Appendix 2 – National Cybersecurity Workforce Framework Communications Sector Recommended Categories, Specialties and Competencies

Category	Specialty	Competency
Cybersecurity - Securely Provision	Secure Acquisition	Capacity Management
Cybersecurity - Operate and Maintain	Secure Software Engineering	Communications Security Management
Cybersecurity - Protect and Defend	Systems Security Architecture	Computer Forensics
Cybersecurity - Investigate	Technology Research and Development	Computer Languages
Cybersecurity - Oversee and Govern	Systems Requirements Planning	Computer Network Defense
Cybersecurity - Collect and Operate	Test and Evaluation	Computer Skills
Cybersecurity - Analyze	Systems Development	Computers and Electronics
Essential Skills	Data Administration	Configuration Management
	Customer Service and Technical Support	Contracting/Procurement
	Network Services	Criminal Law
	System Administration	Cryptography
	Systems Security Analysis	Data Management
	Enterprise Network Defense Analysis	Database Administration
	Incident Response	Database Management Systems
	Enterprise Network Defense Infrastructure Support	Distributed Systems
	Vulnerability Assessment and Management	Embedded Computers
	Digital Forensics	Encryption
	Cyber Investigation	Enterprise Architecture
	Legal Advice and Advocacy	External Awareness

Category	Specialty	Competency
	Strategic Planning and Policy Development	Forensics
	Training, Education, and Awareness	Hardware
	Information Systems Security Operations	Hardware Engineering
	Security Program Management	Human Factors
	Risk Management	Identity Management
	Knowledge Management	Incident Management
	Public Safety	Information Assurance
	EMS	Information Management
	Radio Systems	Information Systems Security Certification
	RF Engineering	Information Systems/Network Security
		Information Technology Architecture
		Information Technology Performance Assessment
		Infrastructure Design
		Internal Controls
		Knowledge Management
		Legal, Government, and Jurisprudence
		Logical Systems Design
		Mathematical Reasoning
		Modeling and Simulation
		Multimedia Technologies
		Network Management
		Object Technology
		Operating Systems
		Operations Support
		Oral Communication
		Organizational Awareness
		Personnel Safety and Security

Category	Specialty	Competency
		Political Savvy
		Process Control
		Project Management
		Public Safety and Security
		Quality Assurance
		Reasoning
		Requirements Analysis
		Risk Management
		Security
		Software Development
		Software Engineering
		Software Testing and Evaluation
		Surveillance
		Systems Integration
		Systems Life Cycle
		Systems Testing and Evaluation
		Teaching Others
		Technology Awareness
		Telecommunications
		Vulnerabilities Assessment
		Web Technology
		Collection Operations
		Cyber Operations
		Cyber Operations Planning
		All Source Intelligence
		Exploitation Analysis
		Targets
		Threat Analysis

Category	Specialty	Competency
		Advocacy
		Analytics
		Change Management
		Coalition-Building
		Ethical Decision-Making
		Financial Industry Awareness
		Global Awareness
		Innovation and Creativity
		Problem-Solving
		Professionalism
		Software Development / Engineering
		Strategic Communication
		Supervision
		Verbal Communication
		Written Communication
		Geospatial Information Systems
		- Technician/Cartographer
		- Administrator
		Public Information Relations
		Training Coordinator
		Radio Systems Operation/Technician
		Public Safety Dispatcher/Call Taker
		Senior Technical Coordinator (Public Safety)
		Technical Support Specialist
		Privacy (Statutes/Advocacy)
		Others:
		RF Engineering