

Cyber IST Questions

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Homeland
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Document History

Required Version	Description of Change	Author	Date
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1.0 Background Information

1.1 Primary Cyber or Cyber Security Point of Contact

Include a single Point Of Contact (POC.) Typically this is the primary POC for the company and the 24 hour contact and is the person that will receive the dashboard. On occasion, the Cyber POC will not be the owner / operator.

1.2 Technical Operator Contact that Should Receive Primary Access to the Cyber Survey Dashboard

Please identify the individual that will be the primary user of the dashboard; if applicable, please select the individual that has signed the E&C. This user will be able to create additional users for the site.

1.2 Other Organizations and Visit Participants / Emergency Communications

List all persons contacted during the assessment or that was provided by the owner. If the person participated in the assessment select the box indicating participated in survey.

List all protocols/services that are contacted for emergency communications in an event of an incident or disaster for this site.

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Cyber IST Questions

Primary Cyber or Cyber Security Point of Contact (POC)	
First Name	_____
Last Name	_____
Title	_____
Company/Agency	_____
Phone	Office: _____ Cell: _____
Email	_____
Report to	_____

- Dashboard recipient
 Participated in site visit

Technology Operator Contact (may be different from the Primary Cyber or Cyber Security Point of Contact)	
Same as Primary POC <input type="checkbox"/>	
First Name	_____
Last Name	_____
Title	_____
Company/Agency	_____
Phone	Office: _____ Cell: _____
Email	_____
Report to	_____

- Dashboard recipient
 Participated in site visit

Other Organization Contact or Visit Participant (replicate as needed)	
First Name	_____
Last Name	_____
Company/Agency	_____
Title/Position	_____
Phone	Office: _____ Cell: _____
Email	_____

- Participated in site visit

Emergency Communications

Protocol for Emergency Communications	_____
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2.0 General Information

2.1 What is a Critical Cyber Service?

A basic principle to remember throughout the survey is, “What is a ‘Critical Cyber Service.’” A cyber service is any combination of equipment and devices (hardware); applications and platforms (software), communications, and data that is integrated to provide specific cyber services. A critical cyber service (CCS) is a service that the loss thereof would result in physical destruction, safety, and health effects (e.g., a chemical release or loss of traffic controls), theft of sensitive information that can be exploited, business interruption (e.g., denial of service), or other economic loss to the organization or its customers/users.

Example 1: The SCADA system performing water treatment operations at a water treatment facility.

Example 2: The traffic control operations system that manages transportation lights and cameras for a large city.

Example 3: The centralized network operations serving department and agency level IT services.

Example 4: The management system that handles medical records for a Health Information Exchange.

Example 5: The operations center that supports statewide law enforcement emergency management and coordination.

2.2 Comments and Briefing Notes

Blank areas have been provided for general comments. Consider briefing notes internal use only.. Briefing note areas are for short bullets that the *outbriefer* can use to quickly assemble the out-briefing and should only contain something that could be out-briefed to the facility.

Comment areas are for any comments that may be useful in QA or to explain a checkbox answer more fully. Consider comment areas available to all external users.

Cyber IST Questions

Critical Cyber Service (CCS) Information	
Service Name	_____
Other Service Names/Aliases	Alias: _____
Primary Systems Name	_____
Visit Date(s)	Start Date: _____ End Date: _____
Who Completed This Assessment?	<input type="checkbox"/> Resident CSA <input type="checkbox"/> Non-resident CSA Name: _____ <input type="checkbox"/> Other (e.g., SME) Name: _____
Is This a Multi-site Service?	<input type="checkbox"/> No <input type="checkbox"/> Yes If yes, please describe: _____ If yes, indicate below which CCS location is being evaluated.
Street Address (City, County, State, ZIP Code, Country)	_____
Congressional District	_____
Latitude/Longitude <i>(Decimal format preferred)</i>	Latitude: _____ Longitude: _____
Assessment Motivation <i>(Check all that apply.)</i>	<input type="checkbox"/> Cyber Resilience Review <input type="checkbox"/> RRAP <input type="checkbox"/> Organization request <input type="checkbox"/> Law enforcement request <input type="checkbox"/> Direct threats/suspicious incidents: _____ <input type="checkbox"/> Special event: _____ <input type="checkbox"/> Other: _____

2.3 General Cyber Service Description (For Information Only)

The purpose of this list is to gather information on the organization's specific networks, services, applications, and connections to determine commonalities with other CCSs within the organization.

The purpose of these questions is to gather a general outline of what functions the CCS supports (e.g., Industrial Control, email, billing, or customer service Internet application) and what comprises the Service (e.g., hardware, software, devices, or workstations). Consider the "electronic security perimeter" for the Service, defined as the logical border surrounding a network to which critical cyber assets are connected and for which access is controlled (NERC glossary) and everything that is essential to the reliable operation of the Service. This will establish the CCS for which all other questions will be evaluated.

For example, a SCADA Service may support the monitoring and control of the transmission of electric power within a specific geographic area, including redundant vendor servers, switches, and seven workstations in the company control center, fiber connections to 189 remote terminal units at substations, and limited connections to laptops and business servers, all operating on a specific vendor platform with in-house applications for power flow analysis and predictive planning.

For purposes of this survey the **cyber security budget** should be answered for the normal operations of the Service; not for unusual events or incident response staffing.

Critical Cyber Service (CCS) Information	
General CCS Description:	<p>Check any that apply and provide a short description:</p> <p><input type="checkbox"/> Networks (wireless networks, wired networks, etc.):</p> <p>_____</p> <p>_____</p> <p>_____</p> <p><input type="checkbox"/> Services (computer services, e-mail servers, web servers, control services, etc.):</p> <p>_____</p> <p>_____</p> <p>_____</p> <p><input type="checkbox"/> Applications (computer programs, ERP software, shareware user-added non-company software, etc.):</p> <p>_____</p> <p>_____</p> <p>_____</p> <p><input type="checkbox"/> Connections (VPN access by subcontractors, portable devices connected to organization services, interconnections between networks, connection of a CCS to the Internet, etc.):</p> <p>_____</p> <p>_____</p> <p>_____</p>

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Cyber IST Questions

Critical Cyber Service (CCS) Information	
<p>Which of these cyber systems primarily defines the CCS? <i>(Check one.)</i></p>	<ul style="list-style-type: none"><input type="checkbox"/> Business cyber system(s) that contain sensitive business information, whose exploitation could result in business interruption, economic loss, or theft.<input type="checkbox"/> Business cyber system(s) that manage supply chain, inventory tracking, ordering and/or shipping, whose exploitation could result in the theft or diversion of property, business interruption, or economic loss.<input type="checkbox"/> Business cyber systems that support business functions such as corporate email, payroll, human resources, reporting, scheduling, regulatory and other business-related functions, whose loss or exploitation could result in business interruption or economic loss.<input type="checkbox"/> Internet cyber systems that support business functions, such as ordering, customer support, advertising, interactive business functions, and other business-related public interfaces, whose loss or exploitation could result in business interruption or economic loss.<input type="checkbox"/> Cyber systems that perform physical security functions (e.g., physical intrusion detection services, access control services, camera services and monitoring software), whose loss or exploitation could result in security vulnerabilities, safety and health issues, damage to equipment or property, business interruption, or economic loss.<input type="checkbox"/> Control system(s) that monitor and/or control on-site physical processes or manufacturing services, whose loss or exploitation could result in business interruption, safety and health issues, damage to equipment or property, or economic loss.<input type="checkbox"/> Control system(s) that monitor and/or control remote physical processes or services, whose loss or exploitation could result in business interruption, safety and health issues, damage to equipment or property, or economic loss.<input type="checkbox"/> Data storage system(s) that provide enterprise, backup, or archiving storage for the organization, whose loss could result in business interruption, theft, or economic loss.<input type="checkbox"/> Data storage system(s) that provide enterprise, backup, archiving, or disaster recovery storage for others, whose loss could result in business interruption, theft, or economic loss.<input type="checkbox"/> Other cyber system(s) whose exploitation could result in business interruption, safety and health issues, damage to property, or economic loss.

Cyber IST Questions

Critical Cyber Service (CCS) Information	
<p>Which of the following cyber systems additionally comprise the primary CCS? (Check all that apply.)</p>	<p><input type="checkbox"/> Business cyber system(s) that contain sensitive business information, whose exploitation could result in business interruption, economic loss, or theft.</p> <p><input type="checkbox"/> Business cyber system(s) that manage supply chain, inventory tracking, ordering and/or shipping, whose exploitation could result in the theft or diversion of property, business interruption, or economic loss.</p> <p><input type="checkbox"/> Business cyber systems that support business functions such as corporate email, payroll, human resources, reporting, scheduling, regulatory and other business-related functions, whose loss or exploitation could result in business interruption or economic loss.</p> <p><input type="checkbox"/> Internet cyber systems that support business functions, such as ordering, customer support, advertising, interactive business functions, and other business-related public interfaces, whose loss or exploitation could result in business interruption or economic loss.</p> <p><input type="checkbox"/> Cyber systems that monitor physical security of assets (e.g., intrusion detection services, access control services, camera services and monitoring software), whose loss or exploitation could result in security vulnerabilities, safety and health issues, damage to equipment or property, business interruption, or economic loss.</p> <p><input type="checkbox"/> Control system(s) that monitor and/or control on-site physical processes or manufacturing services, whose loss or exploitation could result in business interruption, safety and health issues, damage to equipment or property, or economic loss.</p> <p><input type="checkbox"/> Control system(s) that monitor and/or control remote physical processes or services, whose loss or exploitation could result in business interruption, safety and health issues, damage to equipment or property, or economic loss.</p> <p><input type="checkbox"/> Data storage system(s) that provide enterprise, backup, or archiving storage for the organization, whose loss could result in business interruption, theft, or economic loss.</p> <p><input type="checkbox"/> Data storage system(s) that provide enterprise, backup, archiving, or disaster recovery storage for others, whose loss could result in business interruption, theft, or economic loss.</p> <p><input type="checkbox"/> Other cyber system(s) whose exploitation could result in business interruption, safety and health issues, damage to property, or economic loss.</p>
<p>How many authorized users/customers have access to this CCS?</p>	<p><input type="checkbox"/> 1 to 500 <input type="checkbox"/> 501 to 5,000 <input type="checkbox"/> 5,001 to 50,000 <input type="checkbox"/> >50,000</p>

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Critical Cyber Service (CCS) Information				
What is the basis of the Cyber Security budget for this CCS?	<input type="checkbox"/> No formal budget is established	<input type="checkbox"/> Strict dollar amount	<input type="checkbox"/> Strict percentage of IT budget	<input type="checkbox"/> Strict percentage of overall budget

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3.0 Cyber Security Management (LEVEL ONE)

For purposes of this evaluation cyber security management includes the leadership roles and responsibilities (e.g., governance), physical documentation, lifecycle tracking, information sharing (e.g., threat information), accreditation, assessment, and audits.

