

Project / Executive Summary:

Technical	Business	Schedule
Yellow (S)	Green (S)	Green (S)

I = Improving D = Deteriorating S = Stable

Technical:

- Saber made significant progress toward in implementing the agreed upon plan to move back to the Citrix Software Gateway solution. The software gateway is a step back as far as State / Citrix is concerned and will be a significant change to the SCORE infrastructure. The change would invalidate the performance and security testing that has been completed to this point. Saber issued a Project Schedule outlining a basic plan for moving away from the hardware CAG (Citrix Access Gateway). Citrix had not provided any additional information as to the timing of the CAG update at the time of this report.
- The SCORE IV&V met with the State on the Performance & Security deliverable over the period. The SCORE IV&V is recommending rejection due to the lack of key coverage in the test. Specifically, the Citrix load information was not provided. The deliverable has a number of significant issues that must be addressed. A meeting to review the findings will be conducted with Saber over the next period. The deliverable will be discussed at the Steering Committee meeting over the next period.
- The SCORE IV&V conducted another round of external Independent Security Testing on 11/3 – 11/4. The tests produced some new results that were discussed with Saber in the period. The SCORE IV&V has requested and received the logs for the test period. The SCORE IV&V have reviewed the logs to the extent possible. The logs contain a significant amount of superfluous information that makes it difficult to identify critical issues. The State is experiencing similar issues with the logs and the lack of Saber interpretation. The SCORE IV&V has generated a new risk to address this issue.
- The lack of a Test Platform continues to slow progress in addressing the Citrix Protocol / SSL error and Performance testing. Site 1 has been used for this purpose to date making the site unavailable for production. Both sites must be fully functional starting in early December for the planned statewide rollouts. The initial cost was estimated at roughly 228K. The State and Saber have met over the period to discuss the TCO for the Test Platform. The SCORE IV&V is recommending proceeding with the purchase, hosting the system in Colorado.

Business:

- The Statewide rollout training is being finalized with a dry-run scheduled for the week of November 26th. The State and IV&V will be a part of that process to help Saber adjust the training for the counties that have had limited to no exposure to the SCORE system. The importance of the training and follow-up support is critical to a successful Statewide rollout. The reduced exposure of the Statewide counties over the pilot counties makes the content and presentation of the training vital to the project.

- The connectivity and the number of SCORE software releases are stretching the counties during their election cycles. Several of the counties are pushing back on their availability during the blackout period. Emergency releases to support specific requests continue to be required.
- The CDOS Elections Director has established the SCORE Task Force to address and set the priority of the issues and enhancements being developed. The SCORE IV&V is being included in the task force. The SCORE IV&V's role will be limited to advisory and restricted by the contractual priorities of the project. The SCORE IV&V will continue to attend meetings as the topics dictate. The SCORE IV&V PM will attend task force meeting as topics and time permits.

Schedule:

- Updates to the infrastructure required by the Independent Security Test (IST) along with the "official" performance testing were completed before the November 2007 elections. Discussions with Saber and the State continued over the period in order to assure that the any critical changes are made before the Statewide rollout.
- Changes to the Votec extract must be applied to the Statewide rollout data migration to eliminate the need for counties to update their data after migration. The data migration process will need to be updated in the next month in order to meet the needs of the counties. Saber has contacted Votec and was put off until after the November elections. This makes it impossible for Saber to complete their changes in time for the Statewide rollout. Changes to the Votec county data migration will need to be made via custom extracts for individual county needs. The impact could be significant if the Statewide counties have to be taken down for the supplement migrations.
- Due to the many outstanding issues (application / infrastructure), Saber has a very tight window to get all the corrections into place and tested before the end of November scheduled 3.0 and now 3.2 (Petitions) releases. The STF has prioritized the outstanding issues into modules buckets for better organization and to allow Saber to address multiple issues affecting the same area. The limited time constraint is pushing this issue into a risk, for the SCORE application, that incorrect interpretation of requirements or incomplete regression testing.

Accomplishments:

- The SCORE IV&V continued to perform Acceptance Testing over the period. The new goal is to complete all the 1540 test cases by the completion of the Statewide rollout (March 2008). This will allow Saber enough time to address the issues by the Priority # 3 release date. The HAVA compliance has risen to 80%. Provisional ballots are the only component not tested to this point. Testing will continue with each release of the application. There are 2 issues related to HAVA compliance: Agency interface implementation for state and Provisional Ballots. The analysis for the Colorado statues has been completed at this time, but cannot be implemented until 3.5 bucket.
- The SCORE IV&V working with the STF are making some progress on the HAVA or Colorado Statue requirements. There are 2 issues related to HAVA compliance: Agency interface implementation for state and Provisional Ballots. The analysis for the Colorado statues has been completed at this time, but cannot be implemented until 3.5 bucket.

- The SCORE II PMO and IV&V continue to review and respond to multiple Saber Plans and deliverables. The SCORE IV&V has shifted two of its Quality Assurance and Voter Registration / Election Management subject matter experts to performing Acceptance Testing and finalizing the User Acceptance Testing support for the Priority #3.0 & 3.2 issues. In addition, the Security and Infrastructure resources are being re-directed toward the Independent Security Testing findings follow-up. This movement supports the Graded Approach scheme with emphasis toward product or application not paper deliverables.

Management Attention: None in the period

Information:

- The Saber Data Migration process calls for fields that do not comply with database and business rules to be changed during the migration process. Those changes are not currently being documented inside the legacy system. The SCORE IV&V recommends that whenever a data field is changed in the data migration process that an activity record be generated describing the change and the timing of the change. Saber has not added the information to this point due to county availability. This will be tracked as an issues moving forward until all the pilot counties data has been inserted in the production database.
- The SCORE IV&V recommends that the State Create procedures to verify SSN number in the SCORE system, since the counties will not be using the manual work around (URL) and CDOR is not ready for online exchanges. This will not be necessary if the CDOR Driver's License interface is implemented before the Statewide rollout. Progress with the CDOR interface over the period will eliminate the need for this workaround.
- The SCORE IV&V continues to monitor outside influences including the status of other states HAVA implementation. The information is used to assess the SCORE II project. The next meeting of the SCORE IV&V Executive Steering Committee has been scheduled for 12/11.
- The SCORE IV&V continues to see corrections which are being implemented outside of the established list provided by the Score Task Force (STF). The STF was designed to review any SPIRIT issues for statues and policy rules. CDOS and Saber will work together to ensure a compliant design and then present the solutions to the CCB for the final decision. The release process will be tightly coupled with the Spirit Work flow in the future.
- The SCORE IV&V is addressing the weekly code drops in between major releases code drops. This is unplanned testing which was not part of the original scope of work. The State should re-evaluate the use of an automated tool for testing.

