CONTROL SURVEY Settlement Applicable Policy/Standard Security Control Requirement Applicable NIST 800-53 (Rev 4) Objective **ASKD Domain** Response Comments Short Name 1.1 Authentication & Does the application leverage a company's standard authentication control for providing single-sign-on capability? Best Practice User Authentication Is multi-factor authentication as defined by the Information Security Standard GISS Information Multi-Factor Auth leveraged for all users this application? Is multi-factor authentication as defined by the Information Security GISS Information Multi-Factor Admin Autl Standard leveraged for administrative users this application? Systems: 8.1.4 TBD Are minimum password requirements for user accounts established in GISS Information assword Strength compliance with Information Seucrity Standards? Systems: 7.2 1.5 Are service account credentials stored and managed using a Privileged GISS Information Credential Management Account Management solution? Systems: 6.6.3 1.6 GISS Information ecured Passwords Are passwords secured using hash + salt functions using strong cryptographic Systems: 7.1.13 & 13.x algorithms? TBD Are user accounts in the application locked out after a defined number of Account Lockout failed login attempts No Is the process for provisioning and deprovisioning users within the application documented? GISS Information Authorization / Access User Provisioning Control (AZ) Are users authorizations managed within a centralized tool? Rest Practice Is a centralized list of all personnel with access to "SECRET" data GISS Information 2.3 Secret Data Access established and maintained Classification: Exhibit 1: Applicability Does the application use role-based access controls and principles of least GISS Information RBAC privilege to assign user authorization? Are periodic reviews of user access rights conducted, at minimum, every six months? Systems: 6.2 GISS Informa Yes Access Audits TBD Has the application been deployed on approved images or configurations and kept up to date using a patch management lifecycle? Configuration Security Patch Management (CS) Has a web application firewall been deployed and configured specifically for Best Practice WAF Implementation Does the application employ a multi-tiered design in which the presentation Best Practice 3.3 Multi-tier Application layer is isolated from other network segments? TBD Is the application hosted on servers that are installed in a company owned 0 Authorized Hosting data center or authorized secure facility? Is the application hosted on cloud service providers such as AWS, Azure, 3.5 Cloud Hosted Google Cloud, etc.? Is the application protected by standard Anti-DDOS solution? Best Practice TBD DDOS Does the application log sufficient information regarding user successes and failures to reconstruct user activity? GISS Information Systems: 10.2 & Logging & Audit (LG) ogging Are application logs written to a location that is protected from unauthorized GISS Monitoring: 3.5 4.2 Log Management access by systems personnel or other external parties? Is an automated log retention mechnism established to ensure the availability GISS Information 4.3 Log Retention of log files? Systems: 10.3 GISS Information TBD Are application events forwarded to centralized and monitored SIEM with Log Events event notifications defined? No Is user activity routinely reviewed to identify potential anomolous user activity. Best Practice or fraudlent use? og Activity Audits Does the application make u anti-request forgery tokens? Request Forgery / Nonplication make use of standard components for implementing Best Practice Request Forgery Repudiation (RF) TBD Do critical user actions (changing password, initiating a financial transaction, etc.) require re-authentication of the user? Sensitive Data Protection (SD) Do critical user actions (changing password, initiating a financial transaction, etc.) require re-authentication of the user? Sensitive Data Protection GISS Informa Systems: 13.1 5.2 ReAuthentication ncryption in Transit Does the application leverage encryption to protect all Secret, Confidential or Systems: 13.13 Does the application leverage encryption to protect all Secret, Confidential or GISS Information Does the application leverage encryption to protect all Secret, Confidential or GISS Information 6.2 File Encryption at Rest TRD 6.3 DB Encryption at Rest Personal data that is written to databases? Systems: 13.1.3 Are users sessions automatically terminated after a defined period of Session Management ession Inactivity (SM) inactivity? 7.2 Best Practice When user sessions are terminated, does the application remove all Session Termination sensitive data from the screen/page or redirect the user to a new TBD screen/page? Scientipager Does the application make use of common libraries or components for generating and managing session identifiers? Does the application make use of any Anti-Cross Site Scripting or other common input validation libraries/components? Rest Practice SM Libraries No Validation & Encoding Best Practice (VE) Are acceptable/expected input characteristics defined for all data elements received from the user or other external systems? Is standard output encoding used on all user entered data returned to the user interfects. 8 2 nput Validation TBD Output Encoding Are reusable common libraries used for any typical application functionality 9.1 Extensible Design (XD) Common Libraries (Authentication, Authorizataion, Logqing, etc.)? Is the creation of design specifications, requirements definitions and other Best Practice 9.2 ec Requirements project artifacts enforced? Have common application functions been designed according to common 9.3 Best Practice Secure Design design guidance or reference architectures? Does the application undergo penetration testing on a monthly basis? No GISS Vulnerability 10.1 Security Verification (SV) 10.2 Do application development teams submit application source code for a Best Practice Do application development teams submit application source code for a security review during the development lifecycle? Are Design Reviews/Threat Modeling conducted as part of the early concept phases of application development? Are infrastructure level vulnerability scans performed against the application's servers consistent with the Information Security Standard on Vulnerability Management? TBD 10.3 10.4 GISS Vulnerability nfrastructure Scans Are infrastructure level vulnerability scans performed against the application's servers consistent with the Information Security Standard on GISS Vulnerability 10.5 Infrastructure Scans xvxcvbcxvxcv 8 Vulnerability Management? TBD Has a vendor security assessment been performed against the vendor of this GISS Third-Party application? (TM) 11.2 Does the application's vendor provide regular security vulnerability updates Best Practice endor Security Update 11.3 Have vendor contracts been structured to include performance objectives Best Practice Vendor Contracts and penalties for resolution of security vulnerabilities? Has the application vendor provided attestation of security surance activities (vulnerability scans, penetration tests) conducted? Has the vendor signed a confidentiality agreement with Company? TBD 11.4 Best Practice No GISS Third-Party 11.5