

**APPENDIX 1004**  
**ARNG ELECTRONIC SECURITY SYSTEM (ESS)**  
**MANAGEMENT, INSTALLATION, OPERATION AND MAINTENANCE (MIO&M)**

**Section 401. General.**

a. This Appendix to the Master Cooperative Agreement (MCA) prescribes the terms, conditions and administrative procedures related to the National Guard Bureau's (NGB's) federal contribution for the Army National Guard (ARNG), Requirements and Analysis Division (IES) (ARNG-IES) Electronic Security Systems (ESS) Program Cooperative Agreement Program within the 54 States, Territories, Commonwealths, and District of Columbia (referred as 'State' here forth). This Appendix is also referred to as the ESS Cooperative Agreement (ESSCA).

b. Statement of Facts.

(1) The authorities and provisions set forth in NGR 5-1 and the terms and conditions contained in the Master Cooperative Agreement (MCA) and included Attachment A to which this is an appendix are incorporated into this Appendix by reference.

(2) ARNG-IES is authorized to contribute 100 percent of federal funds to the State for specific expenses incurred in rendering management, installation, operation and maintenance (MIO&M) services of approved and authorized ARNG-IES ESS equipment used exclusively for the support of federal system requirements approved by the ARNG-IES ESS Program Manager.

(3) QPSM ESS funds are to be used for the support of AR190-11 AA&E IDS maintenance and monitoring requirements. Non-AA&E federal system requirements may be considered for support with QPSM O&M funds only after obtaining the ARNG-IES ESS Program Manager's advanced written approval. All State-requested and other electronic security system requirements will require other funding to plan, scope, design, procure, install, and sustain.

(4) ARNG-IES ESS shall provide 100 percent federal support within funding limitations for authorized ESS MIO&M. The support of ESS MIO&M is authorized for facilities described as joint use with the federal government, coded for federal support with an Installation Number, Facility Number, and Facility Type, and approved for standardized ESS equipment by the ARNG-IES ESS Program Manager (PM).

(5) ESS MIO&M provides federal support for Intrusion Detection Systems (IDS), Closed Circuit Television (CCTV), Electronic Entry and Access Control Equipment to include Intercom Systems, and other ESS systems as defined and approved by the ARNG-IES ESS Program Manager on authorized facilities.

(6) ESS MIO&M rendered beyond the scope of services authorized in this Appendix 1004 will not be reimbursed through this agreement.

(7) The services performed by personnel at the State level in support of this Appendix 1004, are to be accomplished using criteria, standards, processes, and procedures promulgated by the ARNG-IES ESS Program Manager (a federal government employee). No services or work efforts being performed, at the State level, are inherently Governmental in nature. In terms of contracted ESS technicians, as long as their performance of work has specific deliverables, defined using the position skill set language in Section 405 of this Appendix 1004, and has government civilian or military oversight, then contracted ESS technician work is not inherently governmental in nature.

(8) Prior to attending the ARNG ESS IDS Certification Course (ATTRS Code: 964-ARNG-CFMO-110), all attendees must show proof of possessing a valid, current security clearance per Army Regulation 190-11 para 3.6 and Army Regulation 380-67 (Section III: 2-6; 2-7; 2-8) from their State Personnel Security Office. All ARNG ESS Technician positions require a security clearance level, prescribed in AR190-11 and AR190-13, in order to install,

operate, maintain, manage, and train for identified duty requirements in AR190-11, AR190-13 and this Appendix 1004.

**Section 402. Additional Definitions.**

a. Arms, Ammunition, and Explosives Vaults (UL 827): Central Station Alarm Services is the UL standard that covers central monitoring facilities. The primary focus of Appendix 1004 funds is the protection of arms, ammunition, and explosives as well as ammunition supply points per Army Regulation 190-11. Under UL 827, two categories exist. Each category is identified by its UL Category Control Number (CCN). The categories cover:

(1) Protective Signal Services - Central Station (UUFX) and

(2) Burglar Alarm Systems - Central Station (CPVX) to monitor assets one or any of the following cases of Central Monitoring of High Security Assets:

a) The asset(s) is (are) under the authority of the National Industrial Security Program

b) The protection of Arms, Ammunition and Explosives (AA&E) assets. The intrusion detection system and central monitoring station need to be UL 827-compliant in order to perform these specialized government intrusion detection services per AR190-11.

b. Secure Areas and Open Storage Areas (UL 2050): This UL standard is used for the protection of Secure Areas (G2) and open storage areas (G2). UL 2050 is a standard that describes central monitoring; encrypted-signal processing, investigation, servicing and operation of encrypted alarm systems for which a national industrial security system certificate has been issued by Underwriters Laboratories (UL). This is the standard the security industry must follow to service U.S. federal government facilities. The intrusion detection system and central monitoring station must be UL 2050 conformant in order to meet the regulatory requirements outline in AR 380-5. The maintenance and central monitoring station services are authorized, under this Appendix 1004, as long as the secured space being protected has been vetted and validated by the ARNG-IES ESS Program and ARNG-G2 proponents (notated on your FY State Equipment Report Costing page). The secured space can only be validated if the space has received final accreditation by the appropriate Authorization Official. If the State has approval for their secured space central monitoring reimbursement, then the ARNG-IES ESS Program will note added resources, in the State's Annual Funding Program (AFP) State Equipment Report (SER) for the pending Fiscal Year file. If the secure space has not received final accreditation by the proper Government Accrediting Authority, then Appendix 1004 funds cannot be expensed/applied for any services for this space. ARNG-IES ESS approved equipment for Secure Areas is to be initially procured using National Guard and Reserve Equipment Appropriation (NGREA) funds. Appendix 1004 Operation & Maintenance funds are not authorized for initial procurement of project ESS equipment sets.

