CHAPTER ONE

1. **INTRODUCTION**

- 1.1 The Guyana Elections Commission (GECOM decided to commission a Systems Review and Audit ("Audit") of the election which it conducted on the 19th of March 2001. it was intended that the Audit would contribute to the transparency of GECOM and the general administration of the processes. A further motivation for the conduct of the audit was that as GECOM had become a permanent operational institution, evaluation and assessment of its work were therefore in the public interest.
- 1.2 On completion of the Audit, GECOM would be in a position, after consultation with the political parties, to propose to the Government the appropriate recommendations in order to address the issue detailed in the Audit.
- 1.3 The International Institute for Democracy and Electoral Assistance (IDEA) was approached to appoint an international expert team to conduct the assessment mission which would determine the scope and terms of reference of the audit. After consultations with key stakeholders, Peter Harris and Jan Hult were chosen to undertake the assessment mission. A copy of the report of the assessment mission was made available to GECOM, political parties and the general parties.
- 1.4 The Audit Team is aware that an electoral petition has been lodged. This petition, lodged in the High Court of the Supreme Court of the Judicature, challenges the validity of the election result on the basis that a number of irregularities occurred in the conduct of the elections. GECOM's directive to the Audit and Review Team was "that this circumstance should in n way inhibit the dept of analysis or the forthrightness of reporting of the results of that analysis".
- 1.5 Following the acceptance of the Scoping Report by GECOM, the report was released to the public. Thereafter, GECOM requested that an international team be assembled as a matter of urgency to conduct the Audit and System Review and that this team should commence work before the end of June, 2001.

2. RISK ASSESSMENT

2.1 There are certain features about the electoral process, both practical and political, which need to be kept in mind when considering concerns and allegations that have been made about the conduct of an electoral process.

- 2.1.1 *Elections are national and local events.* They require a centralized effort that is able to extend into all areas of the country.
- 2.1.2 *Elections should be accessible.* Administrators must understand and fulfill these objectives.
- 2.1.3 *Elections are high-pressure events.* Once an election date is set, the election administration involves nothing less than meeting a series of deadlines. The political penalty for missed deadlines is high for election administrators, government and political parties alike.
- 2.1.4 *Elections involve high stakes.* The credibility of elections is tied to national stability, and the winning and losing of elections is tied to political party power. In certain situations, elections themselves can precipitate violence and social unrest.
- 2.1.5 *Elections are expensive*. The administration of elections requires the capacity to spend money economically, efficiently without opportunities for fraud.
- 2.1.6 *Election administration is much more publicly orientated* than many other government functions.
- 2.1.7 Election administration is specialized. There is no other government function quite like preparing for an election, except perhaps preparing for war. It requires the mobilization of tens of thousands of people on an extremely precise timetable. It also requires moving a substantial amount of forms, supplies and equipment to thousands of locations throughout the country. Boundary demarcation, voter registration and many other technical duties of the election authorities are also specialized tasks.
- 2.1.8 Election administrators must be able *to balance the demands of the public at large with the rights of individuals*, especially the marginalized and disadvantaged.
- 2.1.9 Elections must exhibit an overriding concern for the *greater public good*, as opposed to the good of special interest.
- 2.1.10 *The electoral process must be predictable, ruled by law,* commonly understood and universally applied.
- 2.1.11 *Elections must ultimately be a nation-building exercise*, rather than a divisive one.

- 2.2 Bearing the above in mind, it is appropriate to categorize the type of allegations and concerns that commonly arise form an electoral process. These are as follows:
- 2.2.1 Errors that arise as a result of the implementation of incorrect or inappropriate systems, or as a result of the poor administration of systems. These are commonly referred to as "systems errors".
- 2.2.2 The abuse of systems by individuals or groupings with a view to gaining minor political or electoral advantage. This would include such actions as "padding an electoral list by an individual, unfair or biased recruitment and the introduction of false information into a system or process. This is known generally as "systems abuse". Linked to "systems abuse" is the issue of deliberate electoral fraud or conspiracy, the effects of which would have a real impact on the results of the election in a particular region or even on the national result. This would include deliberate deletion of voters from an electoral list thereby disenfranchising them, or the deliberate alteration of programmes to fraudulently multiply the votes of a particular party or remove large numbers of individuals from the list. It would also include deliberate sabotage to IT systems or logistics systems, such as the delayed distribution of materials to a particular region in which a particular party may be well represented.
- 2.2.3 A further area is that which relates to the lack of capacity of staff in an electoral process to professionally carry out their functions.
- 2.3 In order to properly investigate concerns and allegations that have been expressed by political parties, stakeholders and GECOM staff in relation to the conduct of the electoral process in Guyana in 2001, it is necessary to understand the following basic premises of the assessment of risk and consequent prejudice to a process or party.
- 2.3.1 It needs to be determined as to whether the alleged error or fraud in fact took place and to what extend.
- 2.3.2 It needs to be determined as to whether the act was deliberate fraud or a "system error". If it was deliberate fraud, was it part of an electoral conspiracy to influence the result of the election?
- 2.3.3 It needs to be determined as to whether the act was caused by a lack of capacity, time constraints or sheer incompetence.
- 2.3.4 It needs to be determined as to whether the act and its consequence affected the conduct of the elections.
- 2.3.5 A determination needs to be made as to whether, as a result of the act, a contesting party was prejudiced or gained electoral advantage. It may also be that the affected all arties on an equal or reasonably equal basis.