3.1 Cyber Security Leadership (LEVEL TWO)

Cyber security leadership includes roles and responsibilities (e.g., governance), physical documentation, lifecycle tracking, information sharing (e.g., threat information), accreditation, assessment, and audits.

Management may be deemed to a single individual or a department as long as roles and responsibilities are slated to cyber security.

Third-party contracts for cyber management or operational functions includes any/all cyber assessments, cyber documentation, IT audits, and/or additional work that is *not* done by the primary organization.

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Cyber IST Questions

Cyber Security Leadership (LEVEL TWO)	
Is there a manager/department in charge of cyber security management?	<input type="checkbox"/> No <input type="checkbox"/> Yes
If yes, is this the primary function of that manager?	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> N/A
Is there a third-party contract arrangement for primary cyber management and/or operational functions for this CCS? <<Note: If answers to the above two questions are 'Yes,' the best answer here is 'No' .If answer to the first question above is 'No,' the best answer here is 'Yes.'	<input type="checkbox"/> No <input type="checkbox"/> Yes If yes, describe what these responsibilities are: _____
Cyber Security Leadership Briefing Notes: _____	
Cyber Security Leadership Comments: _____	

3.2 Cyber Service Architecture (LEVEL TWO)

3.2.1 Cyber Service Inventory

A critical cyber asset inventory would include at minimum the network addresses, machine names, purpose of each Service and asset owner responsible for each device. It may also include every device with an IP address, including servers, desktops, network equipment (routers, switches, firewalls, etc.), printers, storage area networks, VOIP, multi-homes addresses, virtual addresses, mobile phones, tablets, laptops, and other portable devices that store or process data.

Cyber asset — Programmable electronic devices and communication networks, including hardware, software and data. Data and cabling are considered to exist within the framework of the cyber asset and there are not separate cyber assets.

Network — Information Service(s) implemented with a collection of interconnected components. Such components may include routers, hubs, cabling, telecommunications controllers, key distribution centers, and technical control devices.

Application — Application is digital application software program hosted by an information Service that functions and is operated by means of a computer, with the purpose of supporting functions needed by an asset owner.

Individuals – The key IT and security professionals within the organization. This would include: administrators, users, and third party contractors of the CCS.

For purposes of this evaluation, the review of inventory is the verification and validation of the cyber assets (networks, Services, applications, connections, and individuals). This process can be either manual (checking that the assets are physically there) or automated (computer system has inventory).

For this survey, an identified documented CCS asset security architecture should include all CCS cyber assets. The purpose of these questions are to document the security architecture's approval for additional assets into the architecture document and how frequently it is reviewed and updated.

3.2.2 Enterprise Architecture

A documented system architecture could include the following: routers, switches, computers, servers, firewalls, VPNs, remote desktops, virtual machines, networks, etc.

For the purpose of this survey, system configuration monitoring tools examples are: IBM Tivoli, IBM BigFix, Apache Subversion, & Perforce.

Cyber IST Questions

Cyber Service Architecture (LEVEL TWO)	
Inventory (LEVEL THREE)	
Is there an inventory of all critical cyber assets for this CCS?	<input type="checkbox"/> No <input type="checkbox"/> Yes
If yes, does the inventory include <i>(Check all that apply.)</i>	<input type="checkbox"/> Networks (wireless networks, wired networks, etc.) <input type="checkbox"/> Services (computer services, e-mail servers, web servers, control services, etc.) <input type="checkbox"/> Applications (computer programs, ERP software, shareware user-added non-company software, etc.) <input type="checkbox"/> Connections (VPN access by subcontractors, portable devices connected to organization services, interconnections between networks, connection of a CCS to the Internet, etc.) <input type="checkbox"/> Individuals (e.g., key IT/IT security professionals, including administrators, users, and third-party vendors)
How frequently does the organization review its inventory?	<input type="checkbox"/> Never <input type="checkbox"/> Upon change/continuous <input type="checkbox"/> Annually <input type="checkbox"/> Semiannually <input type="checkbox"/> Quarterly <input type="checkbox"/> At least monthly
Is there a documented security architecture that includes each of the identified CCS assets?	<input type="checkbox"/> No <input type="checkbox"/> Yes
If yes, what protocol best represents what the organization employs to manage the security architecture with respect to asset changes? <i>(Check all that apply.)</i>	<input type="checkbox"/> Documented management approval for introduction of all new non-critical cyber assets <input type="checkbox"/> Documented management approval for introduction of all new critical cyber assets <input type="checkbox"/> Documented management approval for cyber security policy exceptions

Cyber IST Questions

<p>If yes, does the document include any of the following? (Check all that apply.)</p>	<p><input type="checkbox"/> Network Maps or Security Architecture Diagrams</p> <p><input type="checkbox"/> Network nodes/connections</p> <p><input type="checkbox"/> Interfaces/cyber service boundaries (e.g., the electronic perimeter)</p> <p><input type="checkbox"/> Traffic flows (network traffic patterns)</p> <p><input type="checkbox"/> Virtual Local Area Networks (VLANs)</p> <p><input type="checkbox"/> Software</p> <p><input type="checkbox"/> Work flows</p>
<p>How frequently does the organization re-evaluate its security architecture for coverage or inclusion of CCS assets?</p>	<p><input type="checkbox"/> Never</p> <p><input type="checkbox"/> Upon change</p> <p><input type="checkbox"/> Annually</p> <p><input type="checkbox"/> Semiannually</p> <p><input type="checkbox"/> Quarterly</p> <p><input type="checkbox"/> At least monthly</p>
<p>Enterprise Architecture (LEVEL THREE)</p>	
<p>Is the system architecture or configuration documented?</p>	<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p>
<p>If yes, how frequently does the organization review/update this architecture?</p>	<p><input type="checkbox"/> Never</p> <p><input type="checkbox"/> Upon change</p> <p><input type="checkbox"/> Annually</p> <p><input type="checkbox"/> Semiannually</p> <p><input type="checkbox"/> Quarterly</p> <p><input type="checkbox"/> At least monthly</p>
<p>If yes, does the organization use system configuration monitoring tools that measure secure configuration elements and vulnerability information?</p>	<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p>

Cyber IST Questions

If yes, does the organization use system configuration management tools that will automatically enforce and redeploy configuration settings to services at scheduled intervals?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Cyber Service Architecture Notes: _____	
Cyber Service Architecture Comments: _____	

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3.3 Change Management (LEVEL TWO)

3.3.1 Change Management

Change management is the control procedures required to change the baseline configuration of a Service. The baseline configuration is the set of specifications for a Service that has been formally reviewed and agreed on at a given point in time and can be changed only through formal change procedures. Configuration controls include controlling modifications to hardware, firmware, software, and documentation to protect the information Service against improper modifications prior to, during and after Service implementation.

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Cyber IST Questions

Change Management	
<p>Which option best describes the organization's approach to cyber change management (e.g., new hardware/software, employee access)? (Check one.)</p>	<p><input type="checkbox"/> Has revision logs documenting who made the changes to a policy, procedure, plan, inventory or architecture documentation and incorporating a brief synopsis of the change and the corresponding date of those changes; this would include a backout plan.</p> <p><input type="checkbox"/> Has a documented and distributed cyber change management policy and supporting procedures.</p> <p><input type="checkbox"/> Has documented and distributed change management procedures.</p> <p><input type="checkbox"/> Has an ad hoc process for regulating and approving changes.</p> <p><input type="checkbox"/> Does not do change management.</p>
<p>Does the organization use software distribution restrictions (e.g., "white listing technology") to identify approved software that can be installed on the CCS?</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>If yes, how frequently is the list updated?</p> <p><input type="checkbox"/> Never</p> <p><input type="checkbox"/> Upon change</p> <p><input type="checkbox"/> Annually</p> <p><input type="checkbox"/> Semiannually</p> <p><input type="checkbox"/> Quarterly</p> <p><input checked="" type="checkbox"/> At least monthly</p>
<p>Does the Service have a standard for configurations of software to include operating systems?</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes</p>

Cyber IST Questions

<p>What measures does the organization employ to manage the configuration of this CCS? <i>(Check all that apply.)</i></p>	<ul style="list-style-type: none"><input type="checkbox"/> Identifies all hardware and disables all unnecessary elements<input type="checkbox"/> Identifies all software and disables all unnecessary elements<input type="checkbox"/> Identifies all sensitive information<input type="checkbox"/> Identifies all services and disables all unnecessary elements<input type="checkbox"/> Identifies security vulnerabilities<input type="checkbox"/> Identifies and mitigates security vulnerabilities by implementing compensating security controls (e.g. offline)<input type="checkbox"/> Strictly defines standardized service configurations<input type="checkbox"/> Identifies and addresses non-compliant configurations<input type="checkbox"/> Identifies all network communication devices, media, and means and ensures they have appropriate cyber security controls in place.
<p>Change Management Briefing Notes: _____</p>	
<p>Change Management Comments: _____</p>	

3.4 Lifecycle Tracking (LEVEL TWO)

For purposes of this evaluation, a life cycle is defined in the phases of which it passes through initiation, development, operation, and termination.