**Section 403. Office of Primary Responsibility.**

a. The Office of Primary Responsibility for this Appendix is the Army National Guard Installations and Environment Directorate, Electronic Security Systems (ARNG-IES ESS) Program.

b. The Chief, ARNG-IEZ, for the purposes of the Appendix, is the designee of the Director, Army National Guard, and is the individual authorized to make modifications and final approval of all ESS MIO&M budgets, the language of this Appendix, to authorize distribution and recall of ESS MIO&M funds sent to the State USPFO, to receive specified accounting reconciliation reports, and to take any other action on behalf of ARNG or the Director, ARNG, as specifically reserved under this Appendix for ARNG-IES ESS.

**Section 404. Scope of Agreement.**

a. Scope of Services.

(1) The Grantee shall provide ESS MIO&M support as outlined/specified in Section 404, para b. ESS maintenance and monitoring services, in support of Army Regulations (AR) 190-11, 190-13, 190-51, located at facilities listed on the current Facilities Inventory and Stationing Plan (FISP). Those facility locations include but are not limited to: Readiness Centers, Army Aviation Support Facilities (AASF), Joint Forces Headquarters (JFHQ), Armed Forces Reserve Centers (AFRC), Combined Support Maintenance Shops (CSMS), Maneuver Area Training Equipment Site (MATES), Unit Training Equipment Site (UTES), Ammunition Supply Point (ASP), Facility Maintenance Shop (FMS), Organizational Maintenance Shop (OMS), United States Property Fiscal Office Warehouse (USPFOWH), Controlled-Humidity Project (CHP), Civil Support Team (CST), and other FISP facilities as approved by the ARNG-IES ESS Program Manager for the exclusive support of federal system requirements.

(2) The Grantee may contract for said services, provided the required and appropriate paragraphs and clauses are included as prescribed in Articles VIII and IX of the MCA and that the performance specifications listed below are met. ESS MIO&M Activities shall include, but not limited to actions by the Grantee, through employment by the Grantee, of sufficient personnel, acquisition of supplies or services.

(3) Provide ESS MIO&M for designated facilities (with identified mission essential vulnerable areas (MEVA's) and current risk assessments as per AR 190-11 and equipment according to Army Regulations (AR) 190-11, 190-13, 190-51, and ARNG-IES ESS criteria, standards, and metrics.

(4) Provide monitoring of ESS equipment, at a monitoring facility that is in compliance with UL 827 and UL 2050 as prescribed by the Unified Facilities Guide Specification, Division 28, Section 28 10 05, dated May 2016), dated April 2006, and initiate action necessary to obtain appropriate response timing.

b. Performance Specifications.

(1) The Grantee shall furnish services to include the management, installation, operation and maintenance of Electronic Security Systems equipment at designated facilities identified above (Section 404-a).

(2) The Grantee ESS maintenance personnel shall respond within twenty-four (24) hours of notification of system failure as required by AR190-11.

(3) The Grantee shall perform preventive maintenance checks and services on each system no less than semi-annually (every 6-months) as required by AR190-11 for arms, ammunition, and explosives (AA&E) storage areas and as per manufacturer's recommendation for all other supported ESS equipment in use.

(4) The Grantee shall perform semi-annual inspections, of all aspects of Electronic Security Systems installation, operation and maintenance, as recommend by the ARNG-IES ESS Program Manager. Involved organizations/activities include various governmental agencies (federal, state and local); security equipment manufacturers and suppliers, alarm companies, monitoring agencies, and telephone companies.

(5) ARNG-IES ESS Program Equipment Metrics (Page 1)

ARNG-ILIE SS PROGRAM EQUIPMENT METRICS						
5/4/2015						
		RC-SINGLE*	RC-MULTI*	AASF/AVCRAD	JFHQ	MAINT FAC LARGE
CIDS-AA&E PRIMARY	SCP	1	1	1	1	1
	BMS	5	5	5	5	5
	VOLUMETRIC	3	3	3	3	3
	PERIMETER	2	2	2	2	2
	CELL BACKUP	1	1	1	1	1
CIDS-AA&E SECONDARY	SCP	0	0	0	0	0
	BMS	0	5	5	5	5
	VOLUMETRIC	0	3	3	3	3
	PERIMETER	0	2	2	2	2
	CELL BACKUP	0	0	0	0	0
CIDS-OTHER PRIMARY	SCP	1	1	1	0	1
	BMS	2	2	4	0	6
	VOLUMETRIC	2	2	4	0	6
	CELL BACKUP	0	0	0	0	0
CIDS-OTHER SECONDARY	SCP	0	0	0	0	0
	BMS	2	2	2	2	2
	VOLUMETRIC	2	2	1	1	1
	CELL BACKUP	0	0	0	0	0
ACCESS CONTROL	DOORS (ACP)	0	0	2	2	1
	CARD READERS	0	0	6	8	6
INTERCOM	MASTER	1	1	2	2	2
	REMOTE	1	1	2	2	2
CCTV	CAMERAS	0	0	16	12	12
	MONITORS	0	0	2	2	2
	NVR/DVR	0	0	1	1	1
ALARM/SCC	SEC CNTRL CNTR	0	0	1	1	1