Schedule / Activities & Tasks:

Completed & Planned Activities / Tasks		
Completed Last Week		
Activity / Task	Date	Priority
Lessons Learned Follow-up November 2007	11/21/2007	High
SCORE Task Force Meeting	11/21/2007	High
Performance and Security Planning Deliverable Review	11/19/2007	High
SCORE IV&V Audits (Licenses, Performance, Code Review)	11/21/2007	High
Continue to respond to Saber Deliverables and Activities (DED's)	11/21/2007	High
Performance and Security Planning Meetings	11/20/2007	High
Plan for Next Week		
Activity / Task	Date	Priority
Performance and Security Planning Deliverable Review	11/26/2007	High
Steering Committee Meeting	11/27/2007	High
SCORE Task Force Meeting	11/28/2007	High
SCORE IV&V Audits (Licenses, Performance, Code Review)	11/30/2007	High
Continue to respond to Saber Deliverables and Activities (DED's)	11/30/2007	High
Transition Plan Review	11/30/2007	High

Staffing: As of 09/30/2007:

Resource Type / Role	Contract Hours	Hours Used to date	% Used	Hours in Period
Project Management	2347.00	1955.00	83%	130.00
Infrastructure / Disaster Recovery SME	289.00	384.25	133%	2.00
Application / Infrastructure SME	737.00	255.50	35%	16.00
Oracle / Application SME	630.00	156.00	25%	3.00
Voter Registration / Election Management SME	1206.00	1,092.00	91%	40.00
Quality Assurance SME's	2369.00	1,962.25	83%	145.50
Security SME's	860.00	655.50	76%	17.50
Totals	8438.00	6460.50	77%	354.00

Planned Activities	Contract Hours	Hours Used to date	% Used	Hours in Period
Project Management (Status Reports / Meetings)	1599	1829.75	114%	168.50
Source Code Escrow Responsibilities	180	27.00	15%	0.00
Saber / SCORE II Deliverables / Activities Review	3599	1715.00	48%	33.75
SCORE II Independent Assessments (Security...)	544	620.00	114%	10.75
SCORE II Acceptance Testing (User / System)	1940	1945.75	100%	135.00
SCORE II Project Audits	576	323.00	56%	6.00
Totals	8438	6460.50	77%	354.00

Acceptance Testing for V.1.4.19 code baseline - Test Case Execution:

Total Cases	1540	100%	HAVA Requirements		Total Bugs	
Pass	732	48%	Pass	80%	Critical	0
Fail	156	10%	Fail **	20%	High	54
N/A	68	4%	Block	0%	Medium	65
Block	2	0%	Total Req.	100%	Low	71
Total Tested	958	62%			Closed	215
Total to be Executed	581	38%			Total	405

** Provisional Ballots are still an issue with the system. Requirements have been gathered and scheduled Priority 3.5 for the Provisional Ballot Process.

Priority 3.0 Release

68 Test Cases: 168 to Test

Priority 2.7 Release

84 Test Cases: 3 Pass, 1 In-Process and 80 to Test

Emergency October Release

6 Test Cases: 6 Pass

Functional Area	Total Cases	Cases Executed	Cases Passed	Percent Complete	Percent Passed
Absentee Application	55	47	39	85%	83%
Address	103	85	79	83%	93%
Administration	85	45	39	53%	87%
Ballot	61	52	34	85%	65%
Calendar	18	1	0	6%	0%
Candidate	25	13	13	52%	100%
Contacts	14	8	8	57%	100%
Contest	17	10	10	59%	100%
Districts	56	56	53	100%	95%
Document Management	7	7	7	100%	100%
Elections	169	111	95	66%	86%
Election Workers	33	20	19	61%	95%
Exports	5	4	3	80%	75%
Help	2	0	0	0%	
Interfaces	22	7	7	32%	100%
Miscellaneous	18	15	6	83%	40%
Performance	16	9	8	56%	89%
Petition	37	20	19	54%	95%
Poll Book	28	7	7	25%	100%
Polling Places	26	10	10	38%	100%
Reports, Labels and Mailings	205	68	29	33%	43%
Scheduler	19	0	0	0%	
Software/Hardware Compatibility	10	2	2	20%	100%
System	102	11	9	11%	82%
Voter Management	406	271	227	67%	84%
Totals:	1539	879	723	57%	82%

Issues: (Last Reviewed on 10/06/2007)

