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## CF Reserve Pay Audit

December 2007

7053-65 (CRS)



Canada 

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## LIST OF ACRONYMS

ADM(Fin CS)	Assistant Deputy Minister (Finance and Corporate Services)
ADM(IM)	Assistant Deputy Minister (Information Management)
CIC	Cadet Instructor Cadre
CF	Canadian Forces
CMP	Chief Military Personnel
CO	Commanding Officer
CRS	Chief Review Services
CY	Calendar year
DEAIS	Director Enterprise Application Integration Solutions
DMPAP	Director Military Pay and Accounts Processing
ED&T	Exempt from duty and training
HR	Human resources
IL	Increment level (Incentive Pay Code – IPC)
Mil Pay Ops	Military Pay Operations
NES	Non-effective strength
PRL	Primary Reserve List
RPSR	Revised Pay System for Reservists
SOP	Standard operating procedures
User ID	User identification



## RESULTS IN BRIEF

In accordance with the Chief Review Services (CRS) Audit and Evaluation Work Plan for fiscal year 2005/06, an audit of the Canadian Forces (CF) Reserve pay process as it relates to the payment of class A and B Reservists was undertaken. The objective of this audit was to assess whether adequate and effective controls are in place and functioning as intended to ensure accurate payments to CF Reservists.

As a result of the manual attendance recording process for class A members and the associated difficulty in verifying reported attendance, the accuracy and completeness of the \$660 million paid to Reserve members in calendar year (CY) 2005 could not be confirmed. While there was no evidence of inappropriate transactions being processed, improvements to the attendance recording process, functionality within the Revised Pay System for Reservists (RPSR), and pay transaction monitoring and reporting are necessary before the Reserve pay process can be subjected to a controls-reliant audit required as part of the audited financial statement initiative.

### Overall Assessment

While payments to Reservists appear to be accurate, it is difficult to assess whether the attendance information is complete and valid for the following reasons:

- Data input and system access control weaknesses;
- RPSR functionality issues; and
- Limited monitoring and reporting practices.

## Findings and Recommendations

**Input and System Access Controls.** The manual class A attendance recording process lacks the controls and functionality to ensure the accuracy, completeness and validity of attendance information.

It is recommended that Director Military Pay and Accounts Processing (DMPAP) staff in conjunction with Assistant Deputy Minister (Information Management) (ADM(IM)) staff investigate available technologies (i.e., automated processes) that could be implemented in order to improve the verifiability and accuracy of class A attendance records. In the meantime, it is recommended that the Assistant Deputy Minister (Finance and Corporate Services) (ADM(Fin CS)) communicate with Comptrollers to ensure that Reserve organizations reinforce the requirement that current attendance-related controls be followed.

**System Functionality.** Improvements are required to RPSR application controls and functionality related to processing increment entitlements, rank changes, and class B contract amendments.

It is recommended that DMPAP, in conjunction with ADM(IM), take appropriate actions to correct the lack of controls and system functionality to ensure the accuracy, completeness and appropriateness of pay transactions and adjustments.

**Monitoring and Reporting.** The RPSR does not currently generate the required reports that would facilitate the reconciliation and monitoring of Reserve pay transactions and adjustments, including changes to members' personal information.

It is recommended that DMPAP work with the responsible Commands to develop the RPSR reports required by the various levels of management in order to adequately monitor and validate Reserve pay data transactions and changes to members' personal information.

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**Note:** For a more detailed list of CRS recommendations and management response, please refer to [Annex A](#)—Management Action Plan.

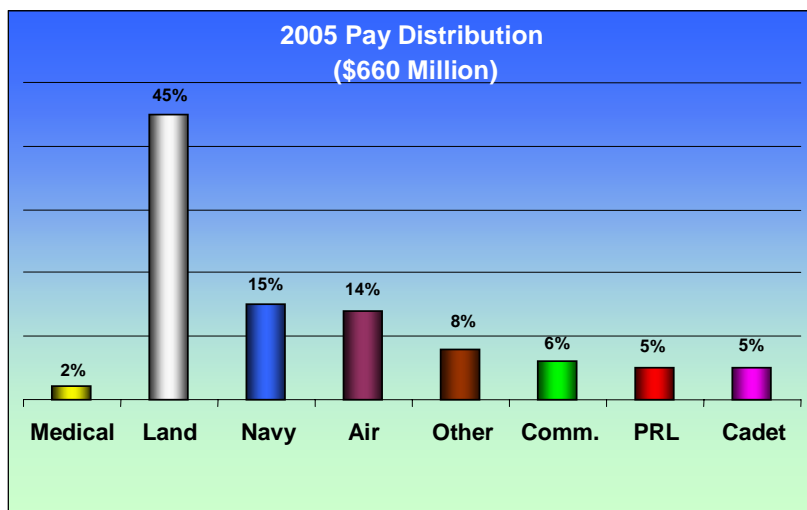
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## INTRODUCTION

