Section 8

Update on the implementation of recommendations from:

Managing Government's Payment Processing

May 2008



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February 27, 2009

Bill Gilhooly Assistant Auditor General Office of the Auditor General PO Box 9036 Stn Prov Govt Victoria BC V8W 9A2

Dear Bill Gilhooly:

Re: Follow-up review of your report on Managing Government's Payment Processing – May 2008

As requested, please find attached our updated self-assessment regarding actions taken in response to the recommendations in your audit report named above. I understand that this response, including the Recommendation Status Summary and the Progress in Implementing Recommendations Form, will be printed, unedited, in your semi-annual follow-up report, to be released April 1, 2009.

We were pleased and reassured by the auditors' conclusion in the report that "adequate controls are in place to manage risks associated with government's payment processing". We are further strengthening controls around payment processing in government by addressing the recommendations in the report. These actions include further enhancements in the areas of management monitoring and review, access, segregation of duties and documentation. To date, all recommendations have been addressed in some way, with 30 of the 34 recommendations either fully or substantially implemented or addressed through an alternate action.

Ministry of Finance

Office of the Deputy Minister Mailing Address: PO Box 9417 Stn Prov Govt Victoria BC V8W 9V1 www.gov.bc.ca/fin Location Address: Room 109 617 Government Street Victoria BC -2-

The attached documents are a combined response from the Ministry of Finance (Banking/Cash Management Branch, Provincial Treasury) and the Ministry of Labour and Citizens' Services (BC Mail Plus and Corporate Accounting Services, both branches within Common Business Services).

I trust that this is satisfactory.

Sincerely,

Chris Trumpy

Deputy Minister

Attachments

pc: Lori Wanamaker Deputy Minister of Labour and Citizens' Services

> Graham Whitmarsh Associate Deputy Minister of Revenue

Jim Hopkins Assistant Deputy Minister, Provincial Treasury Ministry of Finance

Richard Poutney Assistant Deputy Minister, Common Business Services Ministry of Labour and Citizens' Services

Cheryl Wenezenki-Yolland Comptroller General Ministry of Finance

Vern Burkhart Executive Director, Procurement and Supply Services Ministry of Labour and Citizens' Services

Nashater Sanghera Executive Director, Corporate Accounting Services Ministry of Labour and Citizens' Services RECOMMENDATION STATUS SUMMARY Managing Government's Payment Processing As at January 31, 2009 (Please tick implementation status for each recommendation)

	Auditor General's Recommendations		Impleme	Implementation	Status	
		Fully	Substantially	Partially	Alternative Action	No Action
A.Au	A. Administration and maintenance of access					
1.	User and group access should be regularly reviewed to ensure that it is consistent with operational duties and responsibilities and that proper segregation of duties is maintained.	×				
5	Risks associated with the lack of segregation between those administering and monitoring security and those handling daily production activities, and between those maintaining daily system production and those developing and testing changes to production programs should be evaluated. Possible consequences and mitigations should be considered, including whether any residual risks are acceptable.				X	
3.	Security profiles protecting payment, bank reconciliation and computer program files should include logging all change activities for later review.	×	-	2		
4.	Procedures should be established and carried out to regularly monitor and investigate, as required, activities where changes are made to high- risk data and programs.		x			
5.	Access to audit logs should be granted only on a "need to have" basis.	x				
6.	The relationship and responsibilities between the Provincial Treasury Information Systems Branch and the Ministry of Finance Information Management Branch should be more clearly documented and communicated.		X			

