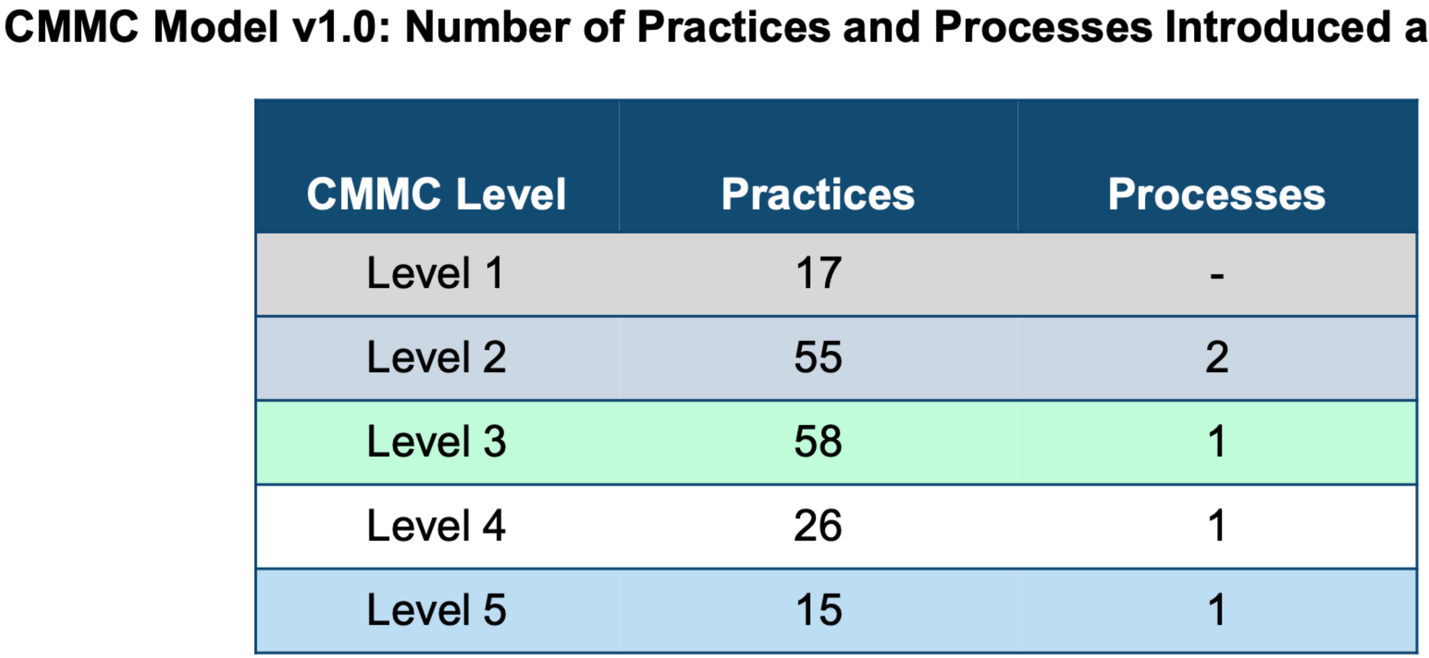
- Bayh-Dole at 40
- Rulemaking
  - No legislative fixes recommended
  - More in the nature of "housekeeping" than restructuring
  - To be sent to OMB in March, NPRM in April
  - Removing explanatory material from existing regulation

DOE Order 142.3A

- Unclassified foreign visits and assignments
- Exemption removed
  - Applied to research under grants performed at institutions of higher education where results are published
  - Performance of such research **<u>not</u>** considered "access to DOE sites, information, technology, equipment, programs, or personnel"
- FN information to be provided for DOE review
- DOE secretary or designee must approve participation of individuals from T-4 countries
- DOE HQ vs. DOE contracting officers

DOD Cybersecurity Maturity Model Certification (31 Jan 2020)