### Background

The RPSR is a web-based centralized system for recording pay transactions and calculating pay amounts due to Reservists. DMPAP is responsible for administering the RPSR and for providing pay clerks with pay guidance and solutions to pay issues. The individual Reserve units maintain Reserve members' pay files and are responsible for recording and processing pay transactions. In CY 2005, the RPSR processed pay transactions for approximately 46,000 Reservists for a total of \$660 million. With the expected increase in recruiting, these figures should increase over the next few years.



**Figure 1. Audit Population.** *CY 2005 Reserve pay distribution.*

Reservists are paid in accordance with the conditions associated with one of the following categories of service:

- **Class A Service:** Similar to casual work, consisting of four or more evenings and one or more weekends a month. Members are paid on the basis of attendance.
- **Class B Service:** Continuous service ranging from 13 days to three years. Members are paid based on the terms of contracts.
- **Class C Service:** Equivalent to full-time Regular Force service for a period greater than 90 days.

### Objectives

The objective of this audit was to assess whether adequate and effective controls were in place and functioning as intended so as to ensure accurate payments to CF class A and B Reservists.

### Scope

The audit examined CY 2005 RPSR expenditures related to class A and B Reservists, including the Cadet Instructor Cadre (CIC) and the Canadian Rangers. Amounts paid to class C Reservists were addressed in a previous CRS audit (Military Pay Audit—Basic Pay, October 2003, 7050-8-2) and thus were excluded.



## Methodology

The observations and recommendations of this audit are based on the results of the following activities:

- Interviewed staff at DMPAP, Director Enterprise Application Integration Solutions (DEAIS), and Reserve units and flowcharted the pay process;
- Visited ten sites to validate pay process control points identified during the flowcharting process, performed system access testing, and verified the completeness of pay-related documentation for 390 personnel and pay files;
- Performed compliance testing on sample transactions to ensure compliance with the Treasury Board and Department of National Defence pay policies; and
- Completed 35 directed sampling and global reasonableness tests on the CY 2001 to CY 2005 RPSR database.

## Criteria

Criteria on which the assessment of the CF Reserve member pay process was made are detailed at [Annex B](#).



## FINDINGS AND RECOMMENDATIONS

### Input and System Access Controls

*The manual class A attendance recording process lacks the controls and functionality to ensure the accuracy, completeness and validity of attendance information.*

#### Attendance Recording

CF Reserve units use attendance sheets to record parade night or training exercise attendance. The attendance sheet is based on the unit's nominal roll and includes the member's name and rank. It also has an area for the member's signature and date of attendance. When members attend a training event, they are supposed to sign next to their name under the supervision of a unit manager.

Once the sign-in process is complete, the supervising officer is supposed to cross out the names of those members not in attendance, sign the document and then forward it to the pay clerk to be entered into the pay system. The pay clerk then enters the attendance information in the RPSR for processing. Once complete, the commanding officer (CO) will perform a final verification of an RPSR-generated input summary against the attendance forms and authorize the pay to be processed.

- Cadet unit attendance sheets are processed at a central support unit. Staff at the Cadet Support Unit have no signature cards to validate the authorizing signatures.
- CO authorization of attendance records ranged from four days to two years after the date that the attendance was recorded.

Current control practices in the attendance recording process provide no means to ensure that payments are only made to members who actually participated in a parade night or exercise. Inconsistencies in existing controls included:

- **Signature Verification.** At the units visited, signature cards for unit members were not kept on file for signature verification purposes. It was not possible to verify that signatures on the attendance sheet belonged to the members who attended the training activity. In addition, a great deal of trust is placed on unit supervisors to ensure that they monitor the sign-in process and that they can attest to the fact that members only signed for themselves.
- **Cross-Out Process.** Instances were observed where the names of individuals not attending a training activity were not crossed off the attendance sheet before it was passed to the pay clerk to be entered into the RPSR. This oversight provides an opportunity for attendance information to be changed before it is entered into the system to be processed.
- **Monitoring.** At the units visited, pay staffs advised that the CO only performed spot check comparisons of the data entered into the RPSR and the attendance sheets. In addition, copies of the RPSR input summary are not provided to unit supervisors so that they can ensure that the processed data accurately reflects the attendance sheets that they





authorized. Applying more rigor to the verification process by involving the unit supervisors decreases the likelihood of inaccurate or unauthorized transactions being processed and provides the unit CO with an additional level of assurance before conducting the final pay transaction verification.