For purposes of this evaluation, third party vendors and service providers would be any organization outside the evaluated facility that provides service or products to the evaluated facility. (e.g. software, hardware, electricity, water)

The question set referring to procurement and contracting measures refers to the needs of third-party vendor contracts to address certain security requirements and who has oversight of the contracts.

A system that are not or cannot be updated with respect to critical vulnerabilities would be mean: outdated operating system or a business reason – break hardware or software doesn't work.

Proof of cyber security integration into the CCS asset life cycle can be done with certifications, operation plans, implementation procedures, and policies.

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Cyber IST Questions

Lifecycle Tracking	
Does the organization employ measures to address the security of CCS assets throughout their life cycle (inception through disposal)?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Does the organization employ procurement and contracting measures to specify and enforce security requirements for third-party service providers and vendors? (if applicable)	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> N/A
If yes, which approach best describes the procurement and contracting measures? <i>(Check one.)</i> <i>*Amanda – moved around for proper order</i>	<input type="checkbox"/> The organization has a policy that requires third-party agreements to address security requirements, but does not specify security standards. The management and oversight of security is informal and reactive. <input type="checkbox"/> The policy specifies standards outlining security requirements for third-party contracts, using pro-forma, boiler-plate language. The management and oversight of third-party compliance with standards is informal. <input type="checkbox"/> The organization monitors, reviews, and requires third-party compliance with security standards. Management requires ongoing demonstrated compliance with standards before continuing or awarding contracts. Assessments of risks are discussed in ongoing conversations between partners. <input type="checkbox"/> The organization assigns security professionals to review and oversee third-party adherence to security requirements. The vendor periodically reports on their performance towards the security requirements. This third party requirement is uniformly practiced between most third parties and the organization, and all exceptions are documented.
Which approach best describes the cyber security policy in the organization's CCS asset life cycle? <i>(Check one.)</i>	<input type="checkbox"/> Organization integrates cyber security into the CCS asset life cycle (design, procurement, installation, operation, and disposal). <input type="checkbox"/> Organization establishes security requirements for all CCS assets and networks before they are put into operation, and for all operational services and networks throughout their life cycle. <input type="checkbox"/> Organization establishes security requirements for all CCS security assets and networks before they are put into operation, and manages those requirements through change and vulnerability management for all critical operational services and networks throughout their life cycle.
Does the organization employ any of the following security controls to prevent	<input type="checkbox"/> Organization routinely identifies available software security patches and updates.

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malicious code from exploiting the CCS?	<input type="checkbox"/> Organization applies appropriate patches and updates to systems as soon as possible, given critical operational and testing requirements.
Approximately what percentage of CCS systems are not or cannot be updated with respect to critical vulnerabilities? (e.g. outdated or business reason – break software)	<input type="checkbox"/> 75% or more <input type="checkbox"/> $\geq 50\%$ but less than 75% <input type="checkbox"/> $\geq 25\%$ but less than 50% <input type="checkbox"/> $\geq 10\%$ but less than 25% <input type="checkbox"/> less than 10%
If the organization has CCS systems that are not or cannot be updated with respect to critical vulnerabilities, approximately what percentage of these systems have compensating security controls in place?	<input type="checkbox"/> 100% <input type="checkbox"/> $\geq 75\%$ but less than 100% <input type="checkbox"/> $\geq 50\%$ but less than 75% <input type="checkbox"/> $\geq 25\%$ but less than 50% <input type="checkbox"/> $\geq 10\%$ but less than 25% <input type="checkbox"/> less than 10%
Which documents does the organization retain that can demonstrate integration of cyber security into the CCS asset life cycle? (<i>Check all that apply.</i>)	<input type="checkbox"/> Security accreditation/certification <input type="checkbox"/> Requirements analysis <input type="checkbox"/> Acquisition plans and/or procedures <input type="checkbox"/> Implementation plans and/or procedures <input type="checkbox"/> Operations plans and/or procedures <input type="checkbox"/> Change management plans and/or procedures <input type="checkbox"/> Vulnerability management plans and/or procedures
Lifecycle Tracking Briefing Notes: _____	
Lifecycle Tracking Comments: _____	

3.5 Accreditation and Assessment (LEVEL TWO)

Does the facility utilize formal, external cyber-security guidance and standards for identifying and implementing cyber-security controls (management, operational, and technical)? The purpose of capturing accreditation and assessment information is to see if the facility utilizes external standards to develop policies regarding cyber security including policies that affect people, processes, and equipment. This information is to help to compare across sectors and amongst different standards.

The purpose of capturing if an audit or assessment is conducted in accordance with the standard practiced is to benchmark the particular standards and their practiced requirements.

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Cyber IST Questions

Accreditation and Assessment	
<p>Does your organization follow a cyber security standard(s) of practice?</p> <p>Not scored—information only.</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>If yes, which standard(s) of practice do you follow? <i>(Check all that apply.)</i></p> <p><input type="checkbox"/> NIST SP 800 Series</p> <p><input type="checkbox"/> ISO/IEC 27000 Series</p> <p><input type="checkbox"/> CObit</p> <p><input type="checkbox"/> ITIL</p> <p><input type="checkbox"/> HITRUST</p> <p><input type="checkbox"/> ISF Standard of Good Practice (SOGP)</p> <p><input type="checkbox"/> NERC CIP</p> <p><input type="checkbox"/> FIPS 199</p> <p><input type="checkbox"/> HIPAA</p> <p><input type="checkbox"/> NIST Cyber Security Framework</p> <p><input type="checkbox"/> Other _____</p> <p><<Suggestion from panel member add: Canada PEPIDA/European Safe Harbor>></p>
<p>If yes, a standard of accreditation is required for: <i>(Check all that apply.)</i></p> <p>Not scored—information only.</p>	<p><input type="checkbox"/> Business requirements</p> <p><input type="checkbox"/> Legislative or regulatory requirements</p> <p><input type="checkbox"/> Contractual requirements</p> <p><input type="checkbox"/> Organization policy</p>
<p>If yes, is audit required against the standards?</p> <p>Not scored—information only.</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes</p>
<p>Does the organization conduct cyber security vulnerability/risk assessments to identify potential</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes</p>

Cyber IST Questions

<p>vulnerabilities of the CCS assets and networks?</p> <p><<Suggestion that the question delete 'risk' and only refer to vulnerability assessments.</p>	
<p>If yes, is this done to meet the standard of accreditation required above?</p> <p>Not scored—information only.</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes</p>
<p>If yes, how often does the organization conduct these assessments? <i>(Check one.)</i></p>	<p><input type="checkbox"/> Monthly <input type="checkbox"/> Quarterly <input type="checkbox"/> Annually <input type="checkbox"/> Every two years</p> <p><input type="checkbox"/> More than two years between assessments</p>
<p>In what ways are the CCS assets assessed? <i>(Check all that apply.)</i></p>	<p><input type="checkbox"/> Internal vulnerability testing <input type="checkbox"/> External vulnerability testing <input type="checkbox"/> Internal vulnerability and penetration testing</p> <p><input type="checkbox"/> External vulnerability and penetration testing <input type="checkbox"/> Documentation review (tabletop) <input type="checkbox"/> Manual checklist</p>
<p>Are cyber security assessment results reported to a broader segment of senior management than IT Security?</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>If yes, describe how: _____</p>
<p>Accreditation and Assessment Briefing Notes: _____</p>	
<p>Accreditation and Assessment Comments: _____</p>	

3.6 Cyber Security Plan (LEVEL TWO)

Organizations must develop, document, update, and implement: the security plans or the planned security plans for organizational information Services that describe the security controls to be in place and the rules of behavior for individuals accessing the information Services.

3.6.1 Does the Organization have a Cyber Security Plan?

The best answer to this question should be “YES” if the facility has documentation that addresses cyber security or cyber service continuity. A cyber service involves addressing continuity of operations, business continuity, cyber disaster recovery, etc. These plans may exist separately or could be included in the organizations overall plans but should address cyber specifically.

3.6.2 Are Personnel Trained on the Plan?

The intent of this question is to capture if the personnel know the plan and its content (procedures), and their role in the case of an incident. They should be well versed with this material and have regular refresher courses.

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Cyber IST Questions

Cyber Security Plan (LEVEL TWO)	
<p>Is there a Cyber Security Plan covering this CCS?</p>	<p> <input type="checkbox"/> No <input type="checkbox"/> Yes </p> <p>If yes,</p> <p>The plan is developed at the (Check all that apply):</p> <p> <input type="checkbox"/> Management level (e.g. managers, senior management) <input type="checkbox"/> Operational unit level (e.g. IT administrators) <input type="checkbox"/> Service level (e.g. users) </p> <p>Has the plan been approved by a broader segment of senior management than IT Security?</p> <p> <input type="checkbox"/> No <input type="checkbox"/> Yes </p> <p>Does a Federal, state, or local regulation or organizational policy require the plan?</p> <p> <input type="checkbox"/> No <input type="checkbox"/> Yes </p> <p>Are key cyber personnel aware of, trained on, and have access to a copy of the plan?</p> <p> <input type="checkbox"/> No <input type="checkbox"/> Yes </p>
<p>Does the Cyber Security Plan address: (Check all that apply.)</p>	<p> <input type="checkbox"/> Identification and classification of critical cyber services/assets <input type="checkbox"/> Access control policies <input type="checkbox"/> Cyber security roles and responsibilities <input type="checkbox"/> Cyber security training <input type="checkbox"/> Audit trails <input type="checkbox"/> Disposal of protected assets <input type="checkbox"/> Security/vulnerability testing <input type="checkbox"/> Cyber security awareness <input type="checkbox"/> Security Event Monitoring <input type="checkbox"/> Physical security of critical cyber services/assets </p>

