

SERS Retirement Board Technology Committee Meeting December 19, 2024 1:00 P.M.

Join Zoom Meeting

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Meeting ID: 996 3637 5770 **Password:** 12345

To join by phone, dial: +1 305 224 1968 and enter the Meeting ID: **996 3637 5770** and Password: **12345** when prompted.

- 1. Roll call
- 2. Approval of **June 20, 2024, and September 19, 2024,** Technology Committee Minutes (R-2)
- 3. Opening Remarks
- 4. Executive Session pursuant to R.C. 121.22(G)(6) to discuss a security matter
- 5. Information Technology Q2 Highlights
- 6. Risk Management Q2 Highlights
- 7. Upcoming Technology Committee Meetings
 - Future Topics
 - Next Meeting Date(s)
- 8. Adjournment

SERS Technology Committee Meeting December 19, 2024

			_ P.M.
Roll Call:			
	Matthew King		
	James Rossler		
	Frank Weglarz		
	Daniel Wilson		

APPROVAL OF MINUTES OF THE TECHNOLOGY COMMITTEE MEETING HELD ON June 20, 2024

Committee meeting hel			on to approve the mini	utes of the Technology
Upon roll call, the vot	te was as follows:			
ROLL CALL:	<u>YEA</u>	<u>NAY</u>	<u>ABSTAIN</u>	
James Rossler Frank Weglarz				
Daniel Wilson Matthew King				

School Employees Retirement System

TECHNOLOGY COMMITTEE MINUTES

Preparer	Megan Robert	son	Meeting Date:	June 20, 2024		
Preparer Committee Chair Agenda Discussion	1. Roll ca 2. Appro 3. Openi 4. Inform 5. Risk M 6. Execumatter 7. Upcor 8. Adjour	Committee Frank Wegl Also in Atte Ryan Henni Aimee Russ Davis, Joe I Gray, Nikki representati attended vir all (R) val of April 18 ng Remarks ation Techno Education S Cybersecur Technology Tech Risk Ianagement a tive Session p (if needed) ning Technolo Future Topi Next meetir	roll call was as follows: Maarz. Absent: Daniel Wilson endance: gan, ORSC representative sell. SERS Staff Members: Marotta, Richard Stensrud, Whitacre, Amy Clark and Nove of the Ohio Attorney Getually on Zoom. , 2024, minutes (R) logy Update Session Under R.C. 171.50 ity Committee Updates nology Roadmap – Infrastruology Roadmap Financial Management Q4 and Information Security Quorsuant to R.C. 121.22(G) ogy Committee Meetings cs	e. SERS Board Member: Phil Grim, Jay Patel, Jeff Karen Roggenkamp, Vatina Megan Robertson. The eneral, Lisa Reid, and guests and 3309.051 – ructure and SMART Tracking uarterly Update		
	call was as fol Absent: Danie Also in attenda Member: Aime Joe Marotta, F Amy Clark and General, Lisa Approval of Member: Aime Frank Weglarz minutes of the call, the vote was a series of the call, the vote was a series of the call of	m.				

Information Technology Update

SERS Deputy Executive Director, Karen Roggenkamp provided opening comments regarding the education session to be presented at the committee meeting. Ms. Roggenkamp explained information would be covered about threats as well as tools to protect SERS as we move forward in a sensitive area.

Phil Grim, Information Security Officer of SERS, provided a presentation that focused on Identity Proofing Accounts and Combating Email Threats.

After some questions and a discussion, the committee thanked Mr. Grim for his informative presentation.

Jay Patel, SERS Chief Technology Officer, shared a Technology Roadmap update on FY2024 Infrastructure projects and FY2024 SMART projects. Mr. Patel reported that as we are ending FY2024, we have good momentum. In terms of FY2024 Infrastructure projects, Mr. Patel highlighted that the firewall replacement was accomplished with considerable savings. The update continued with an FY2024 SMART projects and Mr. Patel provided an update on the MSS Portal Reimagination project which was deployed on May 24, 2024. Mr. Patel shared information and metrics with the committee concerning improved security and less friction when using the member and employer portals. Mr. Patel shared another member portal update implemented in June. When members submit a refund application online, they have the ability to see the processing status at any time. Mr. Patel concluded the SMART projects update noting the upcoming Member Self Service Refund On-line project will provide on-line capability for members to securely submit refund application. continue to improve multi-factor authorization and user experience.