### Contingency Payments

Contingency payments are used to make payments to Reserve members whose attendance data did not get entered into the system in time to be paid in the current pay period. During CY 2005, Reserve units used this option to remit over \$20 million of pay to Reservists. The process to request a contingency payment consists of having the unit's pay clerk complete a request form available on the RPSR website and forward the completed form to DMPAP, where it is entered into the system.

A password is not required to access the contingency request form, meaning that anyone in the unit can complete the form and request a contingency payment. Additionally, DMPAP does not have a control listing of authorized requestors (pay clerks) that can be used to validate that the requestor is indeed a legitimate user from one of the Reserve units. As a result, unauthorized contingency payments could go unnoticed.

### Recommendations

OPI	RECOMMENDATION
ADM(Fin CS)/DMPAP	<b>Attendance Recording.</b> It is recommended that DMPAP, in conjunction with ADM(IM), investigate available technologies that could be implemented in order to improve the verifiability and accuracy of class A attendance records.
ADM(Fin CS)	<b>Attendance Recording.</b> Until DMPAP can make changes to the RPSR application, it is recommended that ADM(Fin CS) communicate with Comptrollers to ensure that Reserve organizations reinforce the requirement that current attendance-related controls be followed.
ADM(Fin CS)/DMPAP	<b>Contingency Payments.</b> It is recommended that DMPAP implement appropriate measures to ensure the accuracy and validity of contingency payments.



## System Functionality

*Improvements are required to RPSR application controls and functionality related to processing increment entitlements, rank changes, and class B contract amendments.*

There are functionality weaknesses in the RPSR that may result in incorrect payments and that could lead to the processing of inappropriate transactions. While pay clerks were aware of some of the functionality issues and had developed their own means to process the required transactions, shortcomings related to class A increment levels (IL) were discovered during testing of the RPSR database.

### Increment Levels

The RPSR will automatically update a class A member's IL without taking into account the period that the member was on non-effective strength (NES) or was exempt from duty and training (ED&T). Except for maternity/parental leave, the period a member has been declared NES or ED&T does not count toward qualifying service for an IL. This can result in members' receiving increments sooner than they are entitled to.

Also, the RPSR does not allow an automatic IL update for class B contracts with terms requiring two or more IL pay adjustments. In these cases, the system allows the input of the first IL increase date, but not subsequent dates. The pay clerk must manually split the contract and apply future ILs on the appropriate dates. Because proper procedures are not documented, processing practices vary from unit to unit, thereby increasing the chance of incorrect payments.

There were 302 of the 45,957 paid members in CY 2005 (less than 0.5 percent) in the RPSR database who had not received an IL increase for 365 or more days. Of these, 144 were at the highest IL and thus there was no further entitlement. A random sampling of 35 of the remaining 158 members produced 12 members who had not received an IL as entitled. All 12 Reserve units were contacted and, at the time this report was written, four units had responded and confirmed that the corrections had been made.

### Class B Contract Changes

Occasionally class B contract terms need to be changed (e.g., extend contract duration). Rather than having the DMPAP Help Desk make the adjustments some units simply delete the original contract and enter the adjustments as a new contract. This normally results in incorrect tax calculations, subsequently impacting the member's net pay.

### Rank Changes

The RPSR is programmed to reject rank changes greater than one level. Members in the accelerated Private-Corporal-Master Corporal program, however, are entitled to be promoted more than one level at a time. To ensure that these members' pay is accurate, pay clerks must promote the member one rank level one day and another level the next day. Because COs do not receive reports that would make them aware of these types of transactions, there is an increased risk that unauthorized rank changes for members not in the accelerated program would go unnoticed.



While none of these shortcomings appear to have had a material impact on overall payments, there is an obligation on the part of the CF to ensure members receive their entitlements and to ensure resources are used appropriately.

### Recommendations

OPI	RECOMMENDATION
ADM(Fin CS)/DMPAP	<b>System Functionality.</b> It is recommended that DMPAP, in conjunction with ADM(IM), take appropriate action to correct the lack of system functionality and controls related to processing increment entitlements, rank changes and class B contract amendments.



