### Appendix B – Security and Vendor Questions

#### **Basic Vendor Information**

Vendor Legal Name:

Vendor Address:

#### **Directions**

Agencies: The following questions facilitate agencies acquiring technology that meets state security standards. These questions will assist in improving the quality and the timeliness of the procurement. The Bureau of Information and Telecommunications (BIT) recommends that you utilize your BIT Business Relationship Manager (BRM) to set up a planning meeting to review the project and these questions. Understanding the background and context of the questions greatly improves realizing the purpose of the questions. The purpose of the questions is to ensure the product/service being procured will meet the technology and security standards of the state.

If you do not know the details of the technologies the vendor will propose, it is best to keep the question set as broad as possible. If there is a detailed knowledge of what will be proposed, a narrowed set of questions may be possible. Vendors are invited to mark any question that does not apply to their technology as NA (Not Applicable).

**Vendors:** The following questions help the State determine the best way to assess and integrate your product or service technology with the State's technology infrastructure. Your response to the questions allows BIT an opportunity to review the security of your product, and helps BIT make an informed decision and recommendation regarding your technology or service. Some questions may not apply to the technology you use. In such cases, simply mark the question as NA (Not Applicable). The questions are divided into sections to help identify the point of the questions.

The State understands that some of the information you may provide when answering the questions is considered confidential or proprietary. Please mark which answers you deem to be confidential/proprietary information. Access to this confidential information will be limited to those state employees who have a need to know. In addition, the State will maintain the confidentiality of the marked information, and the marked information may be exempt from disclosure to the public per the State's Open Records Laws.

Use the last column as needed to explain your response. Also note, many questions require you to explain your response. The more detailed the response, the better we can understand your product or service.

Where we feel that a Yes/No/NA response is not appropriate, the cell has been grayed out. If the vendor answers a question by referencing another document or another part of the RFP response, the vendor must provide the page number and paragraph where the information can be found.

The "BIT" column corresponds to the division within BIT that will be the primary reviewers. If you have questions about the meaning or intent of a question, we can contact the BIT division on your behalf. DC = Data Center; DEV = Development; TEL = Telecommunications; BRM = Business Relationship Manager.

=	ystem/Product: he following questions are relevant for all vendors or third parties engaged in this hardware, software, application, or service.									
#	Response  # BIT Question Select all that apply									
1	DC DEV	Question  Is your proposed solution a cloud-based solution or an on-prem solution?	Select all that apply  State Hosted On-prem (dedicated VM/infrastructure) State Cloud Provider (PaaS Solution) Vendor Hosted Other: (Please state)							
2	DC DEV TEL	What type of access is required by vendor or proposed solution to state hosted or external resources?	<ul> <li>Not Required</li> <li>∨PN</li> <li>API</li> <li>SFTP</li> <li>Other: (Please state)</li> </ul>							

3	DC	What type of access is required by vendor to maintain and support the solution?	<ul> <li>□ Not Required</li> <li>□ Citrix (For On-prem)</li> <li>□ State Cloud Access</li> <li>□ Other: (Please state)</li> </ul>
4	TEL	If an on-prem solution, which of the following will apply?	<ul> <li>□ IoT Hardware</li> <li>□ Non-Windows or non-domain joined solution</li> <li>□ Windows-based domain joined hardware</li> <li>□ Other: (Please state)</li> </ul>
5	DC TEL	Does your proposed solution include/require additional devices connected to the application for activities such as scanning or printing?	☐ Yes ☐ No
6	DC	Does the proposed solution include the use of email?	☐ Yes☐ No☐ If "Yes", please describe how email will be used:
7	BRM TEL	Will there be any desktop software installs, policies, or software required on state managed computers as part of this product?	☐ Yes ☐ No If "Yes", please define:
8	BRM	If there are desktop software installs, please provide a link to the licensing requirements or a copy of the licensing requirements.	Please provide link below, if applicable:
9	BRM	Will any hardware or peripherals need to be attached to or added to state managed computers?	☐ Yes☐ No☐ If "Yes", please define:
10	BRM	Will any browser plugins be required to install, access, or use this product?	☐ Yes☐ No☐ If "Yes", please define:
11	BRM	Will any products that connect or interact with a state managed computer or network be required as part of this product or project?	☐ Yes ☐ No If "Yes", please define:
12	BRM	Will any Bluetooth or RF frequency devices be required as part of this product or project?	☐ Yes☐ No☐ If "Yes", please define:
13	BRM	What operating system is the software/hardware compatible with?	<ul> <li>☐ Microsoft Windows 10</li> <li>☐ Microsoft Windows 11</li> <li>☐ Other (please specify):</li> <li>☐ Not Applicable</li> </ul>
14	BRM	For Vendor Hosted solutions, where are your data centers located (Please include locations for disaster recovery)?	Please provide locations:

# **Section A. System Security**

The following questions are relevant for all vendors or third parties engaged in this hardware, application, or service and pertain to relevant security practices and procedures.