After a few questions from the Committee members and a brief discussion surrounding the portal reimagination project, Mr. Patel provided an update on the budget status with additional updated planned at the next meeting.

Risk Management and Information Security Update

Ms. Roggenkamp introduced the risk management update topic, sharing that Mr. Grim is working with SERS Legal team legal on school cyber incident notifications. Mr. Grim confirmed there is a JCARR scheduled for June 24, 2024, and ensured that the board would be given an update at a future meeting.

Ms. Roggenkamp informed the committee that the quarterly metrics showed no usual trends or incidents. Mr. Grim highlighted that SERS monitors dark web activity as a proactive measure to protect SERS membership from cyber threats.

<u>Upcoming Technology Committee Meetings – Future Topics and Next Meeting Dates</u>

James Rossler thanked Mr. Grim for a great presentation on cybersecurity. He asked that as SERS gets updates on the school cyber incident notifications that SERS make strong effort to get every school notified in a manner where they are not going to miss it. Mr. Rossler and Mr. King strongly recommend including A-Sites when socializing the cybersecurity rule.

Ms. Roggenkamp noted that the committee would receive an overview of the communication we will put in place, along with a few examples.

	The next regular Technology Committee meeting will be held Thursday, September 19, 2024, at 1:30 pm or immediately following the regular SERS Board Meeting. James Rossler will not be in attendance and is excused. Technology Committee Chair, Matthew King, adjourned the meeting at 2:33 p.m.					
	Action Items	Assigned Person	Due Date			
Action Items	n/a					

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Richard Stensrud, Secretary

APPROVAL OF MINUTES OF THE TECHNOLOGY COMMITTEE MEETING HELD ON September 19, 2024

Committee meeting hel			on to approve the minut 1 .	tes of the Technology
Upon roll call, the vot	e was as follows:			
ROLL CALL:	<u>YEA</u>	NAY	<u>ABSTAIN</u>	
James Rossler Frank Weglarz Daniel Wilson				
Matthew King				

School Employees Retirement System

TECHNOLOGY COMMITTEE MINUTES

Preparer	Megan Rober	tson	Meeting Date:	September 19, 2024				
Committee Chair	Matthew King	Committee roll call was as follows: Matthew King, Frank Weglarz, Dan Wilson. Absent: James Rossler Also in Attendance: Ryan Hennigan, ORSC representative. Staff Members: Phil Grim, Jay Patel, Jeff Davis, Joe Marotta, Richard Stensrud, Karen Roggenkamp, John Grumney, Vatina Gray, Nikki Whitacre, Jenn Chao, and Megan Robertson. The representative of the Ohio Attorney General, Lisa Reid, and guests attended virtually on Zoom.						
Agenda	3. Open 4. Inform 5. Exect matte 6. Upco 7. Adjou	oval of June 20, 2024, minutes (R) ing Remarks nation Technology Update Technology Committee Updates Technology Roadmap (TRM) – Infrastructure and SMART Technology Roadmap Financial Tracking utive Session pursuant to R.C. 121.22(G)(6) to discuss a security in ming Technology Committee Meetings Future Topics Next meeting Date(s)						
Discussion	7. Adjournment The SERS Special Technology Committee meeting began in open session at p.m. Roll Call The SERS regular Technology Committee began with a roll call. The committee call was as follows: Present: Matthew King, Frank Weglarz, Daniel Wilson. Ab James Rossler. Also in attendance was Ryan Hennigan, ORSC representative. Staff Members Grim, Jay Patel, Jeff Davis, Joe Marotta, Richard Stensrud, Karen Roggenkar John Grumney, Vatina Gray, Nikki Whitacre, Jenn Chao, and Megan Robertse The representative of the Ohio Attorney General, Lisa Reid, and guests attend virtually on Zoom. Approval of Minutes Frank Weglarz moved, and Matthew King seconded the motion to approve the minutes of the Technology Committee meeting held on June 20, 2024. Upon I call, the vote was as follows: Yea: Matthew King, Frank Weglarz Abstained: D Wilson. Absent: James Rossler. The motion did not carry. Information Technology Update							
<u> </u>		Executive Dirgarding the age	ector, Karen Roggenkamp enda.	provided opening				

Jay Patel, SERS Chief Technology Officer, shared a Technology Roadmap (TRM) update on FY2025 Infrastructure projects and FY2025 SMART projects. Mr. Patel reminded the committee that this is the third year of the TRM and strategic intent of the TRM is to re-imagine and re-engineer member's journey with SERS by deploying digital technology while preserving high touch service and engagement. There were no questions from the committee.