\* AA&E will utilize a 4:1 vault to control panel ration  
 \*\* ASP's - Two panels will be provided at multi storage areas

(6) ARNG-IES ESS Program Equipment Metrics (Page 2)

ARNG-ILIE SS PROGRAM EQUIPMENT METRICS						
5/4/2015						
		MAINT FAC SMALL	CST	RTI	ASP**	USPFO
CIDS-AA&E PRIMARY	SCP	1	1	1	1	1
	BMS	5	5	5	8	5
	VOLUMETRIC	3	3	3	4	3
	PERIMETER	2	2	2	4	2
	CELL BACKUP	1	1	1	1	1
CIDS-AA&E SECONDARY	SCP	0	0	0	1	0
	BMS	5	5	5	2	5
	VOLUMETRIC	3	3	3	1	3
	PERIMETER	2	2	2	1	2
	CELL BACKUP	0	0	0	1	0
CIDS-OTHER PRIMARY	SCP	1	1	1	0	1
	BMS	6	4	4	2	6
	VOLUMETRIC	6	6	6	1	3
	CELL BACKUP	0	0	0	0	0
CIDS-OTHER SECONDARY	SCP	0	0	0	0	0
	BMS	2	2	2	0	2
	VOLUMETRIC	1	1	1	0	1
	CELL BACKUP	0	0	0	0	0
ACCESS CONTROL	DOORS (ACP)	0	1	1	0	1
	CARD READERS	0	6	6	0	6
INTERCOM	MASTER	2	1	2	0	3
	REMOTE	2	1	2	0	3
CCTV	CAMERAS	0	6	6	6	6
	MONITORS	0	2	2	2	2
	NVR/DVR	0	1	1	1	1
ALARM/SCC	SEC CNTRL CNTR	0	0	0	0	0

\* RC AA&E will utilize a 4:1 vault to control panel ration  
 \*\* ASP's - Two panels will be provided at multi storage areas.

**Section 405. Authorized Activities/Charges.**

a. Personnel.

(1) State Employees, Federal-contract Labor personnel (upon an ARNG-approved request for In-Kind Assistance (IKA), or State-contract Labor personnel.

a) The ARNG-IES ESS Program Manager is to be contacted by the State regarding all outsource (OFF-LOAD) contract(s) solicitation to insure contracted labor is compliant to meet ARNG-IES ESS standards, criteria, metrics, processes, and procedures and AR190-11, AR190-13, and AR190-51.

b) Outsourcing ESS labor is permitted as long as the Statement of Work and/or Performance Work Statement meets ARNG-IES ESS Program standards, criteria, metrics, processes, and procedures. No additional subsidies will be provided to cover contracting fees such as, but not limited to: General & Administrative (G&A) fees; contract company fringe benefits; contract company overhead fees; or government contract administration fees.

c) Federal Technicians (Fed-Techs) are not authorized to be compensated or travel on the use of QPSM ESS (131G39.1F or 131G39.30) O&M funds. Federal Technicians are compensated from federal technician labor funds account and travel based on available, applicable Fed-Tech travel account.

d) ESS Technical Personnel – 131G39.1F – (State Employee or Contracted Labor) - The Electronic Security Systems personnel, that perform all duties as assigned to the installation, operation, and maintenance of ESS equipment throughout said State. The job duties and performance requirements stated herein are not inherently governmental functions or performance requirements. All duties and performance requirements are performed in accordance with ARNG-IES ESS Program Office guidelines, processes, procedures, standards, criteria and other documented requirements. For applicable labor rates, the ARNG-IES Program Office uses the Bureau of Labor Statistics - Technician Position Description Code: 49-2098. <http://www.bls.gov/oes/current/oessrcst.htm>

e) ESS Supervisor-Lead Technical Person – 131G39.30 – (State Employee or Contracted Labor) - The Lead Electronic Security Systems technician(s) responsible have input to and/or are accountable for the planning, programming, budget preparation/validation, execution, installation, operation, maintenance, and monitoring of the entire said State ESS Program. These job duties and performance requirements are not inherently governmental. All duties to be performed adhere to ARNG-IES ESS Program Office published standards, criteria, designs, standardization, training, and documentation requirements. For applicable labor rates, the ARNG-IES Program Office uses the Bureau of Labor Statistics - Technician Position Description Code: 49-1011. <http://www.bls.gov/oes/current/oessrcst.htm>

(2) Position Skills (recommended and not limited to) are:

a) Technical Abilities (not limited to):

- 1) High proficiency using latest version of Microsoft (MS) Office Suite: MS Word, MS Excel, MS PowerPoint, and MS Outlook.
- 2) Understanding of basic electronics
- 3) Understanding of basic Cellular Technology principles
- 4) Troubleshoot systems using equipment/device wiring and block diagrams.
- 5) Identify basic system and electronic components
- 6) Understand system equipment installation, operation, and maintenance
- 7) Use of common and manufacturer specific hand tools