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Fully Substantially Partially Alternative for further processing Action Action x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x x	Auditor General's Recommendations		Implem	Implementation	Status	
retiliation files and transfer to MVS for further processing X environment Image: Colspan="2">Construction X environment to ensure proper segregation of duties Image: Colspan="2">Construction In obduction processes and those to ensure proper segregation of duties Image: Colspan="2">Construction It is the obduction processes and those it is the obduction processes and those Image: Colspan="2">Image: Colspan="2">Construction processes and those It is should be further restricted to X Image: Colspan="2">X It is should be further restricted to X Image: Colspan="2">X It is should be removed. X Image: Colspa="2">X It is should be used to X Image: Colspa="2">X It is should be used to		Fully	Substantially	Partially	Alternative Action	No Action
X environment Image: Service of duties Image: Service of duties </td <td></td> <td>further</td> <td>processing</td> <td></td> <td></td> <td></td>		further	processing			
to ensure proper segregation of duties production processes and those ies. tion should be further restricted to ity. o job descriptions and requirements tent should formally approve "root" access should be removed. access should be removed. access should be removed. access should be removed. access should be removed. There software could be used to ther software could be used to audit all activities with this and audit all activities with this apment files to MFS for escure means of transferring files and control totals should be transferring files and control files in the MFS and control files in the AFS and control files in the AFS a	Generation of payment files in the UNIX environment					
tion should be further restricted to X ity. X o job descriptions and requirements X entry access should formally approve "root" X entry access should be removed. X entry access should be removed. X entry access should be used to the audit all activities with this and the audit all activities with the acceleration and control totals should be file transmission. This would verify ting the FTP process. X and control files in the MVS the manual change log, the manual change log, the manual change log, the revorted to the activities acceleration acceleration acted to the flate to the flate to the activities acceleration ac					x	
o job descriptions and requirements X nent should formally approve "root" X access should be removed. X access should be removed. X ether software could be used to X addit all activities with this X <i>ayment files to MFS</i> X <i>and</i> control totals should X <i>and</i> control totals should be X file transmission. This would verify X <i>and control files in the MVS</i> X	20 202	×				
ether software could be used to X id audit all activities with this X ayment files to MVS X ayment files to MVS X onnent. The method used should X credentials and data during X and control totals should be X file transmission. This would verify Internation and control files in the MVS X	A review of "root" access relative t should be performed, and managen access in each case. Any excessive	×				
ayment files to MVS nore secure means of transferring files onment. The method used should credentials and data during credentials and data during and control totals should be file transmission. This would verify ing the FTP process. and control files in the MVS and control files in the MVS and control files in the AVS and control files in the AVS the manual change log, and control files chould be flaced	10. Management should investigate whether software could be used to delegate "root" user capabilities, and audit all activities with this authority.			x		
Note secure means of transferring files X onment. The method used should X oredentials and data during X and control totals should be X file transmission. This would verify X ing the FTP process. X and control files in the MVS X	Use of File Transfer Protocol to transfer payment files to MVS					
and control totals should be file transmission. This would verify file transmission. This would verify ing the FTP process. <i>and control files in the MVS and control files in the MVS eteness of the manual change log, the manu</i>	11. Management should implement a more secure means of transferring files from UNIX to the mainframe environment. The method used should protect the confidentiality of logon credentials and data during transmission over the network.			x		
and control files in the MVS eteness of the manual change log,	12. An audit trail of transaction counts and control totals should be implemented and checked on each file transmission. This would verify that information was not altered during the FTP process.				x	4
, pos	Creation of EFT and cheque payment files and control files in the MVS environment					
	13. To provide assurance on the completeness of the manual change log, high-level profiles protecting computer program files should be flagged,			X		

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	Fully	Substantially	Partially	Alternative Action	No Action
so that when a change is made, the user is identified and logged for later review.					
C. Processing and release of EFT payments					
14. Banking and Cash Management should keep its EFT procedures manual current to ensure accurate guidance is provided to new employees and back-up staff.		x			
15. All instances of incompatible duties should be removed or additional monitoring activities added to manage the risk of accidental or intentional errors going undetected.		х			
16. Batch numbers should be traced to ensure all payment files are processed.	x	ũ			-
17. There should be evidence to support control procedures have been performed. This would ensure that the initial payment information from ministries has been reconciled to the payment information received and processed by the bank.	×				
18. All program changes should be tracked and monitored to ensure they are approved and in compliance with change management policies.	×				
D. Processing and printing cheques					
19. Several monitoring controls, such as access logs and staff lists, should be improved.	x				
20. Policies and procedures for staff should be updated, including those pertaining to cheque stock movements, testing procedures, reconciliations, and security measures.	×				

Follow-up Report: Updates on the implementation of recommendations from recent reports