## Monitoring and Reporting

*The RPSR does not currently generate the required reports that would facilitate reconciliation and monitoring of Reserve pay transactions and adjustments, including changes to a member's personal information.*

### RPSR Reports

During site visits, RPSR users expressed concern that existing reports either did not satisfy their needs or were inaccurate. The general consensus was that it would be more efficient and useful for the Reserve units to have the capability to generate their own customized reports.

As an example, the payment register at one Reserve unit displayed a member's pay account with two equal expenditure amounts. Originally this member had requested that the net pay be split and deposited into different bank accounts, but had since requested that the pay be directed to one bank account. The payment register, however, was reporting that the member's total net pay had been deposited twice—once into each of the identified accounts. Further investigation confirmed that the member had received only one payment, but the payment register was inaccurate, requiring manual calculations be performed in order to reconcile to the Financial Managerial Accounting System.

### Exception or Change Reporting

The RPSR lacks exception and change reporting that could be used by unit managers to monitor and validate pay transactions and adjustments.

For example, unit COs or Comptrollers could confirm the validity and accuracy of changes to a member's rank or bank information if provided with a report detailing such changes. The absence of such reporting increases the chance that errors or inappropriate pay transactions could go unnoticed. This could become more of an issue as the number of Reservists increases and limited unit resources are further strained.

### User ID Control

System administrators can make changes to their own user profile without approval. Additionally, the RPSR consultant can make changes to the RPSR production database without anyone's knowledge. No change reports are produced or provided to DMPAP staff for monitoring or validation of changes.

There are also issues regarding the update and control of RPSR user IDs. User ID testing identified 37 user IDs for **released members** that were still active. Of these, 17 continued to be used to record activities in either the Attendance table or the Human Resources table of the RPSR. An investigation by DEAIS determined that the members had been released from the Reserves but were now working at Reserve units as Regular Force members. Fourteen of the 17 user IDs had been deleted from the active user list, yet they had not been deactivated within the RPSR. Of the other 20 user IDs, three of those also appeared on the DMPAP active user listing although there was no record of them having been used after the member's release date.



Additionally, the user ID of a pay clerk who had transferred out of a unit was not cancelled until three months after the member had left. Upon follow-up with the member's former unit, it was determined that unit personnel were unaware of user ID cancellation procedures.

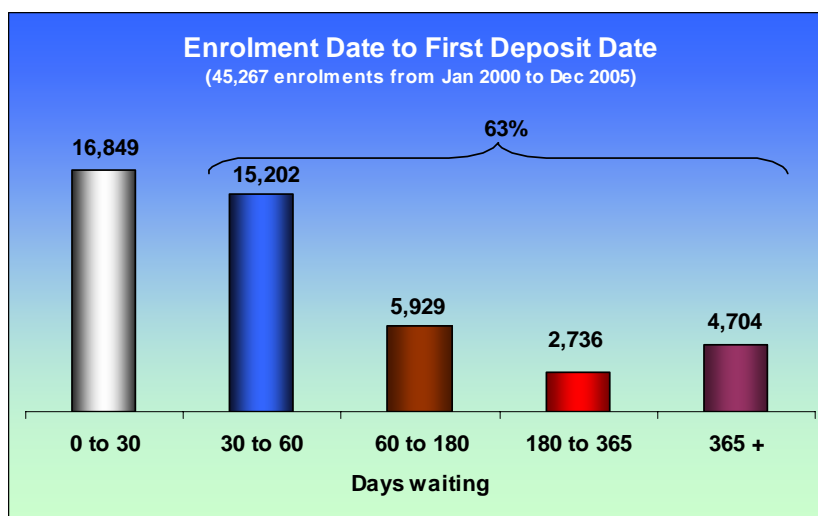
### RPSR Member Profiles

All Reserve members have an RPSR profile. When there is a record of attendance for the member, his or her profile is updated. The unit finance clerk places members with no activity or who elect to be released from the Reserves in either the "Release" or "Supplementary Reserve" databases.