- 8) Use of hammer drills, drivers, and mechanical lifts
  - 9) Use of soldering iron to perform basic soldering, tinning, and splicing of wires and terminals
  - 10) Proper mechanical/crimp termination of wiring terminals and connectors
  - 11) Digital multi-meters to identify voltage, resistance, and continuity within a circuit
  - 12) Troubleshoot systems/wiring using digital multi-meters
  - 13) Proper selection, routing, and bending of conduit
  - 14) Proper selection and mounting of infrastructure equipment (conduit, boxes, fittings, etc.)
  - 15) Understanding of, and able to direct, high voltage (120VAC) requirements for supplying power to ESS equipment components
  - 16) Use of telecom testing equipment
- b) Management Abilities (not limited to):
- 1) 3-year minimum experience level or equivalent in Electronic Security Systems
  - 2) Positive dialogue with Engineering (CFMO) Directorate (G4), Physical Security (G3/5/7) Directorates, Information Management (G6) Directorate, and Resourcing (G8) Directorate.
  - 3) Maintain Maintenance Log Records, of all serviced Intrusion Detection Systems (to include preventive semi-annuals and emergency maintenance calls); Access Control Systems; Closed-Circuit Television equipment; and Stand Alone Facility equipment, for a period of 5-years.
  - 4) Communicate with other State ESS Program entities to identify emerging requirements, troubleshooting, or technical anomalies.
  - 5) Provide technical recommendations and analysis input, into State CFMO MILCON projects, to ensure adequate ESS infrastructure and requirements are included in MILCON 1390/91 documents and in conjunction with ARNG-IES ESS Program Process 6.0 specifications.
  - 6) Provide value-add ESS input during MILCON Project Design Charrettes
  - 7) Interface and update ARNG-IES ESS Program Manager and ESS Program Regional Representative to your State on consistent basis
  - 8) Communicate requirements and issues with the ARNG-IES ESS Program Regional Representative to your State once known
  - 9) Identify State requirements for State Equipment Report (SER) Maintenance and Monitoring (M&M) tool for submission of annual sustainment requirements to ARNG-IES ESS Program
  - 10) Identify State requirements for Program Objective Memorandum (POM) tool for submission of Future Year requirements to ARNG-IES ESS Program
  - 11) Ability to plan, program and forecast ESS requirements for the out years
  - 12) Proficient with current IT and cellular technology
  - 13) Proficient in tracking, logging, maintaining ESS requirements.

14) Applies ARNG-IES ESS program ISO9000 standards, criteria, metrics, processes and procedures in State ESS Program routines.

c) Training Requirements: (IAW AR190-13, Para 3-4-c and Appendix 1004, Section 405-a-4-c (below))

1) Attend required ARNG-IES ESS IDS Certification Training conducted on Camp J.T. Robinson in Building 0358 (ARNG-IES ESS Training Facility) (ATTRS: 964-ARNG-CFMO-110)

2) Attend ARNG-IES ESS Supervisor-Lead Technician Course (ATTRS: 964-ARNG-CFMO-111)

3) Attend ARNG-IES ESS Advance (ACS and CCTV) Courses (ATTRS: 964-ARNG-CFMO-113)

4) Attend ESS standardized equipment manufacturer training as required

5) Encourage State Unit Supply Sergeants to attend the ARNG-IES ESS IDS Operators Training Course in conjunction with attending LTC-027(2) course. Sign-up will be offered in 1<sup>st</sup> week of LTC-027(2).

d) Maintenance Responsibilities (not limited to):

1) Ensure adequate spare parts, tools, supplies are available to meet service requirements

2) Ensure ARNG-approved-authorized equipment and/or DIACAP-certified systems are applied to ESS requirements standardized by State

3) Delegate responsibilities to State ESS Technicians as required

4) Schedule and track semi-annual ESS preventive maintenance requirements and work order system that will sustain an audit

5) Identify and report systemic issues

e) Regulatory Requirements (but not limited to):

1) AR 190-11, Physical Security of Arms, Ammunition, and Explosives (05-Sep-2013)

2) AR 190-13, The Army Physical Security Program (25-Feb-2011)

3) AR 190-16, Physical Security (31-May-1991)

4) AR 190-51, Security of Unclassified Army Property (Sensitive and Non-Sensitive) (30-Sep-93)

5) DA PAM 190-51, Risk Analysis for Army Property (30-Sep-1993)

6) UFC 4-020-01, Planning Manual (11-Sep-2008)

7) UFC 4-020-04 TM 5-853-01, Security Engineering Electronic Security (01-Mar-2005)

8) NFPA 730, Guide for Premises Security (2005 Edition)

9) Other Army Regulations and Department of Defense Policies where applicable

10) Applicable ARNG-IES standards, criteria, processes, and the current hardware (HW), software (SW), Firmware (FW) Baseline for ESS systems approved by the ARNG-IES Program Manager

(3) Salary & Benefits including vacation, holiday, and sick leave benefits; FICA, worker's compensation, health and life insurance, and retirement benefits.

a) Salary compensation will be no less than the Department of Labor Bureau of Labor Statistics using Position Code: 49-2098 for baseline ESS Technicians.

b) Salary compensation will be no less than the Department of Labor Bureau of Labor Statistics using Position Code: 49-1011 for the ESS Supervisor-Lead Technician.