Cyber IST Questions

<input type="checkbox"/> Firewalls
<input type="checkbox"/> Electronic communications
<input type="checkbox"/> Mobile devices
<input type="checkbox"/> Media
<input type="checkbox"/> Remote access
<input type="checkbox"/> Wireless access
<input type="checkbox"/> Security patches or updates
<input type="checkbox"/> Incident Response/Management
<input type="checkbox"/> Unauthorized access
<input type="checkbox"/> Denial of service
<input type="checkbox"/> Malicious code
<input type="checkbox"/> Improper usage
<input type="checkbox"/> Scans/probes/attempted access
<input type="checkbox"/> Disaster recovery
<input type="checkbox"/> Data backup and recovery
<input type="checkbox"/> Availability of alternative site
<input type="checkbox"/> None of the above

Cyber IST Questions

<p>On what basis is the plan reviewed and revised? <i>(Check all that apply.)</i></p>	<p><input type="checkbox"/> Never</p> <p><input type="checkbox"/> After incidents</p> <p><input type="checkbox"/> Upon introduction of new regulations</p> <p><input type="checkbox"/> After business changes</p> <p><input type="checkbox"/> Upon major operational environment changes</p> <p><input type="checkbox"/> Annually</p>
<p>Cyber Security Plan Briefing Notes: _____</p>	
<p>Cyber Security Plan Comments: _____</p>	

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3.7 Cyber Security Exercises (LEVEL TWO)

For purposes of the cyber security exercise questions, if none of the suggested purposes provided are marked, it is assumed that cyber security exercises are done for compliance reasons only.

For purposes of this evaluation, the distinction between tabletop, functional, and full scale exercises are as follows:

Tabletop - practical or simulated exercise typically talked about but not executed in production.

Functional - specialized exercise typically in a specific area that can be an isolated event

Full scale - simulated or actual event typically consuming the entire organization to practice

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Cyber Security Exercises (LEVEL TWO)	
<p>Does the organization conduct cyber security exercises?</p>	<p> <input type="checkbox"/> No <input type="checkbox"/> Yes </p> <p>If yes, for what purpose(s)? <i>Check all that apply.</i></p> <p> <input type="checkbox"/> Cyber awareness <input type="checkbox"/> Service testing <input type="checkbox"/> Continuity planning <input type="checkbox"/> Disaster recovery <input type="checkbox"/> Incident preparedness <input type="checkbox"/> Threat and incident coordination <input type="checkbox"/> Partner readiness </p> <p>If yes, these exercises are:</p> <p> <input type="checkbox"/> Tabletop without external participants (practical or simulated exercise) <input type="checkbox"/> Tabletop with external participants (e.g., vendors, cyber contractors, regulatory agencies, or CIP providers) <input type="checkbox"/> Functional without external participants (specialized exercise) <input type="checkbox"/> Functional with external participants (e.g., vendors, cyber contractors, regulatory agencies, or CIP providers) <input type="checkbox"/> Full scale without external participants (simulated or actual event) <input type="checkbox"/> Full scale with external participants (e.g., vendors, cyber contractors, regulatory agencies, or CIP providers) </p> <p>If yes, how often are exercises conducted?</p> <p> <input type="checkbox"/> Greater than one year <input type="checkbox"/> Annually <input type="checkbox"/> Semiannually <input type="checkbox"/> Quarterly <input type="checkbox"/> Monthly </p> <p>If yes, are exercise results documented, approved and reported to a broader segment of senior management than IT Security?</p> <p> <input type="checkbox"/> No <input type="checkbox"/> Yes </p>

3.8 Information Sharing (LEVEL TWO)

3.8.1 Does the Facility Report Cyber-Security Incidents to Outside Organization?

Organizations have varying criteria for declaring a cyber security incident. However, in general terms, a cyber security incident is an event that violates written or implied security policies. Depending on the organization, examples might include spear phishing campaigns, stolen data, and denial service attacks.

The purpose of validation back to the organization is to allow for better reporting standards. A “Yes” answer means the organization refers back to the document owner providing some feedback that this information was helpful or not to them. A “No” answer means the organization does not give any feedback to originating organization.

3.8.2 Does the Organization Notify or Communicate Security Information to Personnel?

A “No” response means that no security information is communicated to company personnel (e.g., no additional information other than emergency plan information - evacuation or fire drill information). Specific security incident information is for an actual security incident (e.g., suspicious people have been observed around the organization back doors, a change in NTAS level, or how to thwart known attempts at hacking the company cyber servers).

External Information Sharing (LEVEL THREE)	
<p>Does the organization receive threat information, cyber-security-related bulletins, advisories, and/or alerts from an external source?</p>	<p> <input type="checkbox"/> No <input type="checkbox"/> Yes </p> <p>If yes, from whom?</p> <p> <input type="checkbox"/> DHS entities <input type="checkbox"/> FBI entities <input type="checkbox"/> Vendors/industry Which one(s)? _____ Is it sector-based (e.g. Industry ISACs)? <input type="checkbox"/> No <input type="checkbox"/> Yes </p> <p> <input type="checkbox"/> State or local law enforcement department(s) <input type="checkbox"/> Fusion Centers <input type="checkbox"/> Other Which one(s)? _____ </p> <p>If yes, how often does the organization receive and process this information?</p> <p> <input type="checkbox"/> Monthly <input type="checkbox"/> Weekly <input type="checkbox"/> Daily/Continuously </p> <p>If yes, does the organization provide any feedback or validation to the originating organization?</p> <p> <input type="checkbox"/> No <input type="checkbox"/> Yes </p>
<p>Does the organization receive vulnerability information, cyber-security-related bulletins, advisories, and/or alerts from an external source?</p>	<p> <input type="checkbox"/> No <input type="checkbox"/> Yes </p> <p>If yes, from whom?</p> <p> <input type="checkbox"/> DHS entities <input type="checkbox"/> FBI entities <input type="checkbox"/> Vendors/industry Which one(s)? _____ Is it sector based (e.g. Industry ISACs)? <input type="checkbox"/> No <input type="checkbox"/> Yes </p> <p> <input type="checkbox"/> State or local law enforcement department(s) <input type="checkbox"/> Fusion Centers <input type="checkbox"/> Other Which one(s)? _____ </p>

Cyber IST Questions

External Information Sharing (LEVEL THREE)	
	<p>If yes, how often do you receive and process this information?</p> <p><input type="checkbox"/> Monthly</p> <p><input type="checkbox"/> Weekly</p> <p><input type="checkbox"/> Daily/Continuously</p> <p>If yes, does the organization provide any feedback or validation to the originating organization?</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p>
<p>Does the organization report cyber-security incidents to outside organizations?</p>	<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p> <p>If yes, for what purpose(s) do you make such reports? (Check all that apply.) <i>Not scored—information only.</i></p> <p><input type="checkbox"/> Request technical assistance (U.S. CERT, IRT teams, etc.)</p> <p><input type="checkbox"/> Request incident management support</p> <p><input type="checkbox"/> Regulatory (e.g., NERC CIP)</p> <p><input type="checkbox"/> Information sharing (e.g., U.S. Cert, state computer security incident response teams, fusion centers)</p> <p><input type="checkbox"/> Law enforcement (e.g., FBI, USSS, state/local police)</p> <p>Describe: _____</p>
<p>Does the organization share cyber-security information with outside organizations?</p>	<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p> <p>If yes, what information is shared?</p> <p><input type="checkbox"/> Suspicious-activity reports</p> <p><input type="checkbox"/> Threat analysis</p> <p><input type="checkbox"/> Vulnerability analysis</p> <p><input type="checkbox"/> Subset of information reporting</p> <p><input type="checkbox"/> Confirmed incidents</p> <p><input type="checkbox"/> Status and configuration of security controls</p>
<p>Does anyone from the organization actively participate in local or regional cyber security forums (e.g., exchange of lessons learned, best practices, training)?</p>	<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p> <p>If yes, please list and describe.</p> <p><input type="checkbox"/> Sector-specific information sharing and analysis centers Which one(s)? _____</p> <p><input type="checkbox"/> Sector-related associations/partnerships Which one(s)? _____</p>

External Information Sharing (LEVEL THREE)	
	<p><input type="checkbox"/> Federal or State-led partnerships (e.g., FBI InfraGard chapter[s]) Which ones? _____</p> <p><input type="checkbox"/> Fusion center(s) Which one(s)? _____</p> <p><input type="checkbox"/> State or local law enforcement department(s) Which one(s)? _____</p> <p><input type="checkbox"/> Federal law enforcement department(s) Which one(s)? _____</p> <p><input type="checkbox"/> State or local cyber office(s) Which one(s)? _____</p> <p><input type="checkbox"/> Other(s) Describe: _____</p>

Internal Information Sharing (LEVEL THREE)	
<p>Does the organization notify or communicate cyber security information to personnel?</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>If yes, what type of personnel? <i>(Check all that apply.)</i></p> <p><input type="checkbox"/> Corporate officers <input type="checkbox"/> Cyber teams/Incident Management teams <input type="checkbox"/> Managers <input type="checkbox"/> Users</p> <p>If yes, what type of information? <i>(Check all that apply.)</i></p> <p><input type="checkbox"/> Specific security incident information <input type="checkbox"/> General security awareness <input type="checkbox"/> Crisis and emergency information <input type="checkbox"/> Threat information</p> <p>What methods are used to communicate? <i>(Check all that apply.)</i></p> <p><input type="checkbox"/> Recurring meetings <input type="checkbox"/> Email communications <input type="checkbox"/> Web-based training <input type="checkbox"/> Phone communications</p> <p>For what purpose? <i>(Check all that apply.)</i></p> <p><input type="checkbox"/> To build a common operating procedure <input type="checkbox"/> For security awareness</p>

Internal Information Sharing (LEVEL THREE)	
	<input type="checkbox"/> Other: _____ Describe: _____

Information Sharing Briefing Notes: _____
Information Sharing Comments: _____

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4 Cyber Security Forces (LEVEL ONE)

4.1 Personnel (LEVEL TWO)

****Make a note about the positions****

4.1.1 Are Background Checks Conducted?

It is understood that there may be limitations to background checks in some states or for foreign contractors. The intent of the question is to determine if there is a process for background checks. Often background checks are a reasonable action to dissuade insider threats or to ensure effective hiring practices. If foreign contractors do not have background checks, but are allowed to be in the facility without restrictions, then do not select contractors/support functions.