10 10		curity practices and procedures.		Response				
#	BIT	Question	YES	NO	NA	Explain answer as needed		
A1	DC x	Does the solution require user authentication, and does that authentication solution support OpenID Connect or OAUTH2 to provide single sign-on? Please explain the authentication protocol(s) available to meet the State's single sign-on requirements and how that is implemented with one or more identity providers.  Will the system provide internet security						
	TEL x	functionality on public portals using encrypted network/secure socket layer connections in line with current recommendations of the Open Web Application Security Project (OWASP)?						
A3	BRM	Will the system have role-based access?						
A4	DC TEL	Does the application contain mitigations for risks associated to uncontrolled login attempts (response latency, re-Captcha, lockout, IP filtering, multifactor authentication)? Which mitigations are in place? What are the optional mitigations?						
A5	DC TEL	Are account credentials hashed and encrypted when stored? If "Yes" please describe the encryption used (e.g. SHA256).						
A6	DC TEL x	<ul> <li>The protection of the State's system and data is of upmost importance. Web Application Vulnerability Scans must be done if:</li> <li>An application will be placed on the State's system.</li> <li>The State's system connects to another system.</li> <li>The contractor hosts State data.</li> <li>The contractor has another party host State data the State will want to scan that party.</li> </ul> The State would want to scan a test system; not a production system and will not do penetration testing. The scanning will be done with industry standard tools. Scanning would also take place annually as well as when there are code changes. Will you allow the State to scan a test system? If no, please explain or provide an alternative option to ensure protection of the State's system and data.						
A7	DC	Will SSL traffic be decrypted and inspected before it is allowed into your system?						
A8	BRM x	Will organizations other than the State of South Dakota have access to our data?						
A9	DEV TEL	Do you have developers that possess software security related certifications (e.g., the SANS secure coding certifications)?						

A10	DEV	Are there any additional components or configurations required outside of the base product to meet the State's security needs?		
A11	TEL	What threat assumptions were made, if any, when designing protections for the software and information assets processed?		
A12	TEL	How do you minimize the threat of reverse engineering of binaries? Are source code obfuscation techniques used?		
A13	TEL	What security criteria, if any, are considered when selecting third party suppliers?		
A14	TEL	How has the software been measured/assessed for its resistance to publicly known vulnerabilities and/or attack patterns identified in the Common Vulnerabilities & Exposures (CVE®) or Common Weakness Enumerations (CWEs)? How have the findings been mitigated?		
A15	TEL	Has the software been evaluated against the Common Criteria, FIPS 140-3, or other formal evaluation process? If so, please describe what evaluation assurance level (EAL) was achieved, what protection profile the product claims conformance to, and indicate if the security target and evaluation report are available.		
A16	DC TEL	Are static or dynamic software security analysis tools used to identify weaknesses in the software that can lead to exploitable vulnerabilities? If yes, which tools are used? What classes of weaknesses are covered? When in the SDLC are these scans performed? Are SwA experts involved in the analysis of the scan results?		
A17	DC TEL x	Has the product undergone any vulnerability or penetration testing? If yes, how frequently, by whom, and are the test reports available under a nondisclosure agreement? How have the findings been mitigated?		
A18	DC	Does your company have an executive-level officer responsible for the security of your company's software products and/or processes?		
A19	DC	How are software security requirements developed?		
A20	DC	What risk management measures are used during the software's design to mitigate risks posed by use of third-party components?		
A21	DC	What is your background check policy and procedure? Are your background checks fingerprint based? If required, would you be willing to undergo fingerprint-based background checks?		
A22	DEV	Does your company have formally defined security policies associated with clearly defined roles and		