Issue ID:	Entry Date:	Modified Date:	Description:	Category	Status
II-001	Monday, November 6, 2006 7:36:58 AM MST	Sunday, December 3, 2006 1:03:56 PM MST	Potential higher total cost of ownership for maintaining a Colorado version of the software. Mitigation: Monitor customization costs closely and take advantage of other States customized code when possible.	Technical	Open
II-010	Sunday, December 3, 2006 12:10:59 PM MST	Sunday, January 28, 2007 8:02:18 PM MST	Exploits move rapidly, and appropriate mindset for threat and new vulnerability thinking are required to respond proactively and protect systems according to their asset value. There is no apparent threat modeling process to feed into risk-based methodology. In order to be able to protect assets by value, the threat to those assets must be understood. Require Saber to develop cohesive threat modeling methodology as part of the SCORE Security Plan. (updated 1/28/07 BP)	Technical	Open
II-013	Sunday, December 3, 2006 12:23:24 PM MST	Sunday, January 28, 2007 8:04:25 PM MST	Loss of data or system operation in a catastrophic disaster. The architecture does not contain recommendations and processes for off-site storage for backup tapes/offsite media and encryption of sensitive data. Require Saber to store all tape backups in offsite locations. Require offsite backups of the DataGuard failsafe server. Update: Information provided by Saber during the contract negotiations has removed the risk on the Data Guard back-up. Storage of back-up tapes will remain open until the data center(s) are established and operational. (updated 1/28/07 BP)	Technical	Open
II-019	Wednesday, November 15, 2006 3:56:46 PM MST	Tuesday, December 12, 2006 8:25:18 AM MST	How will a county print poll books if the printer fails on the weekend before an election. This same problem could occur if a Branch or County loses power the weekend before an election, but gets it restored on Monday before the Tuesday Election. Two real life examples follow: I had to run the poll books here at SOS and then printed them in the neighboring county. (Lake and Mineral) I also ran them at SOS and printed them at SOS and then had them delivered to the county. (Elbert)	Technical	Open
II-028	Tuesday, December 12, 2006 2:00:39 PM MST	Wednesday, February 28, 2007 4:29:42 PM MST	Once the SCORE system becomes the system of record, the State needs to give the counties some guidance on how to "retire" their legacy systems. This should include a listing of the data that will be maintained by the State as part of the data conversion process.	Business	Open
II-029	Wednesday, December 27, 2006 3:23:11 PM MST	Wednesday, December 27, 2006 3:23:11 PM MST	The State needs to decide when they will purchase the IDE licenses, now or at the end of the project. This was not part of the data center Software procurement document.	Technical	Open
II-030	Sunday, January 7, 2007 3:42:37 PM MST	Tuesday, May 8, 2007 7:29:51 AM MDT	SCORE IV&V reviewed the final document for the Tech Arch Design to see if how/when patches are applied is adequately addressed (Finding 34 in State Review - Technical Architecture Design - 12-Dec-06 - V2.doc) Findings Include: On page 24 of the Final Technical Architecture Design, the last sentence under "Database Failure": Please see the section "Hardware planning" for understanding the process on how software/patches or releases are applied to the SCORE II architecture. Per the Table of Contents, the "Hardware Planning" section is pages 10-29. At no point is there a clear process for maintenance or emergency patching including the testing and migration of these patches.	IV&V Internal	Open
II-031	Thursday, January 4, 2007 10:26:08 AM MST	Tuesday, January 9, 2007 4:16:21 PM MST	Verification and Validation of the power Rectical requiremnts for the HP Cabinets and the connection provided within the e-FOR3T and CDOS Data Centers should be validated prior to shipment and instalation of electiral connectors to insure proper allignemtn of recptical requiremnts and services.	Technical	Open
II-040	Friday, January 26, 2007 7:35:43 AM MST	Tuesday, January 30, 2007 2:31:16 PM MST	When the relationship between Saber and CDOS has expired, how will the confidential information (data) be disposed?	Business	Open
II-042	Wednesday, February 7, 2007 6:13:38	Wednesday, February 7, 2007 6:13:38	The Saber Quality Plan indicates that Saber will conduct periodic Quality Audits. They are currently not identified in the project	Schedule	Open

ID	Start Date/Time	End Date/Time	Description	Category	Status
II-045	Friday, February 9, 2007 6:19:18 AM MST	Friday, February 9, 2007 6:19:18 AM MST	<p>schedule.</p> <p>4. Application Environment Issues. 3rd bullet. Specific roles/positions in the CDOS who are authorized to grant downtime need to be specified. Saber response - CDOS needs to determine the persons authorized to grant downtime. The downtime will be requested from and granted by only authorized personnel. State Response: This is a State issue and will be added to the Open Actions and Issues lists for follow up.</p> <p>The typical DRP (Disaster Recovery Procedure) should be its own document and distributed across multiple independent documents. System Maintenance Guide contains the bulk of the true DRP type information. A DRP should be a step-by-step guide to continue business / recover from any type of disaster. It is the desire of the State to use this plan beyond the life of the project and well into the program. Saber has indicated they will provide this as part of the transition plan.</p>	Business	Open
II-047	Monday, February 12, 2007 6:37:30 AM MST	Monday, February 12, 2007 6:37:30 AM MST	<p>Numerous concerns about the lack of visible progress on development and implementation of the web based functionality of VPA, Early Voting and Vote Centers all sum to a high risk for the project. There are questions and clarifications that were raised at the very beginning of the project about the architecture for the web based interfaces. These have not been closed in the Technical Architecture document and as of this time, serious concerns exist as to whether Saber can deliver this functionality. At a minimum, the Technical Architecture, Security Plans, and Testing Plans should all have details of this implementation. The recent indication that this delivery would be delayed brings to a head the question of exactly who is working on this, and what progress has been made.</p>	Technical	Open
II-068	Monday, February 19, 2007 5:52:15 AM MST	Wednesday, February 28, 2007 4:31:54 PM MST	<p>System Test Plan Finding 87The plan does not have a clear process for configuration set ups or changes to set ups that need to occur after initial set up. Non-code related hardware and software changes should be addressed in how changes will be made, tracked, migrated, tested and documented to minimize issues arising from these changes.</p>	Technical	Open
II-069	Sunday, February 18, 2007 10:06:01 AM MST	Monday, February 19, 2007 11:05:45 AM MST	<p>During the Hardware Installation Inventory IV&V it was discovered that the Network Hardware components had been secured at the front plate of the unite into the cabinet. This installation leaves a significant portion of the Network Component weight unsupported placing significant stress on the securing bracket and the Network Hardware component. This could pose significant risk during the movement of the cabinets, such as the transition form e-FOR3T hosting facility to the CDOS Hosting Center. It is recommended that additional support bracketing be applied to secure the network hardware components.</p>	Technical	Open
II-070	Wednesday, February 28, 2007 10:59:28 AM MST	Wednesday, February 28, 2007 4:31:33 PM MST	<p>The document stops short of providing a complete or industry standard SLA with penalties and rewards associated with the target metrics. It is not clear when or if an SLA will be provided. This may be associated with the Platinum Support Contract once the system is placed into production. Production needs to be defined as the period of time when one or more counties are up on the SCORE system. ASIM: 3/3/2007: We can define when production starts. Added the following line: SCORE II system status will be production, once at least one county has moved to production. Penalties and rewards will be based on the contract. State needs to know more about Platinum. First Paragraph - "Under the agreed upon service-level agreement" Needs to be clarified. Is this a separate SLA, part of the Platinum Support Agreement, or assumed as part of this agreement. ASIM 3/3/3007: This is part of the project, as agreed on the RFP. The SCORE IV&V will carry this as an issue until the Platinum Support Contract is documented.</p>	Technical	Open
II-071	Monday, March 19, 2007 10:48:44 AM MST	Monday, March 19, 2007 10:48:44 AM MST	<p>Security needs to be specifically included in the Descriptions of the Priority Levels. DED Section A specifies that SLA is to be defined for both data centers and counties. This is part of the</p>	Technical	Open