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Cyber IST Questions

Personnel	
<p>Are the following positions formalized within your organization? (Check all that apply.)</p>	<p><input type="checkbox"/> Cyber Security Policy and Planning Coordinator</p> <p><input type="checkbox"/> Cyber Security Training Official</p> <p><input type="checkbox"/> Cyber Security Incident Response Team Lead/Incident Commander</p> <p><input type="checkbox"/> CERT Staff/Triage Staff (Incident Responder)</p> <p><input type="checkbox"/> Cyber Security Exercise Official</p> <p><input type="checkbox"/> Security Operations Personnel (i.e., Security Administrators, Security Analysts)</p> <p><input type="checkbox"/> Cyber Security Threat Coordinator</p> <p><input type="checkbox"/> IT Controls and Compliance Staff</p> <p><input type="checkbox"/> Security Architect</p> <p><input type="checkbox"/> Application Administrator</p>
<p>Do you have a policy that authorizes and holds accountable the personnel having these assignments?</p>	<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> N/A</p>
<p>Are background checks conducted for organizational and supporting personnel?</p>	<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p> <p>If yes, on whom are background checks conducted?</p> <p>Organizational cyber security personnel</p> <p><input type="checkbox"/> No</p> <p><input checked="" type="checkbox"/> Yes</p> <p>If yes, are recurring background checks conducted?</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p> <p>Contract cyber security personnel</p> <p><input type="checkbox"/> N/A</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p> <p>If yes, are recurring background checks conducted?</p> <p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p> <p>Cyber vendors</p> <p><input type="checkbox"/> N/A</p>

Cyber IST Questions

<input type="checkbox"/> No <input type="checkbox"/> Yes If yes, are recurring background checks conducted? <input type="checkbox"/> No <input type="checkbox"/> Yes

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4.2 Cyber Security Training (LEVEL TWO)

Cyber security training has become policy in most organizations but the standards used are different among each organization. This cyber security training question set is here to understand what the median is for type, frequency, and purpose of these training program practices.

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Cyber IST Questions

Training (LEVEL TWO)	
<p>Do cyber security personnel involved in day-to-day operations receive cyber training?</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>If yes,</p> <p>Training programs are: <i>(Check all that apply)</i></p> <p><input type="checkbox"/> Industry-recognized certification <input type="checkbox"/> Formal <input type="checkbox"/> In-house/informal <input type="checkbox"/> Video <input type="checkbox"/> Web-based <input type="checkbox"/> OJT (on-the-job training)</p> <p>Frequency of continuation/refresher training:</p> <p><input type="checkbox"/> Never <input type="checkbox"/> Annually <input type="checkbox"/> Semiannually <input type="checkbox"/> Quarterly <input type="checkbox"/> Monthly <input type="checkbox"/> Weekly</p> <p>Are personnel formally trained in the following areas? <i>(Check all that apply.)</i></p> <p><input type="checkbox"/> Business continuity/disaster recovery <input type="checkbox"/> Training (e.g., user training, train-the-trainer) <input type="checkbox"/> Server administration <input type="checkbox"/> Network administration <input type="checkbox"/> Contingency <input type="checkbox"/> Threat analysis <input type="checkbox"/> Risk management</p> <p>If yes, how often?</p> <p><input type="checkbox"/> Only following an incident <input type="checkbox"/> Greater than one year <input type="checkbox"/> Annually <input type="checkbox"/> Semiannually <input type="checkbox"/> Quarterly <input type="checkbox"/> Monthly</p>
<p>Are cyber personnel trained on the cyber security plan?</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes</p>

Cyber IST Questions

<p>Has the organization established and documented a minimum level of training, education and/or experience required for cyber security personnel?</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>If yes, how is fulfillment of the requirement(s) evidenced? <i>(Check all that apply.)</i></p> <p><input type="checkbox"/> Current professional certification <input type="checkbox"/> Information security degree <input type="checkbox"/> Previous work experience <input type="checkbox"/> Position description and/or performance monitoring <input type="checkbox"/> Human resources file of professional development and performance management</p>
<p>Does the organization track the training as part of the performance monitoring process?</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes</p>
<p>Training Briefing Notes: _____</p>	
<p>Training Comments: _____</p>	

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5 Cyber Security Controls (LEVEL ONE)

5.1 Identification, Authentication, and Authorization Controls (LEVEL TWO)

The purpose of this question set is to find the basis of authentication and authorization controls used on the CCS within the evaluated organization. Common practices such as administrator privileges, user privileges, and password management are assessed.

For purposes of this evaluation, identity proofing is divided into 5 categories: risk-based, controls-based, best-practices, vendor-based, some other basis.

Risk-based is a non-static authentication system which takes into account the profile of a user requesting access to system. An example is asking additional security question if they login from a different computer or IP.

Controls-based is an approach that restricts system access to authorized users. This means that users have to authenticate based on their roles and they are only deemed their privileges based off what they need.

Best-practices is an example of authentication such as two-step verification. Using RSA keys and Cryptocards are examples of second steps of verification. Another example is that DISA produces a STIG and most government institutions follow that STIG.

Vendor-based example is: Microsoft recommends that a virus scanner is needed.

The term “Some other basis” will be the catch all.

Cyber IST Questions

Identification, Authentication, and Authorization Controls (LEVEL TWO)	
<p>Has the organization established a process for identity proofing and authentication to limit access to the CCS to only authorized persons?</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes</p>
<p>If yes, what is the basis for establishing identity proofing and authentication? (Check all that apply.)</p>	<p><input type="checkbox"/> Risk-based <input type="checkbox"/> Controls-based <input type="checkbox"/> Best-practice-based e.g., RSA</p> <p><input type="checkbox"/> Vendor-based <input type="checkbox"/> Some other basis (e.g. management judgment)</p>
<p>If yes, for whom has the organization implemented these specific identity proofing and authentication processes? (Check all that apply.)</p>	<p><input type="checkbox"/> CCS users <input type="checkbox"/> Administrators <input type="checkbox"/> Contractors (if applicable) <input type="checkbox"/> Vendors (if applicable)</p>
<p>Does the organization practice the concept of least privileges (i.e., users are only granted access to the information, files, and applications required to fulfill their roles and responsibilities)?</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes</p>
<p>If yes, which of the following measures does the organization employ to control least privileges? (Check all that apply.)</p>	<p><input type="checkbox"/> Access control list based upon information available, confidentiality and integrity requirements.</p> <p><input type="checkbox"/> Access control list based upon functional isolation requirements.</p> <p><input type="checkbox"/> Data loss prevention technology.</p> <p><input type="checkbox"/> Management review of access privileges per level at least annually.</p> <p><input type="checkbox"/> All user accounts have an expiration date.</p> <p><input type="checkbox"/> All user accounts are audited and event logged.</p> <p><input type="checkbox"/> Accounts are unique to individuals or functions.</p> <p><input type="checkbox"/> An established functional or business requirement.</p> <p><input type="checkbox"/> Rights can be temporarily suspended.</p>

Cyber IST Questions

<p>If yes, which of the following measures does the organization employ to control administrator privileges? <i>(Check all that apply.)</i></p>	<p><input type="checkbox"/> Rights are granted on a temporary basis for specific functions.</p> <p><input type="checkbox"/> All user accounts with administrator privileges are approved by management.</p> <p><input type="checkbox"/> All users with administrator privileges are trained on cyber security requirements.</p> <p><input type="checkbox"/> All accounts with administrative-level access are centrally logged and audited.</p>
<p>Is username/password the primary means of user authentication to the CCS? <i>(Check only one.)</i></p>	<p><input type="checkbox"/> Yes</p> <p><input type="checkbox"/> No</p>
<p>If yes, which of the following password management policies are implemented for the CCS? <i>(Check all that apply.)</i></p>	<p><input type="checkbox"/> Organization enforces a complexity and length requirement on the password.</p> <p><input type="checkbox"/> Organization enforces a reuse policy on passwords forbidding the use of recently used of passwords.</p> <p><input type="checkbox"/> Organization enforces 1 time hashed based passwords.</p> <p><input type="checkbox"/> Organization disallows shared passwords forcing each user and service to have its own username/password.</p> <p><input type="checkbox"/> No password management policies exist</p>
<p>What additional properties of authentication are employed for the critical cyber service?</p>	<p><input type="checkbox"/> Central notification/logging of failed logins</p> <p><input type="checkbox"/> Additional layers of authentication (e.g., sequential)</p> <p><input type="checkbox"/> Account lock-out (after a defined number of failures)</p> <p><input type="checkbox"/> Unique forms of authentication (includes multiple-factors)</p>
<p>If the primary means of authentication failed, has the organization determined that compensating controls would provide sufficient authentication?</p>	<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p>
<p>Does the organization have a protocol for removing, suspending or modifying user accounts upon change of employment?</p>	<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p>
<p>If yes, when is a user account modified,</p>	<p><<Suggestion for future: De-activated or deleted prior to the organization notifying the user of an adverse human resources action</p>