		responsibilities for personnel working within the		
		software development life cycle? Explain.		
A23	TEL	What are the policies and procedures used to protect sensitive information from unauthorized access? How are the policies enforced?		
A24	DC TEL	Do you have an automated Security Information and Event Management system?		
A25	DC TEL	What types of event logs do you keep and how long do you keep them?		
		a. System events		
		b. Application events		
		c. Authentication events		
		d. Physical access to your data center(s)		
		e. Code changes		
		f. Other:		
A26	DC	How are security logs and audit trails protected from tampering or modification? Are log files consolidated to single servers?		
A27	DEV	Are security specific regression tests performed during the development process?		
		b. If yes, how frequently are the tests performed?		
A28	TEL	What type of firewalls (or application gateways) do you use? How are they monitored/managed?		
A29	TEL	What type of Intrusion Detection System/Intrusion Protection Systems (IDS/IPS) do you use? How are they monitored/managed?		
A30	DC TEL	What are your procedures for intrusion detection, incident response, and incident investigation and escalation?		
A31	DC TEL	Do you have a BYOD policy that allows your staff to put any sort of sensitive or legally protected State data on their device personal device(s) or other non-company owned system(s)?		
A32	DC TEL	Do you require multifactor authentication be used by employees and subcontractors who have potential access to legally protected State data or administrative control? If yes, please explain your practices on multifactor authentication including the authentication level used as defined in NIST 800-63 in your explanation. If no, do you plan on implementing multifactor authentication? If so, when?		

A33	BRM	Will this system provide the capability to track data		
A34	DC	entry/access by the person, date, and time?  Will the system provide data encryption for		
	DEV BRM TEL	sensitive or legally protected information both at rest and transmission? If yes, please provide details.		
A35	DC	a. Do you have a SOC 2 or ISO 27001 audit report?		
		b. Is the audit performed annually?		
		c. When was the last audit performed?		
		d. If it is SOC 2 audit report, does it cover all 5 of the trust principles?		
		e. If it is a SOC 2 audit report, what level is it?		
		f. Does the audit include cloud service providers?		
		g. Has the auditor always been able to attest to an acceptable audit result?		
		h. Will you provide a copy of your latest SOC 2 or ISO 27001 audit report upon request? A redacted version is acceptable.		
A36	DC	Do you or your cloud service provider have any other security certification beside SOC 2 or ISO 27001, for example, FedRAMP or HITRUST?		
A37	DC TEL	Are you providing a device or software that can be defined as being Internet of Thing (IoT)? Examples include IP camera, network printer, or connected medical device. If yes, what is your process for ensuring the software on your IoT devices that are connected to the state's system, either permanently or intermittently, are maintained and/or updated?		
A38	DC	Who configures and deploys the servers? Are the configuration procedures available for review, including documentation for all registry settings?		
A39	DC	What are your policies and procedures for hardening servers?		
A40	DC TEL	(Only to be used when medical devices are being acquired.) Please give the history of cybersecurity advisories issued by you for your medical devices. Include the device, date, and the nature of the cybersecurity advisory.		
A41	DC BRM	Does any product you propose to use or provide the State include software, hardware, or hardware components manufactured by any company on the federal government's Entity List?		

A42	DC	Describe your process for monitoring the security of		
		your suppliers.		

#### **Section B. Hosting**

The following questions are relevant to any hosted applications, systems, databases, services, and any other technology. The responses should not assume a specific hosting platform, technology, or service but instead the response should address any hosting options available for the proposed solution.

#### For state-hosted systems that reside in a state-managed cloud:

To minimize impacts to project schedules, vendors are required to provide architectural plans, resource needs, permission plans, and all interfaces – both internal to the state and internet facing for cloud hosted systems. The documentation provided will be reviewed as part of the initial assessment process. If selected for award of a contract, and once the state has approved the submitted materials, a test environment will be provided after contract signature. Systems will be reviewed again before being moved to a production environment. Any usage or processes that are deemed out of compliance with what was approved or represent excessive consumption or risk will require remediation before being moved to production.

		essive consumption or risk will require remediation b	3.3.0			Response
#	BIT	Question	YES	NO	NA	Explain answer as needed
B1	BRM	Are there expected periods of time where the				
		application will be unavailable for use?				
B2	DC	If you have agents or scripts executing on servers of				
		hosted applications what are the procedures for				
		reviewing the security of these scripts or agents?				
В3	DC	What are the procedures and policies used to				
		control access to your servers? How are audit logs				
		maintained?				
B4	DC	Do you have a formal disaster recovery plan? Please				
	DEV	explain what actions will be taken to recover from a				
	BRM	disaster. Are warm or hot backups available? What				
	TEL	are the Recovery Time Objectives and Recovery				
		Point Objectives?				
B5	DC	Explain your tenant architecture and how tenant				
		data is kept separately?				
В6	DC	What are your data backup policies and				
		procedures? How frequently are your backup				
		procedures verified?				
В7	DC	If any cloud services are provided by a third-party,				
	DEV	do you have contractual requirements with them				
	TEL	dealing with:				
		Security for their I/T systems;				
		Staff vetting;				
		Staff security training?				
		a. If yes, summarize the contractual				
		requirements.				
		b. If yes, how do you evaluate the third-party's				
		adherence to the contractual requirements?				
В8	DC	If your application is hosted by you or a third party,				
		are all costs for your software licenses in addition to				
		third-party software (i.e. MS-SQL, MS Office, and				
		Oracle) included in your cost proposal? If so, will				
		you provide copies of the licenses with a line-item				
		list of their proposed costs before they are				
D.C.	D.C.	finalized?				
В9	DC	a. Do you use a security checklist when standing				
		up any outward facing system?				
		b. Do you test after the system was stood up to				
		make sure everything in the checklist was				
D4.0	DC	correctly set?				
B10	DC	How do you secure Internet of Things (IoT) devices				
		on your network?				