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Auditor General's Recommendations		Implem	Implementation	Status	
	Fully	Substantially	Partially	Alternative Action	No Action
21. The cheque inventory tracking application should be password-protected and key cells locked to prevent accidental erasure and alteration.	x				
E. Management of the status of payments					
22. Policies and procedures for managing the status of payments should be regularly reviewed and updated for new and back-up staff.		x			
23. Banking and Cash Management staff should communicate to ministries the importance of complying with policies and procedures for cancelling and re-issuing cheques, as outlined in government's financial policy manual.		×			
24. All program and data changes should be tracked and monitored to ensure they are approved and complying with policy.	×				
25. The summary report of paid cheque data should be regularly reviewed to ensure that the data was successfully loaded into the system.	×				
26. Roles and responsibilities should be reviewed by management with the aim of minimizing incompatible duties with respect to processing undeliverable and unclaimed cheques.	x				
27. Review of daily returned items should be performed regularly. This should be done by staff not involved in processing or authorizing returned items.	×				

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Auditor General's Recommendations		Implem	Implementation	Status	
	Fully	Substantially	Partially	Alternative Action	No Action
28. There should be evidence supporting comparison of the automated funds transfer (AFT) recalls confirmation report with the email notifications received from ministries.	×				
29. Replacement cheque records should be regularly reviewed by management to ensure they are complete and no duplicate payments have occurred.				x	
F. Reconciliation of payments to the general ledger					
30. Specific reference should be made in the maintenance process manual to the change management processes needed for applications running in the MVS mainframe environment.	×			±	
31. To provide assurance on the completeness of the manual change log, high-level profiles protecting computer program files should be flagged so that when a change is made, the user is identified and logged for later review.	×				
G. Back-up of program and payment files					
No recommendations H. Business continuity planning					
32. Banking and Cash Management Branch should update its business continuity plan promptly after each disaster exercise.	x				
33. Corporate Accounting Services should conduct an alternate site exercise.	x				
34. Corporate Accounting Services, Banking and Cash Management, and BC Mail Plus should jointly develop and maintain business continuity plans that will satisfy the minimum processing and printing requirements to enable critical payments to continue in the event of a disaster.			x		

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Managing Government's Payment Processing

As at January 31, 2009

General comments

All recommendations have been addressed, either fully or to some extent. Remaining activities are scheduled and will be completed with due regard for existing and emergent priorities.

Progress by recommendation

For each recommendation, provide your assessment of implementation status as per the legend at the bottom of the page, and information on

Self- Assessed Status	Actions Taken Since Report Issued	Results of Actions and/or Actions Planned (with information on implementation)
Recomme and that p	Recommendation 1: User and group access should be regularly reviewed to ensure that it is consistent with operational duties and responsibilities and that proper segregation of duties is maintained.	re that it is consistent with operational duties and responsibilitie
Σ.	Auditing has been turned on to record all activities of user ids assigned to the Security Officer and Senior Technical Analyst. Resource Access Control Facility parameters have been set on all BankRec files allowing all activities of this group to be audited daily by the Corporate Accounting Services (CAS) Security Officer. Access for a number of user ids has been modified based on the report recommendations.	No further action required as this issue has been closed.
Recomme productio should be	Recommendation 2: Risks associated with the lack of segregation between those administering and monitoring security and those handling daily production activities, and between those maintaining daily system production and those developing and testing changes to production programs should be evaluated. Possible consequences and mitigations should be considered, including whether any residual risks are acceptable.	administering and monitoring security and those handling daily d those developing and testing changes to production programs d, including whether any residual risks are acceptable.
YY	In addition to management review, access restrictions, and a review of audit logs, CAS will be conducting a comprehensive risk evaluation on all aspects of security and will implement any necessary changes. CAS is also investigating alternative processes and procedures to address this and avoid budget impacts. These evaluations to be completed by March 31/09.	No further action required as this issue has been closed.
Sta	-1- For S – Recommendation has been fully or <u>substantially</u> implemented P – Recommendation has been <u>partially</u> implemented AA – Alternative action has been undertaken, general <u>intent of alternative action will addresses OAG finding</u>	ddresses OAG finding