Cyber IST Questions

<p>deleted, or de-activated?</p> <p>*Amanda – switched for proper order</p>	<ul style="list-style-type: none"> <input type="checkbox"/> De-activated or deleted no later than close of business on the day when organization notifies user of an adverse human resources action (e.g. being fired, layoff) <input type="checkbox"/> De-activated or deleted no later than close of business on the day when user leaves organization as a result of an adverse human resources action (e.g. being fired) <input type="checkbox"/> De-activated or deleted more than one business day after user leaves organization as a result of an adverse human resources action <input type="checkbox"/> De-activated or deleted no later than one week after user leaves organization <input type="checkbox"/> De-activated or deleted more than one week after user leaves organization <input type="checkbox"/> Modified no later than one business day after user notifies the organization of a change in role <input type="checkbox"/> Modified no later than one business day after user transfers into new role <input type="checkbox"/> Modified no later than one week after user transfers into new role <input type="checkbox"/> Modified more than one week after user transfers into new role
<p>Does the organization have a protocol for monitoring user activity after changes in employment related to termination?</p>	<ul style="list-style-type: none"> <input type="checkbox"/> No <input type="checkbox"/> Yes <p>Does the organization monitor user activity following notification of employee change up to termination?</p> <ul style="list-style-type: none"> <input type="checkbox"/> No <input type="checkbox"/> Yes <p>Does the organization monitor user activity following employee termination?</p> <ul style="list-style-type: none"> <input type="checkbox"/> No <input type="checkbox"/> Yes <p>Does the organization review historic activity for a period of time prior to the notification?</p> <ul style="list-style-type: none"> <input type="checkbox"/> No <input type="checkbox"/> Yes
<p>Identification and Authentication Briefing Notes: _____</p>	
<p>Identification and Authentication Comments: _____</p>	

5.2 Access Controls (Level Two)

5.2.1 Unauthorized Access

An individual gains logical or physical access without permission to a network, Service, application, data, or other resource.

5.2.5 Remote Access

Remote Access allows connectivity to the internal network from the outside. User controls can include only allowing designated users to connect remotely, vs. all users; use of secure tokens; changing default passwords on remote devices; etc.

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Cyber IST Questions

Access Control (LEVEL TWO)	
Access Paths (LEVEL THREE)	
Has the organization established a business requirement for every access path to/from the CCS?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Does the organization implement security controls to limit access across the documented boundaries (e.g., firewalls, IDS port security, or rules of behavior)?	<input type="checkbox"/> No <input type="checkbox"/> Yes
If yes, does the CCS benefit from access control device(s) that restrict incoming and/or outgoing connections between the CCS and the Internet? (Check all that apply.)	<input type="checkbox"/> CCS benefits from access control device(s) that restrict incoming Internet connections. <input type="checkbox"/> CCS benefits from access control device(s) that restrict outgoing Internet connections.
If yes and applicable, does the CCS benefit from access control device(s) that restrict incoming and/or outgoing connections between the CCS and a non-critical system that is connected to the Internet? (Check all that apply.)	<input type="checkbox"/> CCS benefits from firewall(s) that restrict incoming connections to critical systems. <input type="checkbox"/> CCS benefits from firewall(s) that restrict outgoing connections from critical systems.
Which of the following security measures does the organization employ for preventing exploitation of access paths? (Check all that apply.)	<input type="checkbox"/> Inspection of inbound data communications <input type="checkbox"/> Inspection of outbound data communications <input type="checkbox"/> Policy- or rule-based data communications filtering/blocking <input type="checkbox"/> External source/destination filtering <input type="checkbox"/> Portable storage device/media data communications controls <input type="checkbox"/> Detection and/or controls of unmanaged devices (non-organization-owned laptops, smartphones, etc.)
Remote Access Controls (LEVEL THREE)	
Does the organization allow remote access to critical cyber services/assets? (No is best answer.)	<input type="checkbox"/> No <input type="checkbox"/> Yes

Cyber IST Questions

<p>Which of the following measures does the organization employ to control remote access to the organization's cyber services?</p>	<ul style="list-style-type: none"><input type="checkbox"/> Terms-of-use policies regarding user responsibilities and expected behavior<input type="checkbox"/> Terms-of-use policies regarding service usage<input type="checkbox"/> Terms-of-use policies regarding allowed and/or prohibited activities<input type="checkbox"/> Access allowed only when needed, requested and authorized but disabled otherwise<input type="checkbox"/> Remote-client filtering<input type="checkbox"/> Multi-factor authentication<input type="checkbox"/> Mandatory communications encryption<input type="checkbox"/> Multiple session controls<input type="checkbox"/> Session monitoring<input type="checkbox"/> Session timeout
<p>Access Controls Briefing Notes: _____</p>	
<p>Access Controls Comments: _____</p>	

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5.3 Cyber Security Measures (LEVEL TWO)

5.2.3 Malicious Code

Successful installation of malicious software (e.g., virus, worm, Trojan horse, or other code-based malicious entity) that infects an operating Service or application.

5.2.x Improper usage:

a person violates acceptable computing use policies.

EVENT LOGGING: For purposes of this evaluation, event logging is log retention of services such as networks, endpoints, applications, etc.

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Monitoring and Scanning (LEVEL THREE)	
<p>Which of the following cyber security measures does the organization employ for monitoring of networks related to the CCS? <i>(Check all that apply.)</i></p>	<p><input type="checkbox"/> Near-real-time monitoring for malicious code</p> <p><input type="checkbox"/> Near-real-time monitoring for unauthorized access</p> <p><input type="checkbox"/> Near-real-time monitoring for unauthorized software</p> <p><input type="checkbox"/> Near-real-time network boundary intrusion detection</p> <p><input type="checkbox"/> Near-real-time network boundary traffic monitoring</p> <p><input type="checkbox"/> Near-real-time host intrusion monitoring</p> <p><input type="checkbox"/> Automated security event response and alerting</p> <p><input type="checkbox"/> Automated security event alerting</p> <p><input type="checkbox"/> Manual, non-real-time network monitoring based on audit logs</p>
<p>For what purpose does the organization perform monitoring? <i>(Check all that apply.)</i></p>	<p><input type="checkbox"/> Problem identification</p> <p><input type="checkbox"/> Performance monitoring</p> <p><input type="checkbox"/> Configuration control</p> <p><input type="checkbox"/> Data Loss monitoring</p> <p><input type="checkbox"/> Threat monitoring</p>
Malicious Code Controls (LEVEL THREE)	
<p>Does the organization employ any of the following security controls to prevent malicious code from exploiting the CCS? <i>(Check all that apply.)</i></p>	<p><input type="checkbox"/> Up-to-date real-time, host-based anti-virus/malware software to prevent malicious code from exploiting CCSs</p> <p style="margin-left: 20px;"><input type="checkbox"/> Signature-based</p> <p style="margin-left: 20px;"><input type="checkbox"/> Heuristics-based</p> <p style="margin-left: 20px;"><input type="checkbox"/> Anomaly-based</p> <p><input type="checkbox"/> Network- or gateway-based malware scanning to prevent malicious code from exploiting CCSs</p> <p style="margin-left: 20px;"><input type="checkbox"/> Signature-based</p> <p style="margin-left: 20px;"><input type="checkbox"/> Heuristics-based</p> <p style="margin-left: 20px;"><input type="checkbox"/> Anomaly-based</p>
Security and Event Log (LEVEL THREE)	
<p>Does the organization maintain security and event logs?</p>	<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p> <p>If yes,</p> <p><input type="checkbox"/> There is a log retention policy.</p> <p><input type="checkbox"/> Logs are maintained in a standardized format.</p> <p><input type="checkbox"/> Logs are archived.</p>
<p>Are logs reviewed for anomalies either in a</p>	<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p>

Cyber IST Questions

<p>manual or automated fashion?</p>	
<p>What types of logs are <i>manually</i> reviewed for unauthorized activities? (Check all that apply.)</p>	<p><input type="checkbox"/> Services (network daemons, etc.)</p> <p><input type="checkbox"/> Applications</p> <p><input type="checkbox"/> Firewall logs</p> <p><input type="checkbox"/> Communication devices, e.g., routers and switches</p> <p><input type="checkbox"/> Servers</p> <p><input type="checkbox"/> Endpoint devices</p> <p><input type="checkbox"/> No service logs are reviewed by operators.</p> <p><input type="checkbox"/> Other: _____</p>
<p>What types of logs are <i>automatically</i> reviewed for unauthorized activities? (Check all that apply.)</p>	<p><input type="checkbox"/> Services (network daemons, etc.)</p> <p><input type="checkbox"/> Applications</p> <p><input type="checkbox"/> Firewall logs</p> <p><input type="checkbox"/> Communication devices, e.g., routers and switches</p> <p><input type="checkbox"/> Servers</p> <p><input type="checkbox"/> Endpoint devices.</p> <p><input type="checkbox"/> No service logs are reviewed</p> <p><input type="checkbox"/> Other: _____</p>
<p>What is the <i>manual</i> review frequency for each type of log indicated above? (Check one.)</p>	<p><input type="checkbox"/> Greater than one year</p> <p><input type="checkbox"/> Annually</p> <p><input type="checkbox"/> Semiannually</p> <p><input type="checkbox"/> Quarterly</p> <p><input type="checkbox"/> Monthly</p> <p><input type="checkbox"/> Weekly</p> <p><input type="checkbox"/> Daily</p>
<p>What is the <i>automatic</i> review frequency for each type of log</p>	<p><input type="checkbox"/> Weekly</p>

Cyber IST Questions

indicated above? (Check one.)	<input type="checkbox"/> Daily <input type="checkbox"/> Continuous
Are logs correlated with scans, assessments, audits, and other security controls?	<input type="checkbox"/> No <input type="checkbox"/> Yes If yes, describe how: _____
Are reports generated from anomalies identified in logs?	<input type="checkbox"/> No <input type="checkbox"/> Yes If yes, describe how: _____
Monitoring and Scanning Briefing Notes: _____	
Monitoring and Scanning Comments: _____	

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5.4 Information Protection (LEVEL TWO)

INFORMATION PROTECTION (SENSITIVE INFO): For purposes of this evaluation, information protection for sensitive information is sought to find out that it is identified and properly managed.