II-072	Monday, March 19, 2007 10:51:44 AM MST	Monday, March 19, 2007 10:51:44 AM MST	<p>minimum quality standard requirements all Saber deliverables must meet, and must be consistent on all Saber deliverables in progress and going forward. ASIM: 3/3/3007: It has already been agreed on the DED that the system availability plan will not address county issues, so why this issue has been raised? Isn't this redundant? The following identified as "Severe" issue: "Critical functionality failure exists with excessive risk to the ability of Colorado's election officials to use the SCORE II application system. System or application catastrophic failure has occurred or is very likely to occur imminently." This automatically covers security issue. This will be documented as an issues moving forward.</p>	Technical	Open
II-075	Sunday, April 8, 2007 5:30:27 PM MDT	Tuesday, April 10, 2007 2:59:21 PM MDT	<p>Saber delivered a Quality Management Plan and System Test Plan but the Saber Oregon and Colorado team clearly do not have a complete understanding of the roles that need to be performed, the use of terminology and artifacts to be delivered. The limited exposure to the documentation leads us to believe testing is performed but not according to any Industry Standard. The 2 Oregon testers have only been with Saber for less than 10 months. Neither of the testers has voter management or election experience. The QTP is limited is only the test scripts generated manually and the values are hard coded. Since the risk exposure is unclear at this time, the IV&V Team needs to ensure all code is exercise and should execute all proposed test cases.</p>	Business	Open
II-086	Thursday, May 10, 2007 6:00:44 AM MDT	Thursday, May 10, 2007 6:05:22 AM MDT	<p>The State and IV&V have formally requested that Saber write an entry in the SCORE Audit / Activity Log for any voter where information is changed as part of the data migration process. This information is needed for maintain continuity between SCORE and the respective legacy systems and to make future research less complicated. In the working session Saber indicated that this was not possible as the mapping was completed. Saber did agree to investigate the possibility. This will be carried as an issue until Saber's response is received. If Saber does not agree to make the change, it will be elevated to a risk.</p>	Business	Open
II-088	Monday, May 21, 2007 11:24:33 AM MDT	Monday, May 21, 2007 11:28:25 AM MDT	<p>Proper event log lifecycle management at the server/network layer (logging the optimal indicators, appropriate storage, and intelligent review/analysis of logs) is a significant security countermeasure that is being too easily dismissed. Given the following Jeff and I believe that it is not yet answered and should remain open, or close it with a new Risk defined. The bottom line is the system should not be utilized across the Internet without an effective logging plan implemented. Which way would you think we should go? Default logging 'out of the box' is inadequate. Routers and switches typically do not have any logging turned on by default. Firewall layer logging requires a certified professional so performance and security are balanced appropriately. Server logging and alerting has not been described and is exacerbated by the lack of defined hardening standards, including logging of authorized user activity. The risk is without a thought-out logging scheme, operations can not even detect if an attack is occurring or has already happened. This will be verified during the Independent Security Testing audit.</p>	Technical	Open
II-089	Monday, May 21, 2007 1:46:09 PM MDT	Monday, May 21, 2007 1:46:09 PM MDT	<p>The DED request a description of the processes employed to control the test effort. Test Plan needs more clarification on environment controls for the performance and security testing. Saber 4/6/07 - Issue will be revisited with next release of the updated test plan for performance and security testing. This will need to be carried forward as an issue as Saber is not addressing the subject in this release of the System Test Plan.</p> <p>The section does not address the recent issue where by a counties image data may not be converted in the two week wave plan for rollout. This information is needed to make sure the State and counties agree on the process. ASIM 5/17/2007: following line added: During data collection for dry run cycle, the image collection has taken up considerable time. When counties are rolled into production SCORE II, the voter images/signatures for</p>	Business	Open

II-090	Wednesday, May 30, 2007 1:11:39 PM MDT	Tuesday, June 5, 2007 8:30:59 AM MDT	<p>counties might take a little more time for having these available in SCORE II. Since these pertain to existing voter records, the delay in having these available in production SCORE II does not really impact production preparedness for SCORE II. The SCORE IV&V was looking for a statement that addressed the effort to be done in parallel with a subsequent waiver. The inclusion of timing metrics or data could close this finding along with an understanding of a plan if all the images can not be migrated in the two week wave window. ASIM 5/24/2007: This is work in progress, Saber will provide this information soon. This finding will be carried as an issue and revisited with Saber during the weekly status meetings until closure can be reached.</p>	Business	Open
II-091	Tuesday, May 29, 2007 11:58:52 AM MDT	Tuesday, August 28, 2007 12:51:25 PM MDT	<p>State is verifying Scanners, Bar code readers and Label printers on the County equipment but using the Colorado FEQA architecture. The risk is IV&V has seen environment configuration differences between Saber location and Colorado (production) location. "The lights are on but no guarantee of working in the correct environment."</p>	Business	Open
II-092	Tuesday, May 29, 2007 12:01:06 PM MDT	Tuesday, August 28, 2007 12:50:37 PM MDT	<p>Due to the number of issues derived from UAT session, there may not be enough time to develop everything within the current timeline for Final UAT. The users should have final sign-off on all items prior to production, but there is not scheduled time between the Final UAT and Pilot Production to verify all changes. Also, there is a scheduled code drop in October with users fixes and modifications to the software. The county users will be in the black period and no scheduled time for the counties to verify the October code drop.</p>	Business	Open
II-096	Tuesday, June 26, 2007 7:10:38 AM MDT	Tuesday, June 26, 2007 7:10:38 AM MDT	<p>According to the delivered agendas, the following items should be covered during Training/UAT and were not: User Administration, User Roles, Election Payment, Election Worker, Election Close-out, Voter Activity, Mailings & Labels (Process/Receive), State Agency Interface Processing, Import tabulation data from voting machines. When will this be addressed? Saber Comments: Added a line to the document on Page 8 that states Saber will provide the finalized agendas for UAT 3 & UAT 4 separate from this document. Additional information does not cover the following specific items: User Administration / User Roles & Responsibilities Saber Comments: A working session with the state is needed to define the roles and privileges appropriate for SCORE II. CDOR State Agency Interfaces Saber Comments: This will be covered during final UAT. Document Updated Importing Tabulation Data Saber Comments: This may not be completed before Pilot Mock Election. Depending upon getting all required technical specifications from the tabulation device vendors, the development is expected to be complete before November 07. Each item will be tracked as issues moving forward. The Final UAT document should close all but the last issue dealing with the Voting Machine interface.</p>	Business	Open
II-097	Tuesday, June 26, 2007 7:11:28 AM MDT	Tuesday, August 7, 2007 7:17:37 AM MDT	<p>UAT is focused on county users. UAT scope and depth for each module must include state users and their acceptance sign-off. When will this be addressed? Saber Comments: Added a line on Page 5 that states Saber will provide training for State level testing. Information was added to the document. This will be carried as an issue until the training occurs. The State needs to complete their policy / centralization discussions so Saber has a complete list of "State" functions.</p>	Business	Open
II-098	Tuesday, June 26, 2007 7:12:58 AM MDT	Tuesday, August 7, 2007 7:18:04 AM MDT	<p>According to the latest project schedule, Saber will provide a copy of the performance statistics on the infrastructure for the UAT's 1 & 2. This information should be discussed as part of this document and provided to the State according to the schedule. Saber Comments: Saber will provide statistics from the first two UAT sessions. This will be tracked as an issues moving forward. The performance information is not directly tied to this deliverable.</p>	Business	Open