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Self- Assessed Status	Actions Taken Since Report Issued	Results of Actions and/or Actions Planned (with information on implementation)
	Auditing has been turned on, Resource Access Control Facility parameters have been set on all BankRec files and all activities will be audited daily by the CAS Security Officer.	
Recomme activities	Recommendation 3: Security profiles protecting payment, bank reconciliation and computer program files should include logging all change activities for later review.	and computer program files should include logging all change
Ŧ	Auditing has been altered to log changes, including user id, on all BankRec files. All activities are audited daily by CAS Enterprise Security Officer.	No further action required as this issue has been closed.
Recomme made to h	Recommendation 4: Procedures should be established and carried out to regulated to high-risk data and programs.	Recommendation 4: Procedures should be established and carried out to regularly monitor and investigate, as required, activities where changes are made to high-risk data and programs.
S	A comprehensive-Information Systems Branch (ISB) security review was completed June 2008. Accesses were reviewed and changes made accordingly. Audit logs are created and a project to create exception reporting was completed December 31, 2008.	by March 31, 2009.
Recomme	Recommendation 5: Access to audit logs should be granted only on a "need to have" basis.	have" basis.
Ĩ	All access to these datasets have been restricted to the production support group, Multiple Virtual Storage (MVS) scheduler support and system accounts.	No further action required as this issue has been closed.
Recomme Information	Recommendation 6: The relationship and responsibilities between the Provincial Treasury Information Management Branch should be more clearly documented and communicated	Recommendation 6: The relationship and responsibilities between the Provincial Treasury Information Systems Branch and the Ministry of Finance Information Management Branch should be more clearly documented and communicated.
S	Meetings were held between the ISB and the Information Management Branch to clarify security roles and responsibilities.	A formal delegation instrument is under development and will be in place by March 31, 2009.
Recomme processes	Recommendation 7: Management should review access to ensure proper segre processes and those responsible for development activities.	access to ensure proper segregation of duties between staff able to set up and run production activities.
AA	CAS has outsourced the scheduling tool support function, however to mitigate risk CAS has one FTE staff member who also has the scheduling tool support duties and knowledge. This does fall within our	Corrective action plan initiated and currently underway. Target date for completion is March 31, 2009.
Sta	 - 2 - F or S - Recommendation has been fully or <u>substantially</u> implemented P - Recommendation has been <u>partially</u> implemented A - Alternative action has been undertaken, general <u>intent of alternative action will addresses OAG finding</u> NA - No substantial action has be taken to address this recommendation 	ill addresses OAG finding

Follow-up Report: Updates on the implementation of recommendations from recent reports

Self- Assessed Status	Actions Taken Since Report Issued	Results of Actions and/or Actions Planned (with information on implementation)
	risk tolerance. Audit logging will be turned on within the scheduling product to monitor activities of support personnel. Each day's audit logs are monitored by the Enterprise Security Officer.	
Recomme	Recommendation 8: Access to the payment file information should be further restricted to ensure its confidentiality and integrity.	stricted to ensure its confidentiality and integrity.
Ĩ	A new directory for the payment file was created and access has been restricted to only the resources delegated with responsibility for the nightly scheduling activities and support of the payment file transfer (currently 3). Access has been limited to only one user id.	No further action required as this issue has been closed.
Recomme approve '	Recommendation 9: A review of "root" access relative to job descriptions and requirements should be performed, and management should formally approve "root" access in each case. Any excessive access should be removed.	equirements should be performed, and management should formally
Σ.	A review of access was conducted and excessive access has been removed. Access by the Database Administrators (DBAs) has been removed and will only be granted for emergencies or limited cases during upgrade projects, on a temporary and controlled basis which are logged and monitored by the CAS Enterprise Security Officer. CAS has implemented an outsourced service provider model with respect to DBA resources. DBA access is formally approved for each resource by the Director of Technology Operations.	No further action required as this issue has been closed.
	"Root" access is owned and monitored by Workplace Technology Services (WTS) as part of the Shared Services Hosting Service. WTS Hosting resources with root access are approved by WTS Management. CAS contacted WTS to confirm that root access is reviewed regularly and that no inappropriate access was in place.	
Recommendation with this	Recommendation 10: Management should investigate whether software could be used to delegate "root" user capabilities, and audit all activities with this authority.	e used to delegate "root" user capabilities, and audit all activities
Р	CAS is not aware of any software delegation tools that would prevent root access users from being able to edit the audit logs.	Corrective action plan initiated and currently underway. Target date for completion is March 31, 2009.
	"Root" access is owned and monitored by WTS as part of the Shared Services Hosting Service. WTS Hosting resources with root access are	
St	- 3 - F or S – Recommendation has been fully or <u>substantially</u> implemented P – Recommendation has been <u>partially</u> implemented AA – Alternative action has been undertaken, general <u>intent of alternative action will addresses OAG</u> finding NA – No methodication has been undertaken, general <u>intent of alternative action will addresses OAG</u> finding	addresses OAG finding