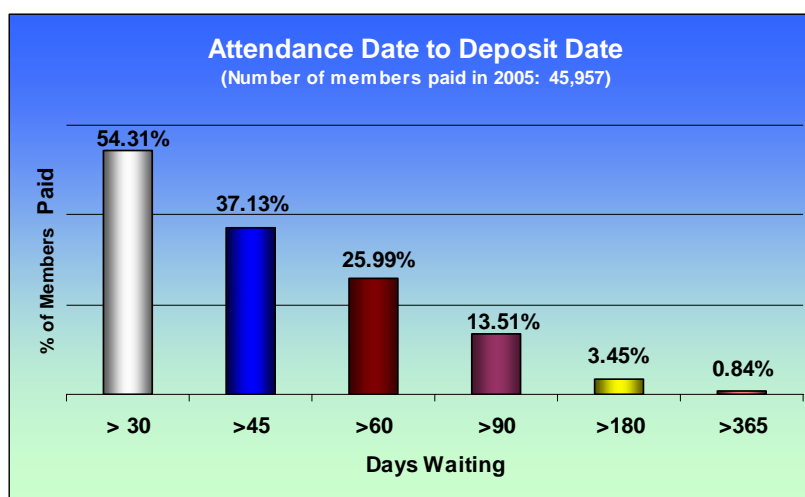
Since the inception of the RPSR in 1999, a total of 124,567 reserve member profiles have been created. After removing the profiles labelled as "Release" and "Supplementary Reserve," along with the 45,957 members with attendance in 2005 from this number, 5,398 active profiles remained. To reduce the risk of inappropriate pay transactions, these "active" inactive profiles should have been classified as NES and moved to the release or supplementary databases. Leaving the profiles active provides a mechanism through which inappropriate pay transactions can be processed with little or no chance of detection.

### Timeliness

A comparison of the date of a member's first pay to the date of enrolment for the 45,420 recruits who enrolled in the Reserves between 2000 and 2005 showed that 63 percent (Figure 2) received payment more than 30 days after their enrolment date, with 10 percent waiting over a year. Furthermore, at least once during CY 2005, 54 percent (Figure 3) of Reservists received a payment more than 30 days after the date of training.



**Figure 2. Enrolment Date to First Deposit.** *Time for new recruits—between January 2000 and December 2005—to receive their first pay.*



**Figure 3. Attendance Date to Deposit Date.** *Days waited to be paid.*

These delays could be attributed to both the members and the pay clerks. In some cases, the member had not provided the banking information required to process the direct fund transfers. Other times, delays were due to attendance sheets not being sent to the pay cell in a timely fashion or errors in data entry.

Whatever the reason, untimely payments could potentially result in financial difficulties for some members. Again, by reviewing pay run comparison reports, managers might be better positioned to address unit pay processing issues before they become a problem.

### Recommendations

OPI	RECOMMENDATION
ADM(Fin CS)/DMPAP	<b>Monitoring and Reporting.</b> It is recommended that DMPAP work with the responsible Commands to develop the RPSR reports required by the various levels of management in order to adequately monitor and validate Reserve pay data transactions and changes to members' personal information.
ADM(Fin CS)/DMPAP	<b>User IDs and Member Profiles.</b> It is recommended that DMPAP work with the appropriate Command organizations to develop procedures that ensure user IDs and inactive profiles are properly managed.

## ANNEX A—MANAGEMENT ACTION PLAN

Ser	CRS Recommendation	OPI	Management Action	Target Completion Date
<b>Input and System Access Controls</b>				
1.	<b>Attendance Recording.</b> It is recommended that DMPAP, in conjunction with ADM(IM), investigate available technologies that could be implemented in order to improve the verifiability and accuracy of class A attendance records.	ADM(Fin CS)/ DMPAP	Current design limitations of the RPSR system limit the possible solutions to address such issues. DMPAP, in conjunction with ADM(IM) and CMP have initiated work to procure new technologies to replace the RPSR application. Mil Pay Ops will review current procedures/regulations of attendance recording and send an advisory to remind units. In addition, the role of the Accounting Officer will be reinforced and included under Supervisor's Aides of the DMPAP website.	Not earlier than December 2009  February 2008
2.	<b>Attendance Recording.</b> Until DMPAP can make changes to the RPSR application, it is recommended that ADM(Fin CS) communicate with Comptrollers to ensure that Reserve organizations reinforce the requirement that current attendance-related controls be followed.	ADM(Fin CS)	ADM(Fin CS) will communicate with Comptrollers to ensure that Reserve organizations reinforce the requirement that current attendance-related controls be followed. DMPAP will schedule ongoing random verification to better monitor compliance.	January 2008  May 2008 and ongoing
3.	<b>Contingency Payments.</b> It is recommended that DMPAP implement appropriate measures to ensure the accuracy and validity of contingency payments.	ADM(Fin CS)/ DMPAP	Standard Operating Procedures (SOP) will be developed and widely communicated to ensure the accuracy and validity of contingency payments. These will be listed under the Supervisor's Aides of the DMPAP website. Units must provide justification for contingency payments to Mil Pay Ops to ensure proper audit trails. The verification team will be auditing Mil Pay Ops' internal processes to ensure audit trail standards are met.	November 2007  January 2008 and ongoing