c) Payments for salaries, to include approved overtime and allowable Taxes, FICA, and Healthcare benefits in accordance with State personnel policy for the payment of state government positions criteria listed in Section 405-3a and 405-3b. If a State has a pay raise, pay freeze or pay cap, a hiring freeze or employee furloughs for like positions throughout the State, then the ESS Program employees must be considered 'Exempted' employees and designated "essential" for emergency operations. This includes Outsourced ESS Labor (contracted) personnel. Under furlough or federal government shutdown circumstances, Electronic Security System (ESS) Technicians are vital to the continuing operations, maintenance, and management of the installed systems protecting federal mission arms, ammunitions, and explosives and other federal assets. An example of such is when systems/sensors are triggered into alarm mode and security guard forces are dispatched (or cannot be dispatched), then the ESS Technicians would need to respond to the alarm sequences per Army Regulation 190-11 and established Standard Operating Procedure (SOP) to assess and manage the equipment alarm actions along with coordinate with the central monitoring station. When there are no like State government positions available, salary/wage will be equivalent to comparable level of effort (series and grade) to Federal Civil Service employee in the same geographic area as per the criteria listed in Section 405-3a and 405-3b. ESS Technicians are funded under QPSM which is the same MDEP as Physical Security Guards that are considered 'essential' personnel during conditions similar to Federal Government shutdowns. The expectation is to field an ESS Team, with a minimum of 2 ESS technicians per State Army National Guard organization, with one (1) having Supervisor and primary technician responsibilities for the ESS equipment and operations in accordance with ARNG-IES ESS Program Office standards, criteria, standardization, and guidelines. The other ESS technician(s) are authorized based on the total number of ARNG-IES ESS Program Manager approved federal systems requirements that are supported under this agreement. No additional subsidies will be provided to cover State-specific costs/fees such as, but not limited to: State Union dues; State-specific retirement programs; or State-longevity allowances.

1) ESS Technical Personnel – 131G39.1F

2) ESS Supervisor-Lead Technical Person – 131G39.30 (Labor only)

(4) Travel Expenses.

a) Reimbursement of travel expenses is authorized, at a rate consistent with State regulations, for personnel performing ESS MIO&M activities. The authorities and provisions set forth in NGR 5-1 and the terms and conditions contained in the Master Cooperative Agreement (MCA) to which this is an Appendix are incorporated into this Appendix by reference.

1) ESS Technical Personnel – 131G39.1F

2) ESS Supervisor-Lead Technical Person – 131G39.1F (Other Direct Costs – travel, training, vehicle, tools, etc.)

b) Installation Labor. Labor associated with the installation of ESS equipment as approved by the ARNG-IES ESS Program Manager.

c) Training. Authorized are costs associated with certifications, examinations, or licensing which are required by ARNG-IES ESS, State or Federal agencies for the installation, operation or maintenance of ESS equipment; to include required attendance at ARNG-IES ESS hands-on technical certification and training courses, and specified ESS-manufacturer certification training for authorized equipment. ARNG-IES ESS Intrusion Detection Systems (IDS) certification should be attended at least every two (2) years (annual attendance is



authorized and encouraged). The ARNG-IES ESS Supervisor-Lead Technician Course (SLTC) should be attended every annual year to maintain accountability and knowledge of programmatic, technological, and cybersecurity updates. The ARNG-IES ESS certification courses for Access Control Systems (ACS), Closed-Circuit Television (CCTV), and Stand Alone Facilities (SAF) should be attended at least every three (3) years (annual or semi-annual attendance is authorized). All personnel, within the State who install or maintain ESS equipment under this Appendix are required to be certified via the ARNG-IES ESS Program Certification Courses. Courses and/ or training (authorized approved equipment set manufacturer training) directly related to enhancing the industry trade performance of authorized ESS personnel in the execution of their ESS MIO&M responsibilities can be authorized. Training is not authorized for an Associate, Bachelor, Masters, or any other education degree.

d) Equipment, machines, tools and vehicles. Authorized are costs associated with the purchase, rental, lease, operations, furniture, maintenance, authorized diagnostic equipment (i.e....computers, manufacturer-component laptops, etc.), and repair of equipment, machines, tools and vehicles necessary in the performance of this appendix. Repairs to vehicles are limited to normal wear and tear. In the event of any losses or damages, State Grants Officer Representative (GOR) should reference NGR 5-1, 8-4: Use of Federally Owned Equipment by State Employee. If the items are not for exclusive use, then the State Military Department must reduce its request for reimbursement proportionately. Advance approval by the ARNG-IES ESS Program Manager is required due to potential decrement of funds to Appendix 1004 (O&M ESS Funds) and as the Cooperative Agreement (CA) Program Manager.

e) Rental or lease of items for a period in excess of 240 days requires USPFO approval of an economic analysis showing that this is the most cost effective alternative to ensure the State Military Department meets its responsibilities under the ESS MIO&M Appendix.

f) Communications. Communication service, to include cellular phone/personal digital assistant and their monthly charges (UL827), required by authorized ESS personnel in the performance of their duties. This includes the procurement of communication devices and monthly cellular phone charges to support the monitoring of Intrusion Detection Systems (IDS) alarm devices for UL827 and/or UL2050 requirements. If the items are not for the exclusive use, in support of the ESS MIO&M Appendix, then the Grantee must reduce its request for reimbursement proportionately.

g) Hotel lodging, military billeting, rental car fees, rental car fuel, and predicted airline baggage fees for authorized ESS travel purposes are authorized expenses, using Appendix 1004 funds, when traveling outside of the attendee's home state. These exemptions can occur due to the nature of the job requirements and in accordance with meeting ARNG-IES ESS Program Office standards, criteria, standardization, and guidelines. All ESS technicians are required to attend and maintain mandatory ARNG-IES ESS Program technical training certifications, conducted at Building 0358, in Little Rock, Arkansas. AA&E IDS Training requirements are recognized in AR190-11, 2-10 (Training); AR190-13, 2-18-c (Security Engineering Surveys); and AR190-13, 3-4-c-1-3 (Additional Training). All ESS Supervisor-Lead Technicians are required to attend Supervisor-Lead Technician Training, conducted annually.