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Self-		Results of Actions and/or Actions Planned
Assessed Status	Actions Taken Since Report Issued	(with information on implementation)
	approved by WTS Management. CAS communicated the Auditor General's recommendations to WTS.	
Recommend umethod u	Recommendation 11: Management should implement a more secure means of transferring files from UNIX to the mainframe environment. The method used should protect the confidentiality of logon credentials and data during transmission over the network.	nsferring files from UNIX to the mainframe environment. The ng transmission over the network.
<u>م</u>	CAS has implemented an alternate encryption software package to protect the confidentially of the transmission. CAS is reviewing the WTS File Transfer Protocol Secure (FTPS) package to determine feasibility of creating a more secure transfer connection. The review will be completed by March 31, 2009.	Corrective action plan initiated and currently underway. Target date for completion is March 31, 2009.
Recomme would ver	Recommendation 12: An audit trail of transaction counts and control totals shoul would verify that information was not altered during the FTP process.	counts and control totals should be implemented and checked on each file transmission. This ing the FTP process.
AA	CAS has implemented an encryption software package to ensure the information is not altered during the transmission.	No further action required as this issue has been closed.
Recomme should be	Recommendation 13: To provide assurance on the completeness of the manual change log, high-level profiles protecting computer program files should be flagged, so that when a change is made, the user is identified and logged for later review.	ange log, high-level profiles protecting computer program files ed for later review.
Ч	Audit logging has been turned on within the scheduler product. Each day's audit logs are monitored by the Enterprise Security Officer. CAS is currently investigating ways to enhance monitoring of DBA access. CAS investigated a configuration control software package, unfortunately, although this software is owned by WTS they have not made the service available to the ministries. Implementing a database specific product which can encrypt the data files, will require procurement and testing cycles. A project to implement DB Vault will begin by March 31st, 2009.	Corrective action plan initiated and currently underway. Target date for completion is March 31, 2009.
	CAS is not aware of any software delegation tools that would prevent root access users from being able to edit the audit logs. "Root" access is owned and monitored by WTS as part of the Shared Services Hosting Service. WTS Hosting resources with root access are approved by WTS Management. CAS communicated the Auditor General's recommendations to WTS.	
Recomme	Recommendation 14: Banking and Cash Management should keep its EFT procedures manual current to ensure accurate guidance is provided to new	lures manual current to ensure accurate guidance is provided to new
Sta	Status F or S - Recommendation has been fully or <u>substantially</u> implemented P - Recommendation has been <u>partially</u> implemented AA - Alternative action has been undertaken, general <u>intent of alternative action will addresses OAG finding</u> NA - No substantial action has be taken to address this recommendation	ldresses OAG finding

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emplovee	Actions Taken Since Report Issued	(with information on implementation)
	employees and back-up staff.	
S	All EFT (electronic fund transfer) procedures have been updated and are available to staff on the branch shared network drive.	A technical writing resource will be identified to collate the procedures into manual form. Target completion is June 30, 2009.
Recommen accidental	Recommendation 15: All instances of incompatible duties should be removed or additional monitoring activities added to manage the risk of accidental or intentional errors going undetected.	additional monitoring activities added to manage the risk of
<u>م</u>	A comprehensive ISB security review was completed June 2008. Accesses were reviewed and changes made accordingly. Audit logs are created and a project to create exception reporting was completed December 31, 2008.	Documentation of exception reporting review procedures to be completed by March 31, 2009.
Recommer	Recommendation 16: Batch numbers should be traced to ensure all payment files are processed.	s are processed.
۲. ۲	All batches are matched to the incoming file notifications as evidenced by tick marks, and both releaser and reviewer initials. A systems project to enhance batch control edits was completed January 26, 2009.	No further action required as this issue has been closed.
Recommen informatio	Recommendation 17: There should be evidence to support control procedures have been performed. This would e information from ministries has been reconciled to the payment information received and processed by the bank.	support control procedures have been performed. This would ensure that the initial payment o the payment information received and processed by the bank.
Ъ	All payment files are matched to both the incoming file notifications from ministry feeder systems and file processing confirmations from our bank, as evidenced by tick marks, and both releaser and reviewer initials.	No further action required as this issue has been closed.
Recommen manageme	Recommendation 18: All program changes should be tracked and monitored to en management policies.	be tracked and monitored to ensure they are approved and in compliance with change
F	ISB has promoted greater staff awareness of the change management policy, and a ticket tracking tool is being used.	No further action required as this issue has been closed.
Recommen	Recommendation 19: Several monitoring controls, such as access logs and staff lists, should be improved.	lists, should be improved.
Я	All access for print operators and system analysts has been reviewed and updated as necessary. Off-hour access reports are routinely reviewed and authorized staff lists are maintained.	No further action required as this issue has been closed.