B11	DC	Do you use Content Threat Removal to extract and		
DII	TEL	transform data?		
B12	DC	Does your company have an endpoint detection and		
DIZ	TEL	response policy?		
B13	DC	Does your company have any real-time security		
D13	TEL	auditing processes?		
D4.4				
B14	TEL	How do you perform analysis against the network		
		traffic being transmitted or received by your		
		application, systems, or data center? What		
		benchmarks do you maintain and monitor your		
		systems against for network usage and		
		performance? What process(es) or product(s) do		
		you use to complete this analysis, and what results		
		or process(es) can you share?		
B15	TEL	How do you monitor your application, systems, and		
		data center for security events, incidents, or		
		information? What process(es) and/or product(s)		
		do you use to complete this analysis, and what		
		results or process(es) can you share?		
B16	DC			
	TEL	What anti-malware product(s) do you use?		
B17	DC	What is your process to implement new vendor		
	TEL	patches as they are released and what is the		
		average time it takes to deploy a patch?		
B18	DC	Have you ever had a data breach? If so, provide		
	TEL	information on the breach.		
B19	BRM	Is there a strategy for mitigating unplanned		
		disruptions and what is it?		
B20	DC	What is your process for ensuring the software on		
	TEL	your IoT devices that are connected to your system,		
		either permanently or intermittently, is maintained		
		and updated?		
B21	BRM	Will the State of South Dakota own the data created	 	
		in your hosting environment?		
B22	DEV	What are your record destruction scheduling		
		capabilities?		

# **Section C: Database**

The following questions are relevant to any application or service that stores data, irrespective of the application being hosted by the state or the vendor.

						Response
#	BIT	Question	YES	NO	NA	Explain answer as needed
C1	DC	Will the system require a database?				
C2	DC	If a Database is required, what technology will be				
		used (i.e. Microsoft SQL Server, Oracle, MySQL)?				
C3	DC	If a SQL Database is required does the cost of the				
		software include the cost of licensing the SQL				
		Server?				
C4	BRM	Will the system data be exportable by the user to				
		tools like Excel or Access at all points during the				
		workflow?				
<b>C</b> 5	DC	Will the system infrastructure include a separate				
	DEV	OLTP or Data Warehouse Implementation?				
C6	DC	Will the system infrastructure require a Business				
	DEV	Intelligence solution?				

### **Section D: Contractor Process**

The following questions are relevant for all vendors or third parties engaged in providing this hardware, application, or service and pertain to business practices. If the application is hosted by the vendor or the vendor supplies cloud services those questions dealing with installation or support of applications on the State's system can be marked "NA".

		installation of support of applications on the State 3.3				Response
#	BIT	Question	YES	NO	NA	Explain answer as needed
D1	DC	Will the vendor provide assistance with				
	BRM	installation?				
D2	DC	Does your company have a policy and process for		1		
	DEV	supporting/requiring professional certifications? If		1		
	BRM	so, how do you ensure certifications are valid and				
D3	TEL	up-to date?				
D3	DEV	What types of functional tests are/were performed on the software during its development (e.g., spot				
		checking, component-level testing, and integrated				
		testing)?				
D4	DEV	Are misuse test cases included to exercise potential				
		abuse scenarios of the software?		1		
D5	TEL	What release criteria does your company have for				
		its products regarding security?				
D6	DEV	What controls are in place to ensure that only the				
		accepted/released software is placed on media for				
	DC	distribution?				
D7	DC	a. Is there a Support Lifecycle Policy within the				
	DEV	organization for the software  b. Does it outline and establish a consistent and				
		predictable support timeline?		1		
D8	DC	How are patches, updates, and service packs				
	_	communicated and distributed to the State?				
D9	DEV	What services does the help desk, support center,				
		or (if applicable) online support system offer when				
		are these services available, and are there any				
		additional costs associated with the options?				
D10	DC	a. Can patches and service packs be uninstalled?		1		
		b. Are the procedures for uninstalling a patch or				
		service pack automated or manual?		1		
D11	DC	How are enhancement requests and reports of				
	DEV	defects, vulnerabilities, and security incidents				
		involving the software collected, tracked,				
		prioritized, and reported? Is the management and				
		reporting policy available for review?				
D12	DC	What are your policies and practices for reviewing				
		design and architecture security impacts in relation				
D13	DC	to deploying patches, updates, and service packs?  Are third-party developers contractually required				
ם דמ	DC	to follow your configuration management and		1		
		security policies and how do you assess their		1		
		compliance?		1		
D14	DEV	What policies and processes does your company				
		use to verify that your product has its comments				
		sanitized and does not contain undocumented				
		functions, test/debug code, or unintended, "dead,"				
		or malicious code? What tools are used?				
D15	DEV	How is the software provenance verified (e.g., any				
		checksums or signatures)?				