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Cyber IST Questions

Information Protection	
Is sensitive information (e.g., network diagrams, CCS inventories) identified and categorized?	<input type="checkbox"/> No <input type="checkbox"/> Yes
How is sensitive information managed? <i>(Check all that apply.)</i>	<input type="checkbox"/> Secure storage (Encrypted while at rest) <input type="checkbox"/> Limited access (password-protected) <input type="checkbox"/> Role-based access <input type="checkbox"/> Adequately destroyed (e.g., e-shredding, secure delete) <input type="checkbox"/> Protective markings <input type="checkbox"/> Secure transmission (encrypted in flight) <input type="checkbox"/> Archived and/or backed up
If sensitive information is archived and/or backed up offline, how often are backups performed?	<input type="checkbox"/> Monthly <input type="checkbox"/> Weekly <input type="checkbox"/> Daily
Is real-time replication occurring to a different site or piece of hardware?	<input type="checkbox"/> No <input type="checkbox"/> Yes
If sensitive information is archived and/or backed up, are data restores performed and verified (e.g., are backup data restored and checked to see if they work)?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Is there a security review before information is released outside of operations (partner sharing, public release, etc.)?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Information Protection Briefing Notes: _____	

Information Protection Comments: _____

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5.5 User Training (LEVEL TWO)

USER TRAINING: The purpose of these questions in this section is not to find out what type of training but to find out when the user is trained and when the user receives access to network.

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Cyber IST Questions

<p>Does the organization provide training on cyber security for CCS users?</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>If yes, how often?</p> <p><input type="checkbox"/> Only following an incident <input type="checkbox"/> Greater than one year <input type="checkbox"/> Annually <input type="checkbox"/> Semiannually <input type="checkbox"/> Quarterly <input type="checkbox"/> Monthly</p>
<p>If yes, when does the organization provide cyber security training?</p>	<p><input type="checkbox"/> Before the user obtains access <input type="checkbox"/> Within 1 week of obtaining access <input type="checkbox"/> Within 30 days of obtaining access <input type="checkbox"/> More than 30 days after obtaining access</p> <p><input type="checkbox"/> As remediation upon security violations or other infractions <input type="checkbox"/> Training is incidental to a lessons-learned process</p>
<p>If yes, which of the following topics is included in CCS user training? <i>(Check all that apply.)</i></p>	<p><input type="checkbox"/> General review of organization's cyber policies <input type="checkbox"/> Review of organization's cyber security policies <input type="checkbox"/> User roles and responsibilities <input type="checkbox"/> Password procedures</p> <p><input type="checkbox"/> Acceptable usage practices <input type="checkbox"/> Identification and reporting of incidents and suspicious activities <input type="checkbox"/> Cyber security situational awareness and best practices <input type="checkbox"/> Cyber security threats, trends and attacks</p>
<p>User Training Briefing Notes: _____</p>	
<p>User Training Comments: _____</p>	

5.6 Defense Sophistication and Compensating Controls (LEVEL TWO)

DEFENSE SOPHISTICATION/ COMPENSATING CONTROLS: for purposes of this evaluation best judgment is to be used for defense sophistication/compensating controls. Examples of this are moving target defense, diverse platforms, etc.

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Defense Sophistication and Compensating Controls	
Does your organization employ additional advanced tactics, strategies and/or specific layered defenses to compensate for a loss of primary controls? (Examples may include platform diversity, moving-target defense, etc.)	<input type="checkbox"/> No <input type="checkbox"/> Yes If yes, describe: _____

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6.0 Incident Response (LEVEL ONE)

6.1 Incident Response Measures (LEVEL TWO)

6.1.1 Incident Response/Management

For purposes of this evaluation, an incident response plan should be documented in its full form. It should be agreed on and signed off by all officials. All personnel should know the plan and be fully aware of it. This incident response plan should contain items of how to respond to incidents, emergencies, and smaller events. It should layout key plans that the organization has practiced in case of an incident.

6.1.3 Does the facility participate in provider priority plan for restoration?

A priority plan is a “list” of facilities or types of facilities that will be restored before other types of facilities. For instance, most utilities will prioritize human health facilities such as hospitals, water treatment Service assets, and nursing homes and restore service to them before other customers.

Cyber IST Questions

Incident Response Measures	
Does the organization have predefined plans for responding to cyber security incidents?	<input type="checkbox"/> No <input type="checkbox"/> Yes
The organization has a defined incident response plan for handling cyber incidents, which (at a minimum) contains: <i>(Check one.)</i>	<input type="checkbox"/> Documented procedures, security violations and conditions, and assigned roles for cyber security incident response <input type="checkbox"/> Assigned roles for cyber security incident response but no documented procedures <input type="checkbox"/> No assigned roles for cyber security incident response and no documented procedures
The organization has defined incident response procedures for handling cyber incidents, which (at a minimum) contain: <i>(Check all that apply.)</i>	<input type="checkbox"/> Planned procedures for network containment <input type="checkbox"/> Planned procedures for malware containment(s) and boxing <input type="checkbox"/> Planned procedures to rate limit in response to a Distributed Denial of Service attack <input type="checkbox"/> Planned procedures to respond to an unauthorized access to sensitive information <input type="checkbox"/> No incident response procedure exists.
How often do you test cyber-incident response procedures/capabilities (Continuity of Operations Plans, Disaster Recovery Plans, Business Continuity Plans, etc.)?	<input type="checkbox"/> Never <input type="checkbox"/> Every two years <input type="checkbox"/> Annually <input type="checkbox"/> More than once a year
How do you test cyber-incident response procedures/capabilities (Continuity of Operations Plans, Disaster Recovery Plans, Business Continuity Plans, etc.)?	<input type="checkbox"/> With a controlled live-fire incident chosen by an outside source <input type="checkbox"/> With a controlled live-fire incident chosen by an inside source <input type="checkbox"/> With a tabletop exercise <input type="checkbox"/> Via document review
How often do you review responses to actual cyber incidents to see if they are consistent with the incident response procedures/plan (Continuity of Operations Plans, Disaster Recovery	<input type="checkbox"/> Within a reasonable time after incident resolution, as part of follow-on actions <input type="checkbox"/> Monthly <input type="checkbox"/> Semiannually <input type="checkbox"/> Annually

Cyber IST Questions

Plans, Business Continuity Plans, etc.)?	<input type="checkbox"/> Never
Is there a written contract with entities other than emergency responders (e.g. other organizations, other companies, contract response companies, water and wastewater agency response networks)?	<input type="checkbox"/> No <input type="checkbox"/> Yes

Incident Response Measures Briefing Notes: _____
Incident Response Measures Comments:

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6.2 Alternate Site and Disaster Recovery (LEVEL TWO)

For purposes of this evaluation, *severely impacted* means that the organization is running at a level considered “significantly lower output to no output” of work.

6.2.1 Is There Alternate Site for Continuity of Business?

Key features of an alternate site include its characterization and the percent of the normal level of the main facility’s production it can handle.

This would be the core operations are moved to an alternative site. For instance, the data control center can operate from another data control center in another city; that is an alternative site. If a team can play in another stadium (e.g., when the Bears played at the University of Illinois while their stadium was being modified), that is another example of an alternate site. However, the fact that people can shop at an alternate mall is not an alternate site for the facility being assessed. The fact that there are other hotels in the area is not an alternate site. Also, if the only thing that has an alternate site is the data center and all other core functions cease, then perhaps it is not an alternate site. If the core mission is carried out remotely from employee’s homes, for instance, that is not an alternate site. Facilities like manufacturing, hospitals, hotels, malls, bridges, tunnels, stadiums, arenas, racetracks, casinos, most general office buildings and similar facilities rarely have an alternate site. Data centers, government agencies / functions, banking and communication facilities often have an alternate site. For instance, redundant data centers where data is backed up but operating terminals would have to be programmed/updated (e.g., cold site) or operational control centers at corporate sister plants where operators can instantly log in as if they were located at the original location (e.g., hot site).

6.1.2 Is There a Contingency/Business Continuity Plan with Provider for Restoration?

The intent of this question is to identify and describe specific service level or special rate agreements that exist between the facility and the utility/service/product provider.

6.1.5 Restoration Time

The intent of this question is to determine the time needed for the facility to resume normal operations after the information technology service is restored. While in many cases the restoration time will be automatic/immediate, it is possible that a delay could occur due to the unique restoration requirements of certain processes or security verifications (i.e., lag time). The restoration time can vary based on the duration of the interruption. The answer to this question should be based on the Maximum Acceptable Outage (MAO) defined when considering the loss of information technology. If the MAO has not been defined, consider a maximum outage duration of 7 days: if the external source of information technology is lost during 7 days, what time will be needed for full resumption of core operations when information technology service is restored.

For purposes of this evaluation, recovery time is the time it takes to recover to a state of functionality whether at an alternative site or the present organization’s site.

Cyber IST Questions

Alternative Site and Disaster Recovery	
Once the CCS is lost (without considering any redundant or alternative mode), what percentage of normal business functions are lost or degraded?	<input type="checkbox"/> 1–33% <input type="checkbox"/> 34–66% <input type="checkbox"/> 67–99% <input type="checkbox"/> 100% (Offline)
Once the CCS is lost (without considering any redundant or alternative mode), within what time period will the business be severely impacted? Number of hours beyond which the effect of CCS loss is minimal.	_____ minutes (enter the number of minutes) OR _____ hours (enter the number of hours) OR _____ days (enter the number of days)
Should your site become inoperable, do you have access to an alternative location?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Is there a contingency or business continuity agreement for recovery?	<input type="checkbox"/> No <input type="checkbox"/> Yes If yes, explain: _____
If yes, how long does it take to recover the system at the alternative site? Number of hours beyond which activation of the alternative site is ineffective.	_____ minutes (enter the number of minutes) OR _____ hours (enter the number of hours) OR _____ days (enter the number of days)
Does the organization employ measures to securely restore operation of cyber services after a disruption or organization incident?	<input type="checkbox"/> No <input type="checkbox"/> Yes
Which of the following post-disaster measures does the organization have? (Check all that apply.)	<input type="checkbox"/> Alternative-site operations include cyber security measures consistent with those in place for <input type="checkbox"/> Recovery/reconstitution phases include cyber security measures consistent with those in place for <input type="checkbox"/> Organization has Continuity of Operations Plans that include cyber security. <input type="checkbox"/> Organization has Disaster Recovery Plans that include cyber security.