P - Recommendation has been <u>partially</u> implemented
 AA - Alternative action has been undertaken, general <u>intent of alternative action will addresses OAG finding</u>
 NA - No substantial action has be taken to address this recommendation

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Self- Assessed Status	Actions Taken Since Report Issued	Results of Actions and/or Actions Planned (with information on implementation)
Recomme reconcilia	Recommendation 20: Policies and procedures for staff should be updated, incluc reconciliations, and security measures.	staff should be updated, including those pertaining to cheque stock movements, testing procedures,
۲.	A cheque printing and distribution procedures manual has been developed documenting the process for MICR (Magnetic Ink Character Recognition) testing and the printing, control, sorting, distribution and reconcilitation of cheques. The security manual is continually updated to reflect enhancements to security measures.	No further action required as this issue has been closed.
Recomme alteration.	Recommendation 21: The cheque inventory tracking application should be password-protected and key cells locked to prevent accidental erasure and alteration.	ord-protected and key cells locked to prevent accidental erasure and
Ĩ	The cheque inventory tracking application has been password-protected with key cells locked.	No further action required as this issue has been closed.
Recomme staff.	Recommendation 22: Policies and procedures for managing the status of paymer staff.	managing the status of payments should be regularly reviewed and updated for new and back-up
S	All cheque management procedures have been updated and are available to staff on the branch shared network drive.	A technical writing resource will be identified to collate the procedures into manual form. Target completion is June 30, 2009.
Recomme procedure	Recommendation 23: Banking and Cash Management staff should communicate to ministries the importance of complying with policies and procedures for cancelling and re-issuing cheques, as outlined in government's financial policy manual.	to ministries the importance of complying with policies and nancial policy manual.
S	Advice is provided to clients daily and information bulletins are distributed to ministry contacts as required. Working in conjunction with the Office of the Comptroller General (OCG), draft changes to core policy have been presented to the Financial Officers Advisory Committee (FOAC) and feedback from the committee will be incorporated into the policy.	Client education is an on-going activity for the branch.
Recomme	Recommendation 24: All program and data changes should be tracked and monitored to ensure they are approved and complying with policy.	ored to ensure they are approved and complying with policy.
F	ISB has promoted greater staff awareness of the change management policy, and a ticket tracking tool is being used.	No further action required as this issue has been closed.
Recomme	Recommendation 25: The summary report of paid cheque data should be regular	cheque data should be regularly reviewed to ensure that the data was successfully loaded into the
Status	 - 6 - F or S – Recommendation has been fully or <u>substantially</u> implemented P – Recommendation has been <u>partially</u> implemented AA – Alternative action has been undertaken, general <u>intent of alternative action will addresses OAG</u> finding NA – No substantial action has be taken to address this recommendation. 	idresses OAG finding