		<u>,                                      </u>	 _	
D16	DEV	a. Does the documentation explain how to install,		
		configure, and/or use the software securely?  b. Does it identify options that should not		
		normally be used because they create security		
		weaknesses?		
D17	DEV	a. Does your company develop security		
		measurement objectives for all phases of the		
		SDLC?		
		b. Has your company identified specific statistical and/or qualitative analytical techniques for		
		measuring attainment of security measures?		
D18	DC	a. Is testing done after changes are made to		
		servers?		
		b. What are your rollback procedures in the event		
		of problems resulting from installing a patch or		
240		service pack?		
D19	DC	What are your procedures and policies for handling and destroying sensitive data on electronic and		
		printed media?		
D20	DC	How is endpoint protection done? For example, is		
	TEL	virus prevention used and how are detection,		
		correction, and updates handled?		
D21	DC	Do you perform regular reviews of system and		
D22	TEL	network logs for security issues?		
D22	DC	Do you provide security performance measures to the customer at regular intervals?		
D23	DC	What technical, installation, and user		
	BRM	documentation do you provide to the State? Is the		
		documentation electronically available and can it		
		be printed?		
D24	DC	a. Will the implementation plan include user		
D24	DEV	acceptance testing?		
	BRM			
		b. If yes, what were the test cases?		
		c. Do you do software assurance?		
D25	DC	Will the implementation plan include performance		
	DEV BRM	testing?		
	TEL			
D26	DEV	Will there be documented test cases for future		
	BRM	releases including any customizations done for the		
		State of South Dakota?		
D27	DEV	If the State of South Dakota will gain ownership of		
	BRM	the software, does the proposal include a		
D28	DEV	knowledge transfer plan?  Has your company ever conducted a project where		
520	BRM	your product was load tested?		
D29	DC	Please explain the pedigree of the software.		
		Include in your answer who are the people,		
		organization, and processes that created the		
		software.		
D30	DC	Explain the change management procedure used to identify the type and extent of changes allowed in		
		the software throughout its lifecycle. Include		
		information on the oversight controls for the		
		change management procedure.		

D31	DC	Does your company have corporate policies and		
	DEV	management controls in place to ensure that only		
	TEL	corporate-approved (licensed and vetted) software		
		components are used during the development		
		process? <b>Provide a brief explanation</b> . Will the		
		supplier indemnify the acquirer from these issues in		
		the license agreement? <b>Provide a brief</b>		
		explanation.		
D32	DEV	Summarize the processes (e.g., ISO 9000, CMMi),		
		methods, tools (e.g., IDEs, compilers), techniques,		
		etc. used to produce and transform the software.		
D33	DEV	a. Does the software contain third-party		
		developed components?		
		b. If yes, are those components scanned by a		
		static code analysis tool?		
D34	DC	What security design and security architecture		
	DEV	documents are prepared as part of the SDLC		
	TEL	process? How are they maintained? Are they		
		available to/for review?		
D35	DEV	Does your organization incorporate security risk		
		management activities as part of your software		
		development methodology? If yes, please provide a		
		copy of this methodology or provide information on		
		how to obtain it from a publicly accessible source.		
D36	DC	Does your company ever perform site		
	50	inspections/policy compliance audits of its U.S.		
		development facilities? Of its non-U.S. facilities? Of		
		the facilities of its third-party developers? If yes,		
		how often do these inspections/audits occur? Are		
		1 · · · · · · · · · · · · · · · · · · ·		
		they periodic or triggered by events (or both)? If		
		triggered by events, provide examples of "trigger" events.		
D37	DC	How are trouble tickets submitted? How are		
	TEL	support issues, specifically those that are security-		
		related escalated?		
D38	DC	Please describe the scope and give an overview of		
D36	DEV	the content of the security training you require of		
	DLV	your staff, include how often the training is given		
		and to whom. Include training specifically given to		
D39	DC	your developers on secure development.  It is State policy that all Contractor Remote Access		
פפט	TEL	to systems for support and maintenance on the		
		1		
	х	State Network will only be allowed through Citrix		
		Netscaler. Would this affect the implementation of		
D40	BRM	the system?  Contractors are also expected to reply to follow-up		
D40		1		
	TEL	questions in response to the answers they provided		
	X	to the security questions. At the State's discretion,		
		a contractor's answers to the follow-up questions		
		may be required in writing and/or verbally. The		
		answers provided may be used as part of the		
		contractor selection criteria. Is this acceptable?		
D41	DC	(For PHI only)		
	DEV	a. Have you done a risk assessment? If yes, will		
	BRM	you share it?		
	TEL			
	X			