Cyber IST Questions

Alternative Site and Disaster Recovery				
	<p>the original operational functions.</p> <p><input type="checkbox"/> Organization has Business Continuity Plans that include cyber security.</p>	<p>the original operational functions.</p> <p><input type="checkbox"/> Organization has cyber Contingency Plans that include cyber security.</p>	<p><input type="checkbox"/> Organization has backups of data and software (e.g., firewall rules and control service configuration files) available such that services can be restored quickly to an equivalently secure state.</p>	<p><input type="checkbox"/> Organization has no documented measures.</p>
How often do you test your alternative-site procedures/capabilities?	<p><input type="checkbox"/> Never</p> <p><input type="checkbox"/> Every two years</p> <p><input type="checkbox"/> Annually</p> <p><input type="checkbox"/> More than once a year</p>			
How do you test alternative-site procedures/capabilities?	<p><input type="checkbox"/> With a controlled live-fire incident chosen by an outside source</p> <p><input type="checkbox"/> With a controlled live-fire incident chosen by an inside source</p> <p><input type="checkbox"/> With a tabletop exercise</p> <p><input type="checkbox"/> Via document review</p>			
Alternate Site and Disaster Recovery Briefing Notes: _____				
Alternate Site and Disaster Recovery Comments: _____				

7.0 Dependencies (LEVEL ONE)

Dependencies at rest – items such as storage (SAN, NAS)

Dependencies in motion – switches, networks, firewalls

Dependencies in process – mainframe & cluster

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7.1 Dependencies – Data at Rest (LEVEL TWO)

Dependencies – Data at Rest	
<p>Is data storage required for the CCS?</p> <p>(‘No’ means CCS is not dependent on data storage; ‘No’ is best answer.)</p>	<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p>
<p>If the storage gear (SAN, NAS, etc.) becomes unavailable, within what time period will the CCS be severely impacted (i.e., lost connectivity, misconfiguration, device failure)? Number of hours beyond which the effect on the CCS is minimal.</p>	<p>_____ minutes (enter the number of minutes) OR</p> <p>_____ hours (enter the number of hours) OR</p> <p>_____ days (enter the number of days)</p>
<p>Once the storage gear (SAN, NAS, etc.) has become unavailable (without considering any redundant or alternative mode), what percentage of normal cyber functions are lost or degraded?</p>	<p><input type="checkbox"/> 1–33%</p> <p><input type="checkbox"/> 34–66%</p> <p><input type="checkbox"/> 67–99%</p> <p><input type="checkbox"/> 100% (Offline)</p>
<p>Does the organization have alternative or backup storage capabilities that can be used in case of loss of the primary storage?</p>	<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p>
<p>Once the primary storage is restored, how long will it take before full resumption of operations? Number of hours beyond which resumption of operations is ineffective.</p>	<p>_____ minutes (enter the number of minutes) OR</p> <p>_____ hours (enter the number of hours) OR</p> <p>_____ days (enter the number of days)</p> <p>Describe: _____</p>

Data at Rest Dependencies Briefing Notes: _____

Data at Rest Dependencies Comments: _____

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7.2 Dependencies – Data in Motion (LEVEL TWO)

Dependencies – Data in Motion	
<p>Are external communications required for the organization's cyber operations?</p> <p>('No' means that CCS is not dependent on external communications; 'No' is best answer.)</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>If yes, who/what is the dependency on?</p> <p><input type="checkbox"/> Networking provider: _____ <input type="checkbox"/> Telecom provider: _____</p> <p>If yes, is the dependency provider required to notify the organization of an outage?</p> <p><input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>If yes, do you monitor this dependency?</p> <p><input type="checkbox"/> No <input type="checkbox"/> Yes</p>
<p>Are internal communications required for the organization's cyber operations?</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>If yes, who/what is the dependency on?</p> <p><input type="checkbox"/> Networking provider: _____ <input type="checkbox"/> Telecom provider: _____</p> <p>If yes, is the dependency provider required to notify the organization of an outage?</p> <p><input type="checkbox"/> No <input type="checkbox"/> Yes</p> <p>If yes, do you monitor this dependency?</p> <p><input type="checkbox"/> No <input type="checkbox"/> Yes</p>
<p>If the communication services functionality (switches, network, firewalls, etc.) is lost completely, within what time period will the CCS be severely impacted? Number of hours beyond which the effect on the CCS is minimal.</p>	<p>_____ minutes (enter the number of minutes) OR _____ hours (enter the number of hours) OR _____ days (enter the number of days)</p>

Cyber IST Questions

<p>Once the functionality of the communication services (switches, network, firewalls, etc.) is lost (without considering any redundant or alternative mode), what percentage of normal cyber functions are lost or degraded?</p>	<p><input type="checkbox"/> 1-33%</p> <p><input type="checkbox"/> 34-66%</p> <p><input type="checkbox"/> 67-99%</p> <p><input type="checkbox"/> 100% (Offline)</p>
<p>Is there a contingency/business continuity plan with the provider for restoration?</p>	<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p> <p>Explain: _____</p>
<p>Does the organization participate in the provider's priority plan for restoration?</p>	<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p> <p>Explain: _____</p>
<p>If the primary mode of communication service is lost, is there a backup mode of communication?</p>	<p><input type="checkbox"/> No</p> <p><input type="checkbox"/> Yes</p> <p>Explain: _____</p>
<p>Once the primary mode is restored, how long will it take before full resumption of operations? Number of hours beyond which resumption of operations is ineffective.</p>	<p>_____ minutes (enter the number of minutes) OR</p> <p>_____ hours (enter the number of hours) OR</p> <p>_____ days (enter the number of days)</p> <p>Describe: _____</p>
<p>Data in Motion Dependencies Briefing Notes: _____</p>	
<p>Data in Motion Dependencies Comments: _____</p>	

7.3 Dependencies – Data in Process (LEVEL TWO)

Dependencies – Data in Process	
Are data processing services (mainframes, server farms, cloud providers, etc.) required for the operation of the CCS? ('No' means that CCS is not dependent on data processing services; 'No' is best answer.)	<input type="checkbox"/> No <input type="checkbox"/> Yes
If power to the processing service (mainframe, cluster, etc.) is lost completely, within what time period will the CCS be severely impacted? Number of hours beyond which the effect on the CCS is minimal.	_____ minutes (enter the number of minutes) OR _____ hours (enter the number of hours) OR _____ days (enter the number of days)
Once the availability of the processing service (mainframe, cluster, etc.) is lost (without considering any redundant or alternative mode), what percentage of normal cyber functions are lost or degraded?	<input type="checkbox"/> 1–33% <input type="checkbox"/> 34–66% <input type="checkbox"/> 67–99% <input type="checkbox"/> 100% (Offline)
Is there a contingency/business continuity plan with the provider for restoration?	<input type="checkbox"/> No <input type="checkbox"/> Yes Explain: _____
Once service is restored, how long will it take before full resumption of operations? Number of hours beyond which resumption of operations is ineffective.	_____ minutes (enter the number of minutes) OR _____ hours (enter the number of hours) OR _____ days (enter the number of days) Describe: _____
Does the organization depend on external data service providers? ('No' is best answer.)	<input type="checkbox"/> No <input type="checkbox"/> Yes If yes, who/what is the dependency on:

Cyber IST Questions

	<input type="checkbox"/> Data set: _____ <input type="checkbox"/> Analytic capability: _____ If yes, Is the dependency provider required to notify the organization of an outage? <input type="checkbox"/> No <input type="checkbox"/> Yes If yes, do you monitor this dependency? <input type="checkbox"/> No <input type="checkbox"/> Yes
Data in Process Dependencies Briefing Notes: _____	
Data in Process Dependencies Comments: _____	

7.4 Dependencies – End Point Services (LEVEL TWO)

Dependencies – End Point Systems	
Are end-point systems (desktops, laptops, tablets, etc.) required for the operation of the CCS? ('No' means that CCS is not dependent on endpoint systems, 'No' is best answer.)	<input type="checkbox"/> No <input type="checkbox"/> Yes
If the endpoint systems (desktops, laptops, tablets, etc.) are no longer available, within what time period would the CCS be severely impacted? Number of hours beyond which the effect on the CCS is minimal.	_____ minutes (enter the number of minutes) OR _____ hours (enter the number of hours) OR _____ days (enter the number of days)
Once the endpoint systems (desktops, laptops, tablets, etc.) are no longer available (without considering any redundant or alternative mode), what percentage	<input type="checkbox"/> 1–33% <input type="checkbox"/> 34–66% <input type="checkbox"/> 67–99% <input type="checkbox"/> 100% (Offline)

Cyber IST Questions

<p>of normal cyber functions are lost or degraded?</p>	
<p>Is there a contingency/business continuity plan with the provider for restoration?</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes <i>Explain:</i> _____</p>
<p>Does the organization participate in the provider's priority plan for restoration?</p>	<p><input type="checkbox"/> No <input type="checkbox"/> Yes <i>Explain:</i> _____</p>
<p>Once the primary service is restored, how long will it take before full resumption of operations? Number of hours beyond which resumption of operations is ineffective.</p>	<p>_____ minutes (enter the number of minutes) OR _____ hours (enter the number of hours) OR _____ days (enter the number of days) Describe: _____</p>
<p>End Point Services Dependencies Briefing Notes: _____</p>	
<p>End Point Services Dependencies Comments: _____</p>	