Mr. Patel continued his presentation explaining the Sagitec Support Agreement Assessment which will be conducted with the help of Linea Solutions consulting firm. Sagitec Support and Maintenance (S&M) five-year contract for SMART is scheduled to expire on July 30, 2025. This contract includes product support, upgrades to the Neospin framework software, and ongoing security enhancements. To evaluate the best SMART support model moving forward, SERS has enlisted Linea Solutions. Mr. Patel shared the assessment objectives explaining that Linea will help provide a benchmark and provide intelligence of what is happening in the market. A draft report in expected in late October and the committee will receive updates as this assessment progresses.

Mr. Patel continued his report with an update on the budget status. The committee had no questions.

Mr. King thanked Mr. Patel for his presentation stating that things are well on track and look good from a budget standpoint.

Executive Session

Dan Wilson moved, and Frank Weglarz seconded the motion that the Technology Committee convene in Executive Session pursuant to R.C. 121.22(G)(6) to discuss security matters. Upon roll call, the vote was as follows: Yea: Matthew King, Frank Weglarz, Daniel Wilson. Absent: James Rossler. The motion carried.

The committee convened in Executive Session at 2:21 p.m.

The committee returned to open session at 3:01 p.m.

<u>Upcoming Technology Committee Meetings – Future Topics and Next</u> Meeting Dates

Dan Wilson asked to be kept informed about filling the open Information Security position.

Executive Director, Richard Stensrud, took a moment to express appreciation for the two Member Services representatives heard on the calls in executive session. This illustrated our employees are thinking and not just reacting although there were other calls in the que. It illustrates that some work helping people can take a long time and that means things can get backed up, so we want to find the right balance between getting peoples' problems addressed and handling the needs.

Mr. King echoed this appreciation and thanked staff.

The next regular Technology Committee meeting will be held Thursday, December 19, 2024, at 12:30 pm or immediately following the regular SERS Board Meeting.

Technology Committee Chair, Matthew King, adjourned the meeting at 3:03 p.m.

	Action Items	Assigned Person	Due Date
Action Items	n/a		

Matthew King, Committee Chair	Richard Stensrud, Secretary



Agenda Items



- Opening Remarks
- Executive Session
- Information Technology Q2 Highlights
- Risk Management Q2 Highlights
- Appendix
 - Technology Roadmap (TRM) Projects Details
 - TRM Budget
 - Socure Process Examples
 - Information Security Key Metrics
- Questions/Future Topics

EXECUTIVE SESSION

move	ed and	_seconded the m	otion that the Technology C	ommittee
convene in Executive	Session pursuant	to R.C. 121.22(0	G)(6) to discuss a security ma	atter.
Upon roll call, the vo	te was as follow	s:		
ROLL CALL: James Rossler Frank Weglarz Daniel Wilson Matthew King	<u>YEA</u>	<u>NAY</u>	ABSTAIN	
IN EXECUTIVE SESS	SION AT	A.M./P.	м.	
RETURN TO OPEN S	ESSION AT	A.I	И. / Р.М.	



Information Technology Q2 Highlights

Technology Roadmap (TRM) Summary



Infrastructure Projects:

- A static bot for answering FAQs on the MSS portal has been successfully deployed in production.
 - Next: researching other types of chat solutions, including those powered by GenAl.
- Data Protection:
 - 50 TB of cloud backup storage has been added to support the 3-2-1 backup strategy.
 - The evaluation of Veeam Software has been completed and the team decided to continue using it.