## ANNEX A

Ser	CRS Recommendation	OPI	Management Action	Target Completion Date
<b>System Functionality</b>				
4.	<b>System Functionality.</b> It is recommended that DMPAP, in conjunction with ADM(IM), take appropriate action to correct the lack of system functionality and controls related to processing increment entitlements, rank changes and class B contract amendments.	ADM(Fin CS)/ DMPAP	System changes to increment entitlements, rank changes and Class B contract amendments would be considered major changes, requiring large programming resources. Further analysis must be undertaken in order to determine the cost benefit of implementing large changes, given the proposed replacement of the Reserve Pay System. In the interim, a report can be created to show rank change history, to address the issue with reference to rank changes. DMPAP, in conjunction with ADM(IM), have initiated discussions to move human resources (HR) data input out of the RPSR, and use an HR feed instead.	Not earlier than December 2009
<b>Monitoring and Reporting</b>				
5.	<b>Monitoring and Reporting.</b> It is recommended that DMPAP work with the responsible Commands to develop the RPSR reports required by the various levels of management in order to adequately monitor and validate Reserve pay data transactions and changes to members' personal information.	ADM(Fin CS)/ DMPAP	Customized reports can be provided through Mil Pay Ops. A revised report request was created so units needing specific data identify their requirements to eliminate requests where reports are already available. However, adding the capability to allow users to produce their own ad hoc reports is a major undertaking. An SOP will be developed to advise units of which reports should be reviewed at what frequency and what follow-up action should be initiated.  There is a limitation on reports accessible by Reserve units in comparison to Cadet units. A request has been submitted to allow the same accessibility.	In place  April 2008  June 2008





## ANNEX A

Ser	CRS Recommendation	OPI	Management Action	Target Completion Date
Monitoring and Reporting (cont'd)				
			With respect to the example of the same payment, same account number, a request has been submitted to the programmers to amend the payment register and personal information report.	March 2008
6.	<b>User IDs and Member Profiles.</b> It is recommended that DMPAP work with the appropriate Command organizations to develop procedures that ensure user IDs and inactive profiles are properly managed.	ADM(Fin CS)/ DMPAP	User IDs are automatically deleted after 120 days of inactivity. Units will be reminded to request deletion of user IDs when the member moves or retires, as well as classifying inactive pay accounts as NES. The RPSR security guide has included the following and will be posted to the DMPAP website shortly: "Should a user have a legal name change, they must request a deletion of their account under the old name and request a new account under their new name. When a user leaves their position as a compensation clerk at the unit for an extended period of more than 120 consecutive days, the supervisor must submit a Delete Access Request form to delete the account and request reactivation upon return."	December 2007



## ANNEX B—AUDIT CRITERIA

Risk Management Framework Components	Audit Criteria
<b>1. Organizations – Stakeholders and Reserve Units</b>	<ul style="list-style-type: none"> <li>• Commitments to provide adequate and proper controls to ensure an accurate and timely pay delivery.</li> <li>• Establishment of adequate pay process controls is one of management's top priorities.</li> <li>• Ensure sufficient number of pay staff with appropriate knowledge and skills are assigned to carry out the pay functions.</li> <li>• Policies and procedures are developed to enable pay personnel to carry out pay function in an effective manner.</li> </ul>
<b>2. Segregation of Duties</b>	<ul style="list-style-type: none"> <li>• Shared responsibilities are clearly defined, documented, communicated and controls are in place to avoid repetitive efforts and/or breach of security.</li> </ul>
<b>3. Effective Controls in Pay Process</b>	<ul style="list-style-type: none"> <li>• Control activities related to pay policies, procedures and practices provide safeguards to prevent occurrence of mistakes.</li> <li>• Policy requirements have been implemented in systems related to pay processing.</li> <li>• Reasonable assurance can be provided that pay-related objectives are achieved in areas of pay processing operations, reporting and monitoring.</li> </ul>
<b>4. Risk Management and Monitoring</b>	<ul style="list-style-type: none"> <li>• Identified risks are assessed, communicated and solutions to problems are provided.</li> <li>• Reliable pay information is produced on a regular basis for internal and external purposes.</li> </ul>