Missing voter status verification and political party

II-099	Tuesday, August 14, 2007 2:39:50 PM MDT	Tuesday, August 28, 2007 12:37:32 PM MDT	verification.ASIM 6/28/2007: counties are still advised to do this on the phone calls.Unclear as to how this is documented in the process. Will the subsequent sign-off have additional information in this area?Puneet 07/31/2007: The counties are advised to use the "Additional Comment" area to report these or any other issues not covered by the checklist. The checklist, however is not updated.This will be tracked as an issue going forward and verified as part of the "go-live" migration.	Technical	Open
--------	---	--	---	-----------	------

Vendor Initial Deliverable Metrics:

Deliverable Name	Deliverable Dates				Findings Status					Current Status
	Contract	DED	Draft	Final	High	Major	Moderate	Low	Observation	
Project Plan	10/23/2006	11/2/2006	12/6/2006	12/18/2006	8	38	92	58	32	
Agency Interface Plan	10/23/2006	11/1/2006	11/22/2006	12/13/2006	1	6	37	6	11	
Organizational Change Management Plan	10/23/2006	11/17/2006	2/2/2007	12/22/2006	0	0	6	2	2	
Project Web-Site	10/23/2006	11/6/2006	1/16/2007	12/22/2006	0	0	6	3	0	
System Acceptance Criteria	11/6/2006	11/13/2006	1/26/2007	1/4/2007	5	11	4	4	1	
System Test Plan	11/6/2006	11/13/2006	1/29/2007	12/15/2006	15	19	36	33	19	
Conversion Plan	11/13/2006	11/13/2006	1/26/2007	1/3/2007	4	2	27	9	9	
Disaster Recovery Plan / Business Continuity Plan	11/13/2006	10/30/2006	1/29/2007	12/27/2006	2	15	25	20	45	
Security Plan	11/13/2006	10/30/2006	2/12/2007	1/30/2007	26	8	18	9	5	
Training Plan	11/27/2006	11/5/2006	1/19/2007	12/26/2006	0	15	13	7	8	
Detailed Design for Colorado Customizations	12/4/2006	11/13/2006	2/7/2007	3/7/2007	1	6	32	12	0	
Implementation Plan	12/4/2006	11/30/2006	4/30/2007	5/22/2007	0	4	12	5	1	
Technical Architecture Design	12/8/2006	11/14/2006	11/16/2006	12/26/2006	13	17	25	12	15	
Pilot Test Plan	12/18/2006	11/17/2006	2/1/2007	1/8/2007	2	7	21	13	6	
System Availability Plan	12/19/2006	11/17/2006	1/17/2007	2/12/2007	3	8	20	5	4	
Application Requirements	12/22/2006	11/17/2006	2/2/2007	2/15/2007	0	3	7	3	2	
Conversion Detail Design	2/9/2007	11/30/2006	3/26/2007	5/22/2007	0	0	13	0	1	
Prepare Pilot Counties	3/2/2007	1/31/2007	6/13/2007	7/6/2007	1	3	2	0	1	
Configure Software	3/30/2007	11/17/2006	4/12/2007	6/29/2007	0	1	0	0	0	
System Test	3/30/2007	11/13/2006	5/3/2007	7/19/2007	1	9	1	0	0	
Updated Detailed Design for Colorado Interfaces	3/30/2007	1/25/2007	2/15/2007	3/7/2007	0	8	12	3	2	
Updated Test Plan	3/30/2007	2/2/2007	3/22/2007	4/10/2007	1	16	14	1	4	
Integrated Development Environment	10/23/2006	11/3/2006	1/16/2007	1/30/2007	0	0	3	1	2	
Source Code	10/23/2006	11/7/2006	1/16/2007	1/3/2007	0	0	0	0	0	
Duplicate Voter Check Criteria	TBD	12/5/2006	12/19/2006	2/23/2007	0	0	3	3	0	
Pilot Data Migration	4/20/2007	2/20/2007	5/15/2007	6/1/2007	0	1	7	0	0	
UAT Planning & Testing	3/27/2007	4/3/2007	5/4/2007	6/6/2007	0	2	7	4	0	
UAT / Pilot Training	4/20/2007				0	0	0	0	0	
Performance & Security Test	5/4/2007				0	0	0	0	0	
Installation and Configuration Guide	2/1/2007	2/8/2007	5/31/2007	6/19/2007	2	6	8	1	1	
Verify Pilot Data Migration	3/7/2007	3/14/2007	6/28/2007	7/9/2007	0	9	3	3	2	
User Acceptance Test Plan	5/18/2007				0	0	0	0	0	
Duplicate Voter Check	6/1/2007				0	0	0	0	0	
Test Conversion	6/1/2007	6/13/2007	8/8/2007	8/30/2007	0	4	3	0	0	
Regression & System Test / Production Build	6/15/2007				0	0	0	0	0	
Documentation	3/16/2007	3/23/2007	6/22/2007	6/27/2007	0	5	6	19	0	
Pilot Counties Data Migration	7/9/2007				0	0	0	0	0	
Train Pilot Users	7/20/2007				0	0	0	0	0	
SCORE II Pilot Readiness	7/21/2007	6/19/2007	8/3/2007	8/24/2007	0	5	7	2	3	
Pilot County Survey	8/24/2007				0	0	0	0	0	
Data Centers GAP Analysis	11/24/2006	11/14/2006	11/15/2006	12/18/2006	1	4	3	2	8	
Hardware Installation - CDOS	12/15/2006				0	0	0	0	0	
Hardware Installation - e-Fort	3/2/2007	12/22/2006	4/9/2007	5/11/2007	0	0	6	0	1	
Hardware Procurement Plan & Inventory	1/26/2007	11/14/2006	11/16/2006	12/26/2006	3	3	7	0	8	
Software Inventory	1/26/2007	11/14/2006	11/16/2006	12/26/2006	2	2	2	0	9	
County Hardware Survey	2/2/2007	1/30/2007	2/13/2007	2/28/2007	0	0	0	0	0	
Report Status / Status Meetings	5/1/2007				0	0	0	0	0	
Prepare Statewide Counties	11/16/2007				0	0	0	0	0	
Final Acceptance Testing/Mock Election	NEW				0	0	0	0	0	
Transition Plan	12/24/2007				0	0	0	0	0	
Train End Users	3/18/2008				0	0	0	0	0	
Help Desk Plan	3/28/2008	6/11/2007	7/20/2007	7/30/2007	1	7	10	1	6	
Implementation Roll Out	3/28/2008				0	0	0	0	0	
Maintenance and Support Plan	3/29/2008				0	0	0	0	0	
SCORE II Readiness	3/30/2008				0	0	0	0	0	
Totals					92	244	498	241	208	
		Accepted Deliverable		Conditionally Accepted			Rejected Deliverable			