SMART Projects:

- GL Phase I was implemented in production in October to address audit findings. 2nd Phase of the project is in motion.
- Refund Reimagination:
 - Socure (fraud detection software) has been implemented in a "learning mode"
 - Recommendations from the member account security review are assessed and could affect the project time-line.
- Linea is finalizing their analysis and draft report on the Sagitec's support and maintenance contract renewal
 options.

Budget:

FY25 TRM projects are tracking to the budget forecast



Risk Management Q2 Highlights

FY2025 Q2 Highlights - Risk Management



Continued to Strengthen Information Security Resources

- Elevated Phil Grim to Assistant Director Information Security as part of our continued commitment to developing and recognizing our internal talent and the importance of information security
- New Senior Security Analyst, Ryan Daniels, started December 2nd
 - Role focuses on safeguarding SERS sensitive information, detecting and mitigating cyber threats and attacks as well as implementing best practices related to information security and advanced security monitoring tools
 - Prior experience Information Security Engineer at TCM Bank, Cyber Defense Operations for Ohio Air National Guard,
 Department of Defense contractor (Cyber Security Engineer & Network Technician)

Responded to Recent Security Events

- Notifications of Cyber Security Breaches from Marysville and Cincinnati Schools
 - Successfully disconnected employer portal access (eSERS)
 - · Working with school resources to better understand issues
- Palo Alto Firewall instance