		b. If you have not done a risk assessment, when are you planning on doing one?
		c. If you have not done a risk assessment, would you be willing to do one for this project?
D42	DEV BRM	Will your website conform to the requirements of Section 508 of the Rehabilitation Act of 1973?

# **Section E: Software Development**

The following questions are relevant to the tools and third-party components used to develop your application, irrespective of the application being hosted by the State or the vendor.

	Response						
#	BIT	Question	YES	NO	NA	Explain answer as needed.	
E1	DEV	What are the development technologies used for				-	
	BRM	this system?					
	х					If marked yes, indicate version.	
		ASP.Net					
		VB.Net					
		C#.Net					
		.NET Framework					
		Java/JSP					
		MS SQL					
		Other					
E2	DC	Is this a browser-based user interface?					
	TEL						
E3	DEV	Will the system have any workflow requirements?					
	BRM						
E4	DC	Can the system be implemented via Citrix?					
E5	DC	Will the system print to a Citrix compatible					
		networked printer?					
E6	TEL	If your application does not run under the latest					
		Microsoft operating system, what is your process					
		for updating the application?					
<b>E7</b>	DEV	Identify each of the Data, Business, and					
		Presentation layer technologies your product would					
		use and provide a roadmap outlining how your					
		release or update roadmap aligns with the release					
		or update roadmap for this technology.					
E8	TEL	Will your system use Adobe Air, Adobe Flash, Adobe					
	х	ColdFusion, Apache Flex, Microsoft Silverlight, PHP,					
		Perl, Magento, or QuickTime? If yes, explain?					
E9	DEV	To connect to other applications or data, will the					
		State be required to develop custom interfaces?					
E10	DEV	To fulfill the scope of work, will the State be					
		required to develop reports or data extractions					
		from the database? Will you provide any APIs that					
		the State can use?					
E11	DEV	Has your company ever integrated this product with					
	BRM	an enterprise service bus to exchange data between					
		diverse computing platforms?					
E12	DC	a. If the product is hosted at the State, will there					
		be any third-party application(s) or system(s)					
		installed or embedded to support the product					
		(for example, database software, run libraries)?					
		b. If yes, please list those third-party application(s)					
	<b></b>	or system(s).					
E13	DEV	What coding and/or API standards are used during					
	D. E	development of the software?					
E14	DEV	Does the software use closed-source Application					
		Programming Interfaces (APIs) that have					
	D. E	undocumented functions?					
E15	DEV	How does the software's exception handling					
<u></u>		mechanism prevent faults from leaving the					

		T		
		software, its resources, and its data (in memory and		
		on disk) in a vulnerable state?		
E16	DEV	Does the exception handling mechanism provide		
		more than one option for responding to a fault? If		
		so, can the exception handling options be		
		configured by the administrator or overridden?		
E17	DEV	What percentage of code coverage does your		
		testing provide?		
E18	DC	a. Will the system infrastructure involve the use of		
		email?		
		b. Will the system infrastructure require an		
		interface into the State's email infrastructure?		
		c. Will the system involve the use of bulk email		
		distribution to State users? Client users? In		
		what quantity will emails be sent, and how		
		frequently?		
E19	TEL	a. Does your application use any Oracle products?		
	X			
		b. If yes, what product(s) and version(s)?		
		c. Do you have support agreements for these		
		products?		
E20	DC	Explain how and where the software validates (e.g.,		
		filter with whitelisting) inputs from untrusted		
		sources before being used.		
E21	TEL	a. Has the software been designed to execute		
		within a constrained execution environment		
		(e.g., virtual machine, sandbox, chroot jail,		
		single-purpose pseudo-user)?		
		b. Is it designed to isolate and minimize the extent		
		of damage possible by a successful attack?		
E22	TEL	Does the program use run-time infrastructure		
		defenses (such as address space randomization,		
		stack overflow protection, preventing execution		
		from data memory, and taint checking)?		
E23	TEL	If your application will be running on a mobile		
		device, what is your process for making sure your		
		application can run on the newest version of the		
		mobile device's operating system?		
E24	DEV	Do you use open-source software or libraries? If yes,		
		do you check for vulnerabilities in your software or		
		library that are listed in:		
		a. Common Vulnerabilities and Exposures (CVE)		
		database?		
		b. Open Web Application Security Project		
		(OWASP) Top Ten?		