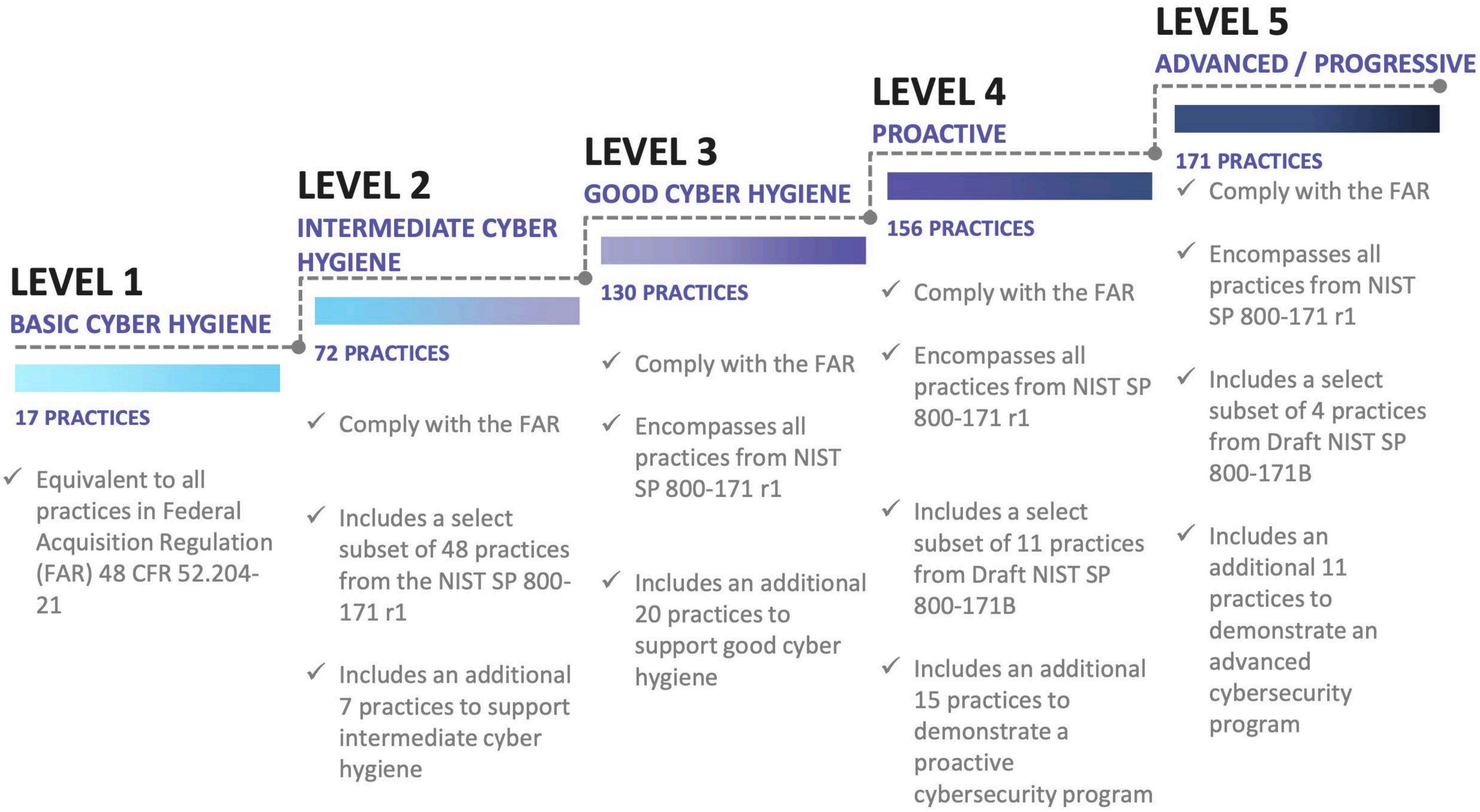
- Unified cybersecurity standard for future acquisitions



CMMC Model v1.0: Number of Practices and Processes Introduced at each Level

CMMC Level	Practices	Processes
Level 1	17	-
Level 2	55	2
Level 3	58	1
Level 4	26	1
Level 5	15	1