Expanded Information Security Metrics will be presented at our March Meeting





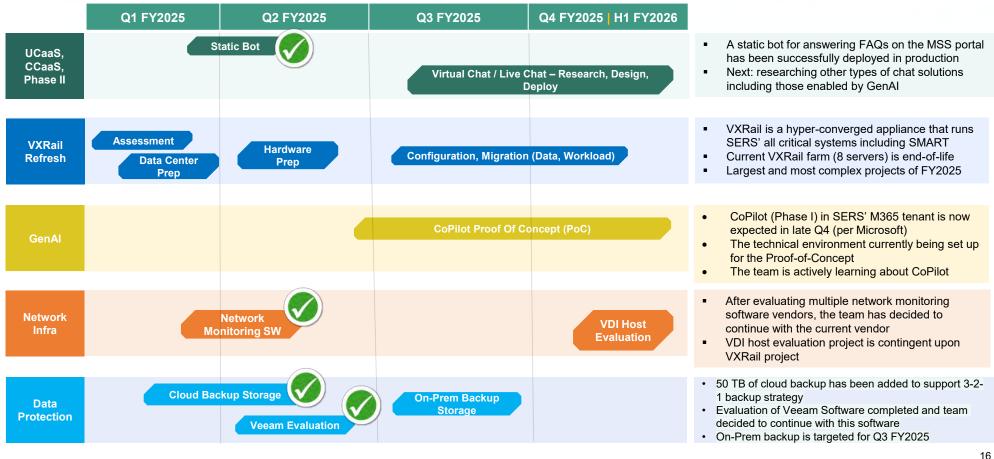
QUESTIONS/ FUTURE TOPICS



Appendix

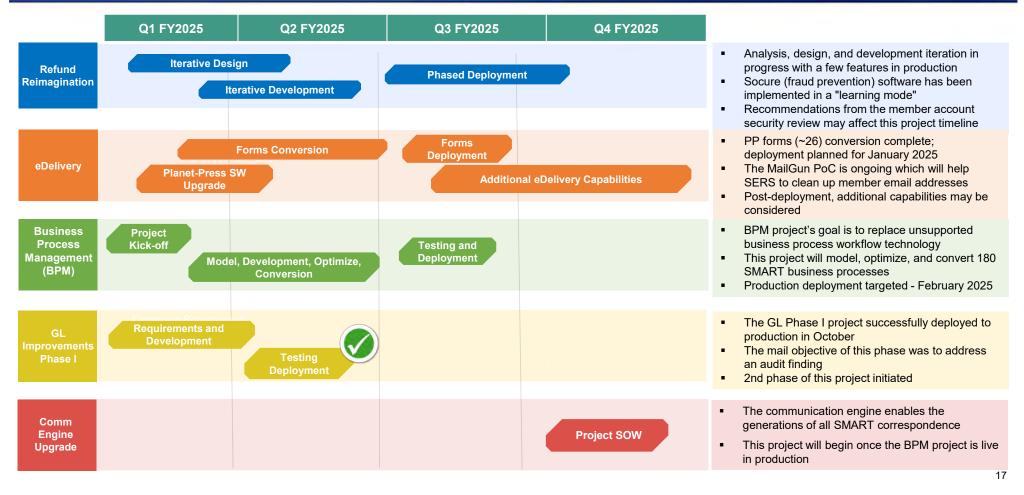
TRM - FY2025 Infrastructure Projects





TRM - FY2025 SMART Projects





Sagitec Support Agreement Assessment by Linea



SMART Support Contract Expiration

• Sagitec Support and Maintenance (S&M) five-year contract for SMART is scheduled to expire on July 30, 2025. This contract includes product support, upgrades to the Neospin framework software, and ongoing security enhancements. The monthly cost for this service is \$35,000.

Assessment Objectives

- To evaluate the best SMART support model moving forward, SERS has enlisted Linea Solutions. Their SOW includes:
 - Review of current S&M contract and how it compares to other Sagitec pension clients
 - Guiding SERS on how to best utilize SERS' IT resources and Sagitec for ongoing SMART support
 - Conducting an environmental scan of Sagitec's clients to understand their support models
 - Comparison of Sagitec's support with other vendors
 - Identifying best practices for the duration, components, and pricing of a renewed contract
 - Linea's consulting fees are not to exceed \$40,000.

Current Status

- Project kicked off on July 30, 2024
- · Meetings with four Sagitec clients were held
 - · Several of these clients follow a support model like ours
 - Our cost structure is within the strike zone
- A draft report is anticipated in early Q3 FY2025
- Updates and information to Technology Committee

Technology Roadmap Financial Tracking



Five Year Tech	nology Roadmap	Budget										
			FY2	2023 & FY2024					Tota	l Roadmap Spend	Rer	naining Roadmap
Description	Total	5-Year Plan	Α	ctual Spend		FY2025 Plan	FY20	25 Spend to Date		to Date		Amount **
Telecommunications	\$	250,000	\$	308,040	\$	-	\$	19,617	\$	308,040	\$	(58,040
Security Stack	\$	899,600	\$	70,977	\$	30,000	\$	-	\$	100,977	\$	798,623
Network Infrastructure Refresh	\$	886,000	\$	653,297	\$	301,500	\$	-	\$	954,797	\$	(68,797
Hybrid Technology Replacement	\$	419,000	\$	123,499	\$	386,000	\$	210,382	\$	509,499	\$	(90,499)
Server Infrastructure	\$	1,216,700	\$	-	\$	341,100	\$	260,012	\$	341,100	\$	875,600
Backup and Recovery	\$	532,754	\$	140,455	\$	121,250	\$	43,573	\$	261,705	\$	271,049
SMART Portals	\$	196,000	\$	82,500	\$	-			\$	82,500	\$	113,500
SMART Framework	\$	760,000	\$	482,500	\$	215,000			\$	697,500	\$	62,500
SMART Enhancements	\$	2,623,000	\$	231,344	\$	803,567	\$	180,969	\$	1,034,911	\$	1,588,089
SMART Business Tools	\$	500,000	\$	334,414	\$	100,000	\$	14,323	\$	434,414	\$	65,586
SMART total	\$	4,079,000	\$	1,130,757	\$	1,118,567	\$	195,292	\$	2,249,324	\$	1,829,676
Infrastructure Total	* \$	4,204,054	\$	1,296,269	\$	1,179,850	\$	533,584	\$	2,476,119	\$	1,727,935
Total Budget	\$	8,283,054	\$	2,427,026	\$	2,298,417	\$	728,876	\$	4,725,443	\$	3,557,611
** Remaining Roadmap is equal the Total	5-Year Plan less	FY2023 & FY20	24 Act	tuals, and less F	Y202	5 Plan						

Socure Examples - Identity Proofing Accounts



POWERFUL GRAPH-DEFINED FRAUD PREVENTION

Sigma Identity Fraud

Every dimension of consumer identity is analyzed to detect third-party fraud across the digital lifecycle



Sigma Synthetic Fraud

Purpose-built module combines proof-of-life data sources and advanced ML trained on synthetic- specific features