h) By direction of ARNG-HQ and the most current Joint Travel Regulation, when traveling to Camp Robinson for ESS Training Courses, attendees must submit a request for PEC billeting. Paperwork is provided when you register for the ESS course via the ESS Training Registrar. If PEC billeting is not available, you will be notified by email, in advance, with a letter of non-availability. The letter of non-availability is your method to reserving off-post (commercial hotel) lodging at the local GSA rate.

i) Repair by Replacement - Approvals. Repair by replacement of existing electronic security systems components, in approved ARNG-IES facilities, may be accomplished, under this ESS MIO&M Appendix, if said systems are damaged beyond repair. Advance approval by the ARNG-IES ESS Program Manager, on a case-by-case basis, is required for such repairs to be verified and authorized.

j) Repair by Replacement – Declines. Legacy, obsolete, and/or non-compliant ESS components that are not found on the current, approved RMF-baseline for hardware, software, and firmware must be planned and programmed for replacement via Program Objective Memorandum (POM) process or funded from Installation, Operation, & Maintenance minor construction funds by the State CFMO. Repair by Replacement, using Appendix W912LN-20-2-1004

1004 funds, will not be authorized/approved where no previously, installed equipment existed as well as where there's no infrastructure (conduit, electrical wiring, communication lines, etc.). These situations would constitute a new project and not authorized with QPSM O&M 13139G.1F funds, by the ARNG-IES ESS Program Manager.

k) Repair Parts. Repair parts necessary to provide essential operational support of authorized ESS MIO&M in approved ARNG facilities. All approved parts can be found on the current, approved RMF-baseline for hardware, software, and firmware. Formal requests should be sent by the State ESS Supervisor-Lead Technician to their ARNG ESS Regional Representative.

l) Supplies. Components, materials and parts for repair and maintenance. Supplies, components, materials and parts necessary to ensure that the ARNG-IES ESS approved electronic security system remains operational and provides the security required during non-duty hours to protect governmental property/facilities is authorized.

m) Monitoring.

1) Central Monitoring Station charges for ARNG-IES ESS Program Office approved electronic security systems and sites that are in compliance with UFGS are authorized 100% Electronic Security System Program federal requirement support.

2) The Central Monitoring Station shall be in compliance with UL 827, Central Station Alarm Services, for the protection of Arms, Ammunition and Explosives (AA&E) vaults. UL 2050, National Industrial Security Systems as outlined in Division 28, Section 28 10 05, dated May 2016, of the Unified Facilities Guide Specifications (UFGS) is for the protection of Sensitive Compartmented Information Facilities.

a. UL 827 is for the intended protection of Arms, Ammunition, and Explosive (AA&E) vaults and an approved expense using QPSM ESS O&M funds. See Section 402-a.

b. UL 2050 is for the intended protection of Sensitive Compartmented Information Facilities. Secure Rooms and Open Storage areas. Reference Section 402-b for secured space central monitoring station guidance. See Section 402-b.

c. The State should submit budget reimbursement discrepancies to ARNG-IES ESS Program Manager and their ARNG-HQ Program equivalent for review and verification.

#### **Section 406. Unauthorized Activities/Charges.**

a. Flexible spending authority is not authorized by the State (or USPFO) against the ARNG-IES Electronic Security Systems Program funding. The ARNG-IES ESS Program has strict inherently technical physical security requirements for State ESS Programs not to deviate from the approved systems, sensors, components, ancillary accessories, or technician labor workforce certifications. If any State selects to deviate from ARNG-IES ESS Program Office standards, then those procured components or business aspects will not be supported with future federal ARNG-IES ESS (QPSM) funds with regard to labor, training, certification, travel per diem of requirements, spare parts, specialized tools, or technician support. Any deviations can result in future funding restrictions/decrements where as any funds are withheld, not used for ESS purposes, or new non-standard/unauthorized system will not meet ARNG ESS Risk Management Framework (RMF) requirements and may fail to communicate with the form-fit-function of the other ARNG ESS standardized equipment used statewide and enterprise-wide across the 54 States. There are risks, due in large part to potential, inherent security risks and compromise of federal military assets.

b. State deviations caused by using non-standardized components/equipment will compromise the ARNG-IES ESS Program Risk Management Framework/cybersecurity authorization and are expressly forbidden.

c. ARNG-IES ESS Program Office does not authorize the use of ESS MIO&M funds for the procurement of uniforms/designed shirts. Purchased items that can be pilfered should be listed on the State Property Book and labeled with a tamper-proof asset tag. Requests for exceptions or verifications need to be emailed to the ARNG-IES ESS Program Manager by the State ESS Resource Manager and/or Grant Officer Representative (before any procurement). Questionable (pilfer-type) items, during a State audit/inquiries of Appendix 1004, can be rejected by the ARNG-IES ESS Program Manager.

d. Procurement of new ESS devices, accessories, or non-authorized equipment as per ARNG-IES ESS Program standards & criteria for the installation of new systems is not authorized. Such equipment can only be procured and installed through established channels (ARNG-IES ESS Program Office, MILCON or BRAC). Unless specifically approved by ARNG-IES ESS, the ESS Program prohibits activities/charges for other than those stated in Section 405.

e. Training and reimbursement in excess of the limitations stated in Section 405a(4)c).