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system. F Revew is evidenced by initials of the reviews. F Review is evidenced by initials of the reviews. No further action required as this issue has been closed. Recommendation 36: Roles and responsibilities should be reviewed. Incompatible duties have been reviewed. Incompatible duties and responsibilities should be reviewed. Incompatible duties have been deceded. No further action required as this issue has been closed. Recommendation 37: Review of daily returned items should be performed regularly. This should be done by staff not involved in processing or aution/ring entruned items. No further action required as this issue has been closed. Recommendation 37: Review of daily returned items should be performed regularly. This should be done by staff not involved in processing or aution/ring entruned items. No further action required as this issue has been closed. Recommendation 37: Review if and initials of the reviewer. No further action required as this issue has been closed. Recommendation 37: Review of adapt of the reviewer. No further action required as this issue has been closed. Recommendation 37: Review of adapt of the reviewer. No further action required as this issue has been closed. Recommendation 37: Review of adapt of the reviewer. No further action required as this issue has been closed. Recommendation 39: Replacement closed from the comparison of the automated through the review is evidenced by reviewed. No further action require	Self- Assessed Status	Actions Taken Since Report Issued	Results of Actions and/or Actions Planned (with information on implementation)
ewer. nould be reviewed by managem ewed. Incompatible duties have deemed acceptable. ms should be performed regula by tick marks and initials of e staff member that processed pporting comparison of the aut upporting comparison of the aut reals of the reviewer. itals of the reviewer. itals of the reviewer. itals of the regularly reviewed l s should be regularly reviewed l enges to core policy have k from the committee will be nanges to core policy have itals of the maintenance proc comment. s have been reviewed and completeness of the manual ch completeness of the manual ch	system.		
nould be reviewed by managem ewed. Incompatible duties have deemed acceptable. ms should be performed regula by tick marks and initials of e staff member that processed pporting comparison of the aut itals of the reviewer. tials of the regularly reviewed l s should be regularly reviewed l s should be regularly reviewed l itals of the manuel be d policy change identifies the ng replacement cheque yments have occurred. it made in the maintenance proc comment. s have been reviewed and completeness of the manual ch completeness of the manual ch completeness of the manual ch to result of alternative action will a	F	Review is evidenced by initials of the reviewer.	No further action required as this issue has been closed.
ewed. Incompatible duties have deemed acceptable. Iby tick marks and initials of e staff member that processed processed protring comparison of the aut tials of the reviewer. itials of the reviewer. itials of the regularly reviewed s should be regularly reviewed itials of the maine will be anges to core policy have k from the committee will be anges to core policy have in the maintenance proce or made in the maintenance proce or ment. In adde in the maintenance proce or made in the maintenance proce or more the solution of the manual ch completeness of the manual ch	Recomm processii	endation 26: Roles and responsibilities should be reviewed by managen ig undeliverable and unclaimed cheques.	nent with the aim of minimizing incompatible duties with respect to
ms should be performed regula by tick marks and initials of e staff member that processed pporting comparison of the aut tials of the reviewer. itials of the regularly reviewed s should be regularly reviewed s should be regularly reviewed anges to core policy have the from the committee will be anges to core policy have the name of the manuel of comment. In made in the maintenance proc comment. In the maintenance proc comment. In the manuel of the manual of completeness of the manual of completeness of the manual of completeness of the manual of completeness of the manual of the completeness of the manual of completeness of the manual of completeness of the manual of completeness of the manual of a completeness of the manual of completeness of the manual of a completeness of the manual of a comp	F	Roles and responsibilities have been reviewed. Incompatible duties have minimized and any residual risk has been deemed acceptable.	No further action required as this issue has been closed.
Iby tick marks and initials of e staff member that processed pporting comparison of the aut tials of the reviewer. itials of the regularly reviewed is should be regularly reviewed is should be regularly reviewed is from the committee will be anges to core policy have the from the committee will be anges to core policy have the nange identifies the of replacement cheque yments have occurred. yments have occurred. in made in the maintenance proc comment. is have been reviewed and completeness of the manual ch completeness of the manual ch completeness of the manual ch completenese of the manual ch implemented	Recomm authorizi	endation 27: Review of daily returned items should be performed regulate returned items.	arly. This should be done by staff not involved in processing or
pporting comparison of the aut tials of the reviewer. s should be regularly reviewed anges to core policy have the from the committee will be an policy change identifies the ng replacement cheque yments have occurred. yments have occurred. in and in the maintenance proc comment. s have been reviewed and completeness of the manual ch completeness of the manual ch	F	The review is done daily and is evidenced by tick marks and initials of the reviewer. The reviewer is not the same staff member that processed the items.	No further action required as this issue has been closed.
tials of the reviewer. s should be regularly reviewed anges to core policy have the from the committee will be ng replacement cheque ng replacement cheque yments have occurred. The maintenance proc comment. s have been reviewed and s have been reviewed and completeness of the manual ch completeness of the manual ch	Recomm email no	endation 28: There should be evidence supporting comparison of the au tifications received from ministries.	tomated funds transfer (AFT) recalls confirmation report with the
s should be regularly reviewed langes to core policy have and angles to core policy have at from the committee will be a policy change identifies the mg replacement cheque will be yments have occurred. It is made in the maintenance procurred. It is have been reviewed and the manual check of the manual check of the manual check of a substantially implemented implemented in the mature action will a deen.	F	Review is evidenced by tick marks and initials of the reviewer.	No further action required as this issue has been closed.
anges to core policy have k from the committee will be l policy change identifies the ng replacement cheque yments have occurred. In made in the maintenance proc comment. Is have been reviewed and s have been reviewed and completeness of the manual ch completeness of the manual ch completeness of the manual ch g or substantially implemented implemented	Recomm	endation 29: Replacement cheque records should be regularly reviewed s have occurred.	by management to ensure they are complete and no duplicate
	¥¥	Working in conjunction with OCG, draft changes to core policy have been presented to the FOAC and feedback from the committee will be incorporated into the policy. The proposed policy change identifies the issuing ministry as responsible for reviewing replacement cheque records and ensuring that no duplicate payments have occurred.	The final approved policy is targeted to be in place early in the 2009/2010 fiscal year.
	Recomm	endation 30: Specific reference should be made in the maintenance proopnes running in the MVS mainframe environment.	ess manual to the change management processes needed for
	Щ	Maintenance process/procedural manuals have been reviewed and updated as recommended.	No further action required as this issue has been closed.
F or S – Recommendation has been <u>fully</u> P – Recommendation has been <u>partially</u> i AA – Alternative action has been underta	Recomm		hange log, high-level profiles protecting computer program files
NA - No substantial action has be taken to address this recommandation	õ	F or S – Recommendation has been <u>fully</u> P – Recommendation has been <u>partially</u> i AA – No enterprist action has been underts NA – No enterprist	uddresses OAG finding