Vendor Current Deliverable Metrics:

Deliverable Name	Deliverable Dates				Findings Status					Current Status	
	Contract	DED	Draft	Final	High	Major	Moderate	Low	Observation		
Project Plan	10/23/2006	11/2/2006	12/6/2006	12/18/2006	0	0	0	0	0	0	Accepted Deliverable
Agency Interface Plan	10/23/2006	11/1/2006	11/22/2006	12/1/3/2006	0	0	0	0	0	0	Accepted Deliverable
Organizational Change Management Plan	10/23/2006	11/1/7/2006	2/2/2007	12/22/2006	0	0	0	0	0	0	Accepted Deliverable
Project Web-Site	10/23/2006	11/6/2006	1/16/2007	12/22/2006	0	0	6	3	0	0	Conditionally Accepted
System Acceptance Criteria	11/6/2006	11/1/3/2006	1/26/2007	1/4/2007	0	0	0	0	0	0	Accepted Deliverable
System Test Plan	11/6/2006	11/1/3/2006	1/29/2007	12/1/5/2006	0	0	0	0	0	0	Accepted Deliverable
Conversion Plan	11/1/3/2006	11/1/3/2006	1/26/2007	1/3/2007	0	0	0	0	0	0	Accepted Deliverable
Disaster Recovery Plan / Business Continuity Plan	11/1/3/2006	10/30/2006	1/29/2007	12/27/2006	0	0	0	0	0	0	Accepted Deliverable
Security Plan	11/1/3/2006	10/30/2006	2/12/2007	1/30/2007	0	0	0	0	0	0	Accepted Deliverable
Training Plan	11/27/2006	11/5/2006	11/9/2007	12/26/2006	0	0	0	0	0	0	Accepted Deliverable
Detailed Design for Colorado Customizations	12/4/2006	11/1/3/2006	2/7/2007	3/7/2007	1	6	32	12	0	0	Rejected Deliverable
Implementation Plan	12/4/2006	11/30/2006	4/30/2007	5/22/2007	0	0	0	0	0	0	Accepted Deliverable
Technical Architecture Design	12/8/2006	11/1/4/2006	11/16/2006	12/26/2006	0	0	0	0	0	0	Accepted Deliverable
Pilot Test Plan	12/18/2006	11/1/7/2006	2/1/2007	1/8/2007	0	0	0	0	0	0	Accepted Deliverable
System Availability Plan	12/19/2006	11/1/7/2006	11/17/2007	2/12/2007	0	0	0	0	0	0	Accepted Deliverable
Application Requirements	12/22/2006	11/1/7/2006	2/2/2007	2/15/2007	0	0	0	0	0	0	Accepted Deliverable
Conversion Detail Design	2/9/2007	11/30/2006	3/26/2007	5/22/2007	0	0	3	0	0	0	Accepted Deliverable
Prepare Pilot Counties	3/2/2007	1/31/2007	6/1/3/2007	7/6/2007	0	2	0	0	0	1	Rejected Deliverable
Configure Software	3/30/2007	11/1/3/2006	5/3/2007	7/19/2007	1	9	1	0	0	0	Rejected Deliverable
System Test	3/30/2007	11/1/3/2006	5/3/2007	7/19/2007	0	0	0	0	0	0	Accepted Deliverable
Updated Detailed Design for Colorado Interfaces	3/30/2007	1/25/2007	2/15/2007	3/7/2007	0	0	0	0	0	0	Accepted Deliverable
Updated Test Plan	3/30/2007	2/2/2007	3/2/2007	4/10/2007	0	0	0	0	0	0	Accepted Deliverable
Integrated Development Environment	10/23/2006	11/3/2006	11/6/2007	1/30/2007	0	0	0	0	0	0	Accepted Deliverable
Source Code	10/23/2006	11/7/2006	1/16/2007	1/3/2007	0	0	0	0	0	0	Accepted Deliverable
Duplicate Voter Check Criteria	TBD	12/5/2006	12/19/2006	2/23/2007	0	0	0	0	0	0	Accepted Deliverable
Pilot Data Migration	4/20/2007	2/20/2007	5/15/2007	6/1/2007	0	0	3	0	0	0	Accepted Deliverable
UAT Planning & Testing	3/27/2007	4/3/2007	5/4/2007	6/6/2007	0	2	7	4	0	0	Rejected Deliverable
UAT / Pilot Training	4/20/2007				0	0	0	0	0	0	Accepted Deliverable
Performance & Security Test	5/4/2007				0	0	0	0	0	0	Accepted Deliverable
Installation and Configuration Guide	2/1/2007	2/8/2007	5/31/2007	6/19/2007	0	3	4	0	0	0	Rejected Deliverable
Verify Pilot Data Migration	3/7/2007	3/14/2007	6/28/2007	7/9/2007	0	4	2	0	0	0	Rejected Deliverable
User Acceptance Test Plan	5/18/2007				0	0	0	0	0	0	Accepted Deliverable
Duplicate Voter Check	6/1/2007				0	0	0	0	0	0	Accepted Deliverable
Test Conversion	6/1/2007	6/13/2007	8/8/2007	8/30/2007	0	4	3	0	0	0	Rejected Deliverable
Regression & System Test / Production Build	6/15/2007				0	0	0	0	0	0	Accepted Deliverable
Documentation	3/16/2007	3/23/2007	6/22/2007	6/27/2007	0	1	3	0	0	0	Rejected Deliverable
Pilot Counties Data Migration	7/9/2007				0	0	0	0	0	0	Accepted Deliverable
Train Pilot Users	7/20/2007				0	0	0	0	0	0	Accepted Deliverable
SCORE II Pilot Readiness	7/21/2007	6/19/2007	8/3/2007	8/24/2007	0	5	7	2	3	0	Rejected Deliverable
Pilot County Survey	8/24/2007				0	0	0	0	0	0	Accepted Deliverable
Data Centers GAP Analysis	11/24/2006	11/1/4/2006	11/15/2006	12/18/2006	0	0	0	0	0	0	Accepted Deliverable
Hardware Installation - CDOS	12/15/2006				0	0	0	0	0	0	Accepted Deliverable
Hardware Installation - e-Fort	3/2/2007	12/22/2006	4/9/2007	5/11/2007	0	0	6	0	1	0	Rejected Deliverable
Hardware Procurement Plan & Inventory	1/26/2007	11/1/4/2006	11/16/2006	12/26/2006	0	0	0	0	0	0	Accepted Deliverable
Software Inventory	1/26/2007	11/1/4/2006	11/16/2006	12/26/2006	0	0	0	0	0	0	Accepted Deliverable
County Hardware Survey	2/2/2007	1/30/2007	2/1/3/2007	2/28/2007	0	0	0	0	0	0	Accepted Deliverable
Report Status / Status Meetings	5/1/2007				0	0	0	0	0	0	Accepted Deliverable
Prepare Statewide Counties	11/16/2007				0	0	0	0	0	0	Accepted Deliverable
Final Acceptance Testing/Mock Election	NEW				0	0	0	0	0	0	Accepted Deliverable
Transition Plan	12/24/2007				0	0	0	0	0	0	Accepted Deliverable
Train End Users	3/18/2008				0	0	0	0	0	0	Accepted Deliverable
Help Desk Plan	3/28/2008	6/11/2007	7/20/2007	7/30/2007	0	4	6	1	0	0	Rejected Deliverable
Implementation Roll Out	3/28/2008				0	0	0	0	0	0	Accepted Deliverable
Maintenance and Support Plan	3/29/2008				0	0	0	0	0	0	Accepted Deliverable
SCORE II Readiness	3/30/2008				0	0	0	0	0	0	Accepted Deliverable
Totals					2	40	83	22	5		
		Accepted Deliverable		Conditionally Accepted				Rejected Deliverable			