**Section 407. Budget Requirements.**

a. Submission.

(1) The State ESS Supervisor-Lead Technician (in coordination with the Cooperative Agreement Program Manager (CA PM)) shall submit a budget preparation/ validation each fiscal year for ESS MIO&M to ARNG-IES ESS for approval. The budget shall list, by line item, the ESS MIO&M to be funded under this Appendix and will indicate by line item the anticipated amount available for reimbursement through this agreement as per the ARNG-IES ESS Program State Equipment Reporting tool for maintenance & monitoring of ESS equipment.

(2) The State ESS Supervisor-Lead Technician (in coordination with the Cooperative Agreement Program Manager (CA PM)) shall validate and submit their State ESS Fiscal Year requirements, no later than 15-business days from date of receipt of their State Equipment Report (SER) Maintenance and Monitoring (M&M) tool, from the ARNG-IES ESS Program. This reoccurring process will take place each succeeding fiscal year (approximately in the January/February timeframe, annually). The State ESS SER M&M tool recognizes requirements that shall be analyzed by ARNG-IES ESS Program as compared to the approved/authorized standards, criteria, and metrics. All FY ESS requirements are analyzed and proportionately assessed, based on HQDA QPSM AMSCOs (131G39.1F and 131G39.30) levels, amongst the 54 State ESS Programs. Upon approval by the ARNG-IES ESS Program Manager, the said State ESS SER M&M requirements support value shall be incorporated and executed into this Appendix.

b. Limitations.

(1) The total amount of the budget shall be the maximum amount for which the ARNG-IES ESS Program has obligated to reimburse the State for the costs of performance of this Appendix. The CA PM must submit a request to the ARNG-IES ESS Program Manager to increase or decrease the budget amount in accordance with Paragraph d, below.

(2) The Budget shall include any limitation, restriction, or instruction on the expenditure of funds.

(3) ARNG-IES ESS Program, in its discretion, may unilaterally increase or decrease the overall budget total, the total for any facility or the total for any line item.

(4) The Army Management Structure Codes (AMSCO) provided in the annual budget guidance letter by the ARNG-IES ESS Program, is the only authorized AMSCO for use.

c. Budget Reports.

(1) The CA PM shall reconcile budget amounts with ARNG-IES ESS periodically, as of 31 December, 31 March, 30 June, 30 September, and 31 December or as deemed needed upon modification. This report is due 30 days after the "as of" date".

(2) The State shall submit any other requested financial or budget report that ARNG-IES ESS Program may require.

d. Budget Changes.

(1) The CA PM must submit a written request through the Grants Officer or USPFO to the ARNG-IES ESS Program Manager, to decrease or increase funds in their ESS budget.

(2) The request shall include an updated budget reconciliation report as an enclosure. The request will not be binding until the document receives the approval from the ARNG-IES ESS Program Manager; no reimbursement can take place until a CA modification to this Appendix has been executed.

e. UnFunded Requirements (UFRs) and UnPlanned Requirements (UPRs).

(1) If the State ESS Program believes, and the State Leadership concurs, that an insufficient funding level has been provided under this Appendix; or the State incurs increased expenditures within the scope of this Appendix that are higher than the ARNG-IES ESS Program Manager can allocate in the Annual Program Budget, then the State ESS Program should coordinate and submit a UFR justification request for the additional funds. The State Physical Security (G3) (or QPSM MDEP controlling) Office will submit a formal justification UFR to ARNG-ODP (G3) with a copy to the ARNG-IES ESS Program Manager. The UFR request must include sufficient detail of the funding being requested by itemized line accounting details. The request for additional funding will be coordinated and reviewed by the ARNG-IES ESS Program Manager for approval or disapproval predicated on the validity of the request, a review of the requirements, and available QPSM funding levels. States must coordinate all formal UFR requests between ARNG-IES ESS (G4) and ARNG-ODP (G3). UnPlanned Requirements (UPRs) are unforeseen O&M expenses that were never planned, programmed, or budgeted by the State with the ARNG-IES ESS Program for the specific Fiscal Year. UPR requested must follow the same process as UFRs, but with additional justifications as to why the requirements were never planned, programmed, or budgeted.

**Section 408. Appendix Administration.**

Changes to the Appendix terms and conditions will be processed IAW NGR 5-1, Chapter 3

**Section 409. Funding Limitation.**

a. Approved Budget Program (ABP)/ Annual Funding Program (AFP): The total dollar amount that NGB anticipates being available for reimbursement, subject to the availability of funds, to the state for its costs in fulfilling its responsibilities under this Appendix. This amount may be increased or decreased by the ARNG-IES ESS Program Manager during the fiscal year.

b. Total Dollars Obligated: The total amount of funds obligated for NGB's share under this Appendix. Only funds obligated through an executed CA modification to this appendix are available for reimbursement to the State. Funds shall be obligated as received by the Cooperative Agreement (CA) PM.

c. Accomplished as In-Kind Assistance (IKA): The total dollars expended through federal acquisition. This dollar amount may reflect anticipated In-Kind Assistance and be updated as IKA is approved, but as a minimum shall reflect the total dollars accomplished through In-Kind Assistance in support of this Appendix for each fiscal year as it occurs.

d. Due to potential annual technology changes to Appendix 1004 and the Electronic Security Systems (ESS) Risk Management Framework (RMF) cyber security baseline, a multi-year Appendix 1004, for Operation & Maintenance (O&M) funds, can no longer offer a multi-year, modification option. New signatures will be required each year.