# F. Infrastructure

The following questions are relevant to how your system interacts with the State's technology infrastructure. If the proposed technology does not interact with the State's system, the questions can be marked "NA".

			Response					
#	BIT	Question	YES	NO	NA	Explain answer as needed.		
F1	DC	Will the system infrastructure have a special						
		backup requirement?						
F2	DC	Will the system infrastructure have any processes						
		that require scheduling?						
F3	DC	The State expects to be able to move your product						
		without cost for Disaster Recovery purposes and to						
		maintain high availability. Will this be an issue?						
F4	TEL	Will the network communications meet Institute of						
	х	Electrical and Electronics Engineers (IEEE) standard						
		TCP/IP (IPv4, IPv6) and use either standard ports or						
		State-defined ports as the State determines?						
F5	DC	It is State policy that all systems must be compatible						
	Х	with BIT's dynamic IP addressing solution (DHCP).						
		Would this affect the implementation of the						
	TC:	system?						
F6	TEL	It is State policy that all software must be able to						
	Х	use either standard Internet Protocol ports or Ports						
		as defined by the State of South Dakota BIT Network Technologies. Would this affect the implementation						
		of the system? If yes, explain.						
F7	DC	It is State policy that all HTTP/SSL communication						
F /	DC	must be able to be run behind State of South Dakota						
		content switches and SSL accelerators for load						
		balancing and off-loading of SSL encryption. The						
		State encryption is also PCI compliant. Would this						
		affect the implementation of your system? If yes,						
		explain.						
F8	DC	The State has a virtualize first policy that requires all						
	x	new systems to be configured as virtual machines.						
		Would this affect the implementation of the						
		system? If yes, explain.						
F9	TEL	It is State policy that all access from outside of the						
	x	State of South Dakota's private network will be						
		limited to set ports as defined by the State and all						
		traffic leaving or entering the State network will be						
		monitored. Would this affect the implementation						
		of the system? If yes, explain.						
F10	TEL	It is State policy that systems must support Network						
		Address Translation (NAT) and Port Address						
		Translation (PAT) running inside the State Network.						
		Would this affect the implementation of the						
F4.4	TEI	system? If yes, explain.						
F11	TEL	It is State policy that systems must not use dynamic Transmission Control Protocol (TCP) or User						
	X	Datagram Protocol (UDP) ports unless the system is						
		a well-known one that is state firewall supported						
		(FTP, TELNET, HTTP, SSH, etc.). Would this affect						
		the implementation of the system? If yes, explain.						
F12	DC	The State of South Dakota currently schedules						
112		routine maintenance from 0400 to 0700 on Tuesday						
		mornings for our non-mainframe environments and						
		once a month from 0500 to 1200 for our mainframe						
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		environment. Systems will be offline during this		
		scheduled maintenance time periods. Will this have		
		a detrimental effect to the system?		
F13	BRM	Please describe the types and levels of network		
	TEL	access your system/application will require. This		
		should include, but not be limited to TCP/UDP ports		
		used, protocols used, source and destination		
		networks, traffic flow directions, who initiates		
		traffic flow, whether connections are encrypted or		
		not, and types of encryption used. The Contractor		
		should specify what access requirements are for		
		user access to the system and what requirements		
		are for any system level processes. The Contractor		
		should describe all requirements in detail and		
		provide full documentation as to the necessity of		
		the requested access.		
F14	BRM	List any hardware or software you propose to use		
	Х	that is not State standard, the standards can be		
		found at:		
		https://bit.sd.gov/bit?id=bit_standards_overview.		
F15	DC	Will your application require a dedicated		
	D.E	environment?		
F16	DEV	Will the system provide an archival solution? If not,		
	BRM	is the State expected to develop a customized		
		archival solution?		
F17	DC	Provide a system diagram to include the		
	TEL	components of the system, description of the		
		component, and how the components		
<b>540</b>	D.C.	communicate with each other.		
F18	DC	Can the system be integrated with our enterprise		
<b></b>	TEI	Active Directory to ensure access is controlled?		
F19	TEL	It is State policy that no equipment can be		
	Х	connected to State Network without direct		
		approval of BIT Network Technologies. Would this		
F20	DC	affect the implementation of the system?		
F20	DC	Will the server-based software support:		
	Х	a. Windows server 2016 or higher		
		b. IIS7.5 or higher		
		c. MS SQL Server 2016 standard edition or higher		
		d. Exchange 2016 or higher		
		e. Citrix XenApp 7.15 or higher		
		f. VMWare ESXi 6.5 or higher		
		g. MS Windows Updates		
		h. Windows Defender		
F21	TEL	All network systems must operate within the		
	Х	current configurations of the State of South		
		Dakota's firewalls, switches, IDS/IPS, and desktop		
		security infrastructure. Would this affect the		
		implementation of the system?		
F22	DC	All systems that require an email interface must use		
		SMTP Authentication processes managed by BIT		
		Datacenter. Mail Marshal is the existing product		
		used for SMTP relay. Would this affect the		
		implementation of the system?		
F23	DC	The State implements enterprise-wide anti-virus		
	TEL	solutions on all servers and workstations as well as		
		controls the roll outs of any and all Microsoft		