Risks:

RISKS										
RISK ID	ENTRY DATE	UPDATE DATE	ARTIFACT	IDENTIFIED RISK	PROJECT AREA	PROBABILITY	IMPACT	EXPOSURE	MITIGATING FACTORS / ACTIONS	STATUS
IVV-2	12/21/2005	10/6/2007		The counties decide to stay with their respective legacy systems as opposed to migrating to the State Wide Voter Registration System. Similar to the rogue county problems from other states.	Business	3	3	9	Keep the counties informed on the decisions being made on the project. Allow the counties to once again participate in the selection process. It is critical that the State continues to send a consistent message to the counties and the state of the project. 8/24/2007 - Steering committee decision where Mesa County decided no to go forward. A total of nine counties are moving forward in various forms of rollout. 10/6/2007 - The uncertainty of Arapahoe's participation in the pilot needs to be clarified.	Open
IVV-29	11/10/2006	11/9/2007		The Saber resources are being stretched thin by the acquisition of other states and or the process of going after additional states.	Schedule	2	3	6	Lock down resources early. Stay informed on the other state acquisition process. The proposed phased approach of software delivery is increasing the probability of this risk. Saber has indicated they have won Wyoming during the audit trip. Vote Center development is starting back up, competition for resources will most likely occur. Saber announced that their Colorado Functional Manager is being re-assigned to the Wyoming implementation project. Saber continues to provide the contract resources as needed for the critical phases of the project. 11/10/2007 - Additional Saber resources being added to the project to support the Statewide rollout.	Open
IVV-31	12/1/2006	9/1/2007		That the SCORE II Vote Center Application can be adequately stress tested during the UAT process. The system must be Stress tested according to industry standard in order to provide the necessary due diligence required by the counties that had issues during the last election. Saber's performance testing results do not match the expectations established as part of the Updated Test Plan deliverable. Saber has used a tool that was not part of the proof of concept documentation. In addition, a load of only 700 users were tested on a part of the infrastructure forcing the results to be extrapolated for the full 5500. Saber does not have the necessary experience with the application to make this judgment.	Technical	3	3	9	The meeting held of February 12th did not produce the desired results. Saber did not come to the meeting prepared to discuss the tools and approach as expected. The State will need to continue to put pressure on Saber to prove the 5500 user requirement. Mitigation Strategy: Independent Stress testing. The State has entered into negotiations with two companies to perform independent performance testing. 5/19/2007 - Saber has documented their Performance Testing Plans in the Updated Test Plan deliverable. Saber will conduct a "Proof of Concept" before the "official" Performance Test. 6/2/2007 - The State provided the IV&V with a copy of the two proposals for the Independent Performance Testing. 7/6/2007 - Performance and stress testing will be just in time due to product deliver, CDOS Data Center implications, and outside contract work. 8/3/2007 - Updated risk. 9/1/2007 - Saber has been asked to revisit the deliverable and perform another test. 11/03/2007 - The application has been adequately tested for the 2007 Election.	Open
IVV-36	1/28/2007	7/6/2007		During the Project Schedule DED review, Saber stated that another Load (Performance) Test would be added to the schedule. The current version only has one formal performance test scheduled (5/21/2007). Another test should be scheduled after or during the Pilot. Stress Tests independent of the standard Load/Performance Tests are also not specified in the Project Schedule. This should represent a Project Risk.	Schedule	3	3	9	Another load test needs to be planned, and executed after all counties are on the SCORE II system. 6/2/2007 - Due to the increased Citrix license requirement due to Early Voting Requirements, this risk needs to be revisited. 7/6/2007 - The SCORE IV&V is proposing an audit based on the increase of the number of Citrix Licenses and the potential application impact.	Open
IVV-37	2/9/2007	6/2/2007		The SCORE IV&V could not find the info documented in the System Maintenance Guide of the DRP, Change Control Document of the DRP or the Technical Architecture Design. It is risky to assume that all Oracle or other software is fully patched. In addition, bugs or issues may occur over the duration of the project requiring patching. In each case of a patch or bug for Oracle and other software it is not clear: 1.How is a patch tested? 2. Where is a patch tested? 3.If it is tested in production, what downtime occurs? 4.How is the patch removed from production if a problem is found after its application? 5. What contingencies are made for bugs without patches? 6.Is there a policy to apply patch sets rather than one off patches whenever possible? If this information is going to be provided in the Configuration Management Plan it should be indicated.	Technical	3	3	9	The State must approve all changes to the SCORE system. Any proposed must be tested in a non-production environment. 6/2/2007 - The State needs to consider creating a "sandbox" environment for the purposes of testing SCORE infrastructure changes. This was discussed as part of the installation and configuration guide deliverable review.	Open
IVV-38	2/9/2007			The Disaster Recovery Plan scenarios provided by Saber fail to address any real world disasters e.g. catastrophic damage to a data center. This should have potential real world disaster scenarios.	Technical	2	3	6	The State needs to incorporate the SCORE II project in their Disaster Recovery Planning scheme. Within the State scenarios, a complete loss of a data center should be addressed.	Open
IVV-40	2/21/2007	11/9/2007	10/6/2007	Substantial security responsibility may fall into State's realm. Adherence to security best practices consistently found to be lacking, and even the most basic hardening steps such as scan/analyze/patch iterative refinements at a subsystem level are missing. Waiting until after 3/26/07 (per Wave Plan) to begin Independent Security Testing may be too late to patch holes uncovered at the device, system and network level for critical path milestones to be achieved.	Technical	3	3	9	Highly recommend appointing a State Security Officer for security officer 'perform', oversight, and governance duties. Independent Security Test will be used to address issues. 10/6/2007 - Based on the feedback from Saber on the IST, the number of issues that will not be implemented is minimal. 11/09/2007 - The initial IST tests were conducted. Follow-up continues with Saber on the issues that are affecting the SCORE environment.	Open
IVV-42	5/18/2007	8/25/2007	Updated Test Plan	The deliverable - System Test Activity, is being carried as risk, due to incomplete information provided IV&V. The lack of testing is putting more emphasis on the Acceptance and User Acceptance test phases.	Technical	3	3	9	UAT sessions generating a significant number of issues. 7/6/2007 - The Bi-weekly priority progress has lessened the impact of the System Test Activity. Saber continues to make progress against the established priority list. 8/4/2007 - The issues that are being discovered during the Mock Election Testing are impacting the counties ability to complete the process. The lack of exposure to key elements due to previously captured issues is putting the pilot rollout in jeopardy. 8/25/2007 - Additional releases of SCORE have shown improvement to the product.	Open