<b>1. Fiscal Year 2020:</b>	Approved Budget/(AFP)	Total Dollars Obligated
	\$ _____	\$ _____

Accomplished as In-Kind Assistance \$ \_\_\_\_\_

**Section 410. Electronic Security Systems Maintenance Requirements**

a. The State ESS Lead Technician must provide the State’s Grant Officer Representative (GOR), the following documents/information. This is in order to meet Appendix 1004 specifications for State Reimbursement (SF270) from the Federal QPSM accounts (131G39.1F and 131G39.30).

1) Upon Request - Provide a copy for-record of the State ESS Program Central Monitoring Station System Activity Report from the contracted vendor.

2) Annually – Provide a copy for-record of the State ESS Program Central Monitoring Station Underwriter’s Laboratory (UL) 827 and UL2050 Certificate to show proof of using a verified contracted vendor for monitoring the State Intrusion Detection Systems (IDS).

3) Upon Request - Provide Maintenance Log Records, of serviced ESS equipment, to include Semi-Annual Intrusion Detection System (IDS) Maintenance Reports

4) Monthly – Requests for Appendix 1004 funds to be spent for maintenance of legacy equipment, that ARE NOT on the approved ARNG-IES ESS Program Risk Management Framework (RMF) equipment list, must be submitted by the State with justification to the ARNG-IES ESS Program Manager prior (before) any maintenance/repairs/ replacements are recorded.

5) Upon Request - The State ESS Program Supervisor and/or ESS Lead Technician must provide a list of projects/ actions related to Repair-by-Replacement (Section 405-a-4-g) and Replacement Components (Section 405-a-4-h) to include documentation of pre-approval requests and acceptance by the ARNG-IES ESS Program Manager.

i. If the State ESS Program Supervisor and/or ESS Lead Technician did not submit an advance email request and receive approval from the ARNG-IES ESS Program Manager, for any legacy equipment changes, then said individuals must provide justification to the ARNG-IES ESS Program Manager; funds can be retroactively rejected based on repairs; and the project(s) forced to be paid from ‘other’ O&M FY funds.

6) All ESS installation and maintenance work must be performed by a currently, certified State ESS Technician(s) or Out-Sourced contracted technician(s) from the ARNG-IES ESS Training Facility as per ARNG-IES ESS Program IDS-certified (per AR190-11; AR190-13; and this Appendix 1004).

**Section 411. Agreement Particulars.**

The information below shall be recorded by the Grants Officer's Representative (GOR) for compliance with the reporting requirements of the DoD Assistance Award Action Report System (DAADS) and the Federal Funding Accountability and Transparency Act of 2006, as amended.

- a. Grantee/Recipient Category: Government
- b. Grantee/Recipient Type: State Government
- c. Grantee/Recipient DUNS: 70980243
- d. Primary Place of Performance  
(if different from 'Issued To' on CA Modification Form):  
789 National Guard Road, Colchester, Vermont 05446-3099  
(To include Zip + 4)
- e. Grantee/Recipient County  
(Primary Place of Performance): Chittenden
- f. Grantee/Recipient Congressional District  
(Primary Place of Performance): At large
- g. Major Agency: DOD
- h. Agency Code: 2100
- i. Funding Agency: Army
- j. Program Source Agency: 21
- k. Transaction Type: Cooperative Agreement
- l. CFDA: 12.401
- m. CFDA Program Title: Operation and Maintenance,  
Army National Guard
- n. Program Source Account-Funding: 2065
- o. Treasury Appropriation Code: 2065
- p. Award/Obligation/Action Date: 1 Oct 19
- q. Starting Date: 1 Oct 19
- r. Ending Date: 30 Sep 20
- s. Record Type: Individual Action
- t. Fiscal Year/Quarter: FY20/1<sup>st</sup> Quarter
- u. Unique Federal Award Identification Number (FAIN) W912LN2021004
- v. Approved Budget Amount: 234,400.00
- w. R&D Award (Yes or No) No
- x. Indirect Cost Rate or CPP Rate: 0/n/a

**EXECUTION**

***IN WITNESS WHEREOF: The parties, by their signatures, execute this Appendix and agree to its terms and conditions.***

<p><b>STATE/TERRITORY/ OR DISTRICT OF :</b> <b>VERMONT</b></p> <p><b>BY:</b> _____ <i>GREGORY C. KNIGHT, MAJOR GENERAL THE ADJUTANT GENERAL</i></p> <p>_____ <b>(Date)</b></p>	<p><b>NATIONAL GUARD BUREAU:</b></p> <p><b>BY:</b> _____ <i>JOHN J. ABELING, COLONEL, NGB USPFO for VERMONT</i></p> <p>_____ <b>(Date)</b></p>
<p><b>Approved as Legal Form:</b></p> <p>_____ <i>JACOB A. HUMBERT Assistant Attorney General for Vermont</i></p> <p>_____ <b>(Date)</b></p>	<p><b>Approved as to Legal Form:</b></p> <p>_____ <i>KURT A. KAFFERLIN, Captain, JA - State Judge Advocate</i></p> <p>_____ <b>(Date)</b></p>