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Follow-up Report: Updates on the implementation of recommendations from recent reports

Status	Actions Taken Since Report Issued	(with information on implementation)
should be	should be flagged so that when a change is made, the user is identified and logged for later review.	ed for later review.
ί λ ι	Auditing has been altered to log changes, including user id, on all BankRec files. All activities are audited by CAS Enterprise Security Officer.	No further action required as this issue has been closed.
Recomme	Recommendation 32: Banking and Cash Management Branch should update its business continuity plan promptly after each disaster exercise.	usiness continuity plan promptly after each disaster exercise.
F	The Business Continuity Plan (BCP) plan is updated regularly. A share- point site has been created for BCP documentation and a Business Continuity Officer has been hired to ensure documentation is maintained.	No further action required as this issue has been closed.
Recomme	Recommendation 33: Corporate Accounting Services should conduct an alternate site exercise.	site exercise.
۲.	During the Dec 4, 2008 MVS Hot Site and Data Recovery Plan (DRP) Technical Exercise, CAS staff performed their recovery tasks from the current alternate site.	No further action required as this issue has been closed.
Recomme business c a disaster.	Recommendation 34: Corporate Accounting Services, Banking and Cash Management, and BC Mail Plus should jointly develop and maintain business continuity plans that will satisfy the minimum processing and printing requirements to enable critical payments to continue in the event of a disaster.	ement, and BC Mail Plus should jointly develop and maintain equirements to enable critical payments to continue in the event of
Ч	During the Dec 4, 2008 MVS Hot Site and DRP Technical Exercise CAS worked jointly with BC Mail Plus (BCMP) to confirm that processing and printing requirements are documented and exercised.	DRP Testing was completed however it was inconclusive since the CAS generated Electronic Funds Transfer data was not used to ensure that electronic fund transfers would occur as expected.
	CAS also confirmed that the processing and interfaces between CAS and the Banking and Cash Management branch (BCM) are functioning as expected. CAS will continue to work with BCMP and BCM to confirm continuity plans.	
	Participants have been identified for a joint working group to identify and document the articulations between the existing CAS, BCM and BCMP Business Continuity Plans. Meetings will be scheduled prior to March 31, 2009.	

Follow-up Report: Updates on the implementation of recommendations from recent reports

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Status

F or S – Recommendation has been <u>fully</u> or <u>substantially</u> implemented P – Recommendation has been <u>partially</u> implemented AA – Alternative action has been undertaken, general <u>intent of alternative action will addresses OAG finding</u> NA – No substantial action has be taken to address this recommendation