RISKS																																								
RISK ID	ENTRY DATE	UPDATE DATE	ARTIFACT	IDENTIFIED RISK	PROJECT AREA	PROBABILITY	IMPACT	EXPOSURE	MITIGATING FACTORS / ACTIONS	STATUS																														
IVV-46	7/20/2007			The lack of detailed design information on the Vote Center Web Module (Database Design, Technical Architecture, Disaster Recovery) limiting the States exposure to arguably the most critical component of the SCORE system. The information is needed to accurately test the system in the area of performance, security and disaster recovery.	Technical	3	3	9	Saber provide additional information and or a walkthrough of the final Architecture in lieu of the updated materials.	Open																														
IVV-48	9/1/2007	10/6/2007		Citrix protocol errors continue to be a problem for the pilot counties. The errors have not been isolated despite the efforts of Saber and Citrix. The problems are beginning to erode at the counties confidence in the SCORE system.	Technical	3	3	9	Saber and the State need to have a "Sandbox" environment that would allow the testing of configuration changes to repair the problem. The State does not have a sandbox environment that includes the SCORE infrastructure. 10/6/2007 - The counties were polled and the larger counties continue to have problems despite the implemented changes. 11/03/2007 - Saber and Citrix met over the period to try to salvage the appliance Citrix Gateway before going back to the Software version. 11/24/2007 - Saber is has started conversion of Site 1 back to the Software version of the Citrix Gateway product.	Open																														
IVV-50	10/6/2007		Saber Facility Audit Report	Saber has re-directed some the two main testers for the SCORE application to a project in South Carolina. The shift leaves resources on the project that do not have the base knowledge that the initial resources had.	Business	3	3	9	Determine who the other resources are that replaced the initial resources. Push to have Saber expand their automated regression testing suite to eliminate the dependence of knowledgeable testers. 11/03/2007 - The counties are using the SCORE application and although there are work arounds necessary at this point, the system is working.	Open																														
IVV-51	11/19/2007		November 2007 Election	Saber is not demonstrating the configuration management expertise that is expected to manage an enterprise architecture. The problem discovered on election day with the database setting being too low to handle the expected low is an real time example of this issue. Without some additional process and discipline the SCORE infrastructure will continue to be in question.	Technical	3	3	9	Require Saber to demonstrate the same level of configuration management discipline the SCORE infrastructure as is being applied to the SCORE application.	Open																														
IVV-52	11/19/2007		ISTP	Saber is not demonstrating their ability to monitor and respond to the SCORE log files. Their lack of a qualified tool and the lack of a response to know attacks puts the SCORE infrastructure at risk.	Technical	3	3	9	Saber acquires a tool for monitoring logs and continue to develop the "production" monitoring capabilities for the system.	Open																														
					<table border="1"> <thead> <tr> <th colspan="5">Impact</th> </tr> <tr> <th>Probability</th> <th>1 - Negligib</th> <th>2 - Marginal</th> <th>3 - Critical</th> <th>4-Catastrophic</th> </tr> </thead> <tbody> <tr> <td>1 - Improbable</td> <td>1</td> <td>2</td> <td>3</td> <td>4</td> </tr> <tr> <td>2 - Remote</td> <td>2</td> <td>4</td> <td>6</td> <td>8</td> </tr> <tr> <td>3 - Probable</td> <td>3</td> <td>6</td> <td>9</td> <td>12</td> </tr> <tr> <td>4 - Expected</td> <td>4</td> <td>8</td> <td>12</td> <td>16</td> </tr> </tbody> </table>					Impact					Probability	1 - Negligib	2 - Marginal	3 - Critical	4-Catastrophic	1 - Improbable	1	2	3	4	2 - Remote	2	4	6	8	3 - Probable	3	6	9	12	4 - Expected	4	8	12	16	
Impact																																								
Probability	1 - Negligib	2 - Marginal	3 - Critical	4-Catastrophic																																				
1 - Improbable	1	2	3	4																																				
2 - Remote	2	4	6	8																																				
3 - Probable	3	6	9	12																																				
4 - Expected	4	8	12	16																																				