CMMC



LEVEL 1

BASIC CYBER HYGIENE

17 PRACTICES

- ✓ Equivalent to all practices in Federal Acquisition Regulation (FAR) 48 CFR 52.204-21

LEVEL 2

INTERMEDIATE CYBER HYGIENE

72 PRACTICES

- ✓ Comply with the FAR
- ✓ Includes a select subset of 48 practices from the NIST SP 800-171 r1
- ✓ Includes an additional 7 practices to support intermediate cyber hygiene

LEVEL 3

GOOD CYBER HYGIENE

130 PRACTICES

- ✓ Comply with the FAR
- ✓ Encompasses all practices from NIST SP 800-171 r1
- ✓ Includes an additional 20 practices to support good cyber hygiene

LEVEL 4

PROACTIVE

156 PRACTICES

- ✓ Comply with the FAR
- ✓ Encompasses all practices from NIST SP 800-171 r1
- ✓ Includes a select subset of 11 practices from Draft NIST SP 800-171B
- ✓ Includes an additional 15 practices to demonstrate a proactive cybersecurity program

LEVEL 5

ADVANCED / PROGRESSIVE

171 PRACTICES

- ✓ Comply with the FAR
- ✓ Encompasses all practices from NIST SP 800-171 r1
- ✓ Includes a select subset of 4 practices from Draft NIST SP 800-171B
- ✓ Includes an additional 11 practices to demonstrate an advanced cybersecurity program

FAR 52.204-21

- **(i)** Limit information system access to authorized users, processes acting on behalf of authorized users, or devices (including other information systems).
- **(ii)** Limit information system access to the types of transactions and functions that authorized users are permitted to execute.
- **(iii)** Verify and control/limit connections to and use of external information systems.
- **(iv)** Control information posted or processed on publicly accessible information systems.
- **(v)** Identify information system users, processes acting on behalf of users, or devices.
- **(vi)** Authenticate (or verify) the identities of those users, processes, or devices, as a prerequisite to allowing access to organizational information systems.
- **(vii)** Sanitize or destroy information system media containing Federal Contract Information before disposal or release for reuse.
- **(viii)** Limit physical access to organizational information systems, equipment, and the respective operating environments to authorized individuals.
- **(ix)** Escort visitors and monitor visitor activity; maintain audit logs of physical access; and control and manage physical access devices.
- **(x)** Monitor, control, and protect organizational communications (***i.e.,*** information transmitted or received by organizational information systems) at the external boundaries and key internal boundaries of the information systems.
- **(xi)** Implement subnetworks for publicly accessible system components that are physically or logically separated from internal networks.
- **(xii)** Identify, report, and correct information and information system flaws in a timely manner.
- **(xiii)** Provide protection from malicious code at appropriate locations within organizational information systems.
- **(xiv)** Update malicious code protection mechanisms when new releases are available.
- **(xv)** Perform periodic scans of the information system and real-time scans of files from external sources as files are downloaded, opened, or executed.

CMMC Roll-out

- Applied through 7012 clause
- Phased approach
  - Small number of prime contractors - 10 in the first years
  - But could show up in subaward
- Third-party audit/ceritification
- Costs
  - DOD: Should be minimal for level I ~ $5K
- Certify enclave/small number of labs
- Procedures, Guidance & Information (PGI) document needed for fundamental research?
- More information
  - COGR updates
  - AUECO Conference April 28-29, 2020 – University of Pennsylvania

Huawei Equipment Restrictions

- NDAA FY19
  - Manufacturers
    - Telecommunications – Huawei, ZTE
    - Telecom in public safety context – Hytera, Hangzhou Hikvision, Dahua
  - Prohibition on sale of defined equipment to USG (2019)
  - Prohibition on use of defined equipment by contractor, not in the context of a particular contract (Aug. 2020)
- "Substantial or essential part" of system
- Scan networks and replace effected equipment
- Could have components within larger pieces of equipment