Email RiskScore

ML model trained on hundreds of email-specific variables and data sources, correlated to an identity



Digital Intelligence

Combined device intelligence, behavioral analytics, and entity profiling associate device, behavioral, network, and location patterns at scale



First-Party Fraud

Consortium ML model detects fraud where true identity is asserted, for abuse, bust out, friendly fraud, and

no intent to pay



Phone RiskScore

ML model trained on hundreds of phone-specific variables and data sources, correlated to an identity



Alert List

Socure's consortium database of known harmful identities weeds

out bad actors



Address RiskScore

ML model trained on hundreds of address-specific variables and data sources, correlated to an identity

DATA-DRIVEN REGULATORY COMPLIANCE



Socure Verify

Verifies first name, last name, address, phone, DOB, SSN correlation for precise identity resolution of nearly any consumer



Global Watchlist Screening with Monitoring

Hyper-accurate sanctions and risk screening with continuous customer status monitoring ensures uninterrupted compliance



CRSV

Instantly verify a consumer provided name, SSN and DOB match with the issuing authority

INSTANT DOCUMENT VERIFICATION



Predictive Document Verification

Instant ID document with ML models and biometric verification with NIST PAD Level 2 liveness detection

ACCOUNT INTELLIGENCE



Account Intelligence

Instant, inclusive bank account status and ownership verification



DECISION MODULE

Hosted controls interface that orchestrates customer decision logic

Socure Examples: Identity Proofing Accounts



Summarized as having three main components:



Is the person who is creating the account who they say they are?

(Copy/Paste behavior, cognitive timing, swiping/typing patterns, network, geolocation, device attributes)







Access and Authentication

Is the person trying to login to the account, the same person that created the account?

(Device attributes, jailbroken, geolocation, IP address, MFA mobile application)







Is the person who logged into the account acting maliciously?

(Step-up for risky transactions, periodic "wellness" checks)



Socure Examples: Identity Proofing Accounts



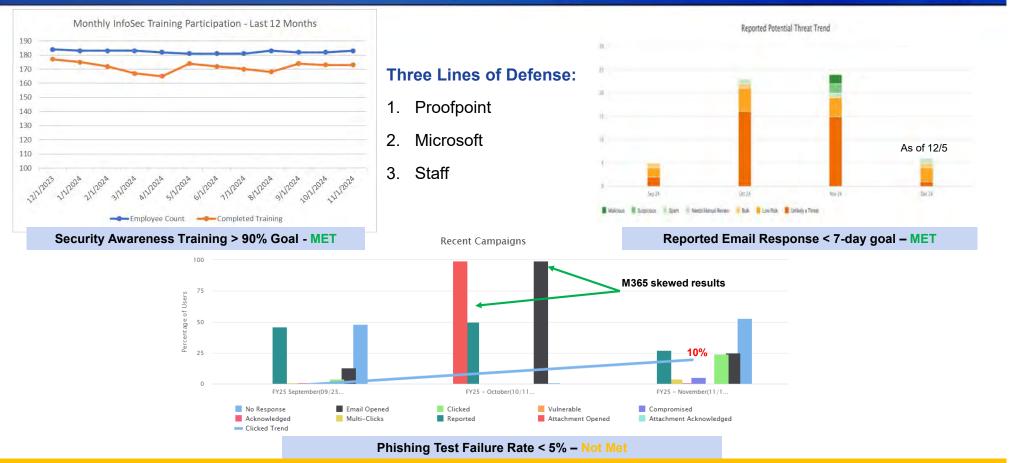


Take selfie - compares selfie to ID photo

Step-up Verification with DocV (Takes Seconds, Not Minutes)

Information Security - Key Metrics





Developing process for staff who fail phishing test more than once

Metrics: Inbound Email and Blocked Messages



Reporting Period – 90 Days (as of 12/6/2024)

Inbound Email Protection Breakdown



Volume of messages continues to increase. 94% of 101,000 new messages were malicious.

ADJOURNMENT(R)

moved that the Technology Committee adjourn to meet on						
for the next scheduled meeting.						
The meeting adjourned at	p.m.					
	Matthew King, Chair					