		patches based on level of criticality. Do you have any concerns regarding this process?		
F24	DC	What physical access do you require to work on		
	TEL	hardware?		
F25	DC	How many of the vendor's staff and/or		
		subcontractors will need access to the state system,		
		will this be remote access, and what level of access		
		will they require?		

### **Section G: Business Process**

The following questions pertain to how your business model interacts with the State's policies, procedures, and practices. If the vendor is hosting the application or providing cloud services, questions dealing with installation or support of applications on the State's system can be marked "NA".

		stem can be marked IVA .	Response				
#	BIT	Question	YES	NO	NA	Explain answer as needed.	
G1	DC	a. If your application is hosted on a dedicated					
		environment within the State's infrastructure,					
		are all costs for your software licenses in					
		addition to third-party software (i.e. MS-SQL,					
		MS Office, and Oracle) included in your cost					
		proposal?					
		b. If so, will you provide copies of the licenses with					
		a line-item list of their proposed costs before					
		they are finalized?					
G2	BRM	Explain the software licensing model.					
G3	DC	Is on-site assistance available? If so, what is the					
	DEV	charge?					
	BRM						
G4	DEV	a. Will you provide customization of the system if					
	BRM	required by the State of South Dakota?					
		b. If yes, are there any additional costs for the					
		customization?					
G5	BRM	Explain the basis on which pricing could change for					
		the State based on your licensing model.					
G6	BRM	Contractually, how many years price lock will you					
		offer the State as part of your response? Also, as					
		part of your response, how many additional years					
		are you offering to limit price increases and by what					
		percent?					
G7	BRM	Will the State acquire the data at contract					
		conclusion?					
G8	BRM	Will the State's data be used for any other purposes					
		other than South Dakota's usage?					
G9	DC	Has your company ever filed for Bankruptcy under					
		U.S. Code Chapter 11? If so, please provide dates for					
		each filing and describe the outcome.					
G10	DC	Has civil legal action ever been filed against your					
		company for delivering or failing to correct					
		defective software? Explain.					
G11	DC	Please summarize your company's history of					
		ownership, acquisitions, and mergers (both those					
		performed by your company and those to which					
		your company was subjected).					
G12	DC	Will you provide on-site support 24x7 to resolve					
		security incidents? If not, what are your					
	55: /	responsibilities in a security incident?					
G13	DEV	What training programs, if any, are available or					
		provided through the supplier for the software? Do					
		you offer certification programs for software					
		integrators? Do you offer training materials, books,					
		computer-based training, online educational					
		forums, or sponsor conferences related to the					
	D.C.	software?					
G14	DC	Are help desk or support center personnel internal					
	TEL	company resources or are these services					

		outsourced to third parties? Where are these resources located?		
G15	DC	Are any of the professional services you plan to provide located outside the United States (e.g., help desk or transcription services)?		
G16	DC	Is the controlling share (51%+) of your company owned by one or more non-U.S. entities?		
G17	DC	What are your customer confidentiality policies? How are they enforced?		
G18	DC BRM x	Will this application now or possibly in the future share PHI with other entities on other networks, be sold to another party, or be accessed by anyone outside the US?		
G19	DC	If the product is hosted at the State, will there be a request to include an application to monitor license compliance?		
G20	DC BRM	Is telephone assistance available for both installation and use? If yes, are there any additional charges?		
G21	DC TEL	What do you see as the most important security threats your industry faces?		