- 2.3.6 An assessment needs to be made as to whether the act will have had a material effect on the outcome of election in a particular constituency, district, region or at a national level.
- 2.3.7 The Audit and Systems Review Team have borne all of the above factors in mind when considering all allegations and concerns that have been placed before them in the conduct of this Audit.

3. POLITICAL BACKGROUND 1997 – 2001 TO THE 19TH OF MARCH 2001 ELECTION

- 3.1 The General and Regional elections held on 15th December 1997 were followed by protests and violent demonstrations which focused on certain alleged irregularities in the conduct of the election. On 31st December, 1997, the elections results were declared which returned the PPP/CIVIC majority in the National Assembly. Subsequently to the declaration of the results on 31December, rioting and violence erupted in Georgetown. The PNC disputed the result of the December 1997 election. Subsequently, on the 26th February, 1998 an election petition was brought by Esther Perreira which focused on election administration problems and questioned the legality of the General and Regional elections, as well as the valid of the declaration of the first results on the 15th December 1997.
- Against the background of continued social unrest arising from the 1997 election results, the Herdmanston Accord was signed on 17th January 1998. The Herdmanston Accord was an agreement between the PPP/CIVIC and the PNC in which the parties committed themselves to political dialogue and also established an agenda of reforms to be implemented by means of the establishment of a Constitution Reform Commission before the next election, which, in terms of the Accord, was to be held within 36months of the date of the signing of the Accord, namely by 17th January, 2001. The Accord also made provision for an independent audit of the December 1997 election to be carried under the auspices of a Caribbean Community (CARICOM) Mission.
- in early June, 1998, the CARICOM Audit stated "......evidence of many procedural omissions, and irregularities and systematic difficulties were found and it was clear that these e provided the basis for suspicion..." The Auditor examined and recorded the information in a systematic process and although rejected ballots were revisited and awarded, no significant difference in result of the election was found". The findings of the CARICOM Audit where followed by violent demonstrations in Georgetown in late June, 1998.
- In order to address the ongoing conflict, CARICOM continued to mediate between the PPP/CIVIC and the PNC, as a result of which the **SAINT LUCIA STATEMENT** was produced which committed both parties to restore a peaceful environment and to renew dialogue on constitutional reform with a view to normalizing the situation in Guyana.
- In terms of the Herdmanston Agreement, new elections were scheduled to be held by 17th January 2001. This shortened the mandate of the incumbent PPP/CIVIV government. On 13 November 2000, GECOM stated that they were unable to meet the requirements of conducting an acceptable election by 15 January 2001 and confirmed that the election

would have to be postponed. The delays related to the passing of the necessary legislation needed to address certain technical areas such as voter education, ID cards and training manuals.

- This postponement of the election raised the issue the issue of who would govern the country after the expiration of the Herdmanston Accord. On 7th December, 2000 the leaders of the four parliamentary parties met with President Jagdeo and agreed that the election should take place on 19 March 2001. The issue of governance after 17th January was referred for further discussion.
- 3.7 The Supreme Court, in giving judgment on the Esther Perreira Petition, stated on 15 January 2001, that in order to "fill the political vacuum" the incumbent President and his Cabinet, as politically constituted, should continue to perform their respective functions of office, not under virtue of declared unlawful elections, but under virtue of the order of the Court". At the same time, the Judge in the Esther Perreira Petition, Justice Claudette Singh stated "having considered the evidence in relation to the massive irregularities which have occurred, I am unable to make a positive finding whether those unlawful acts or omissions per se might have affected the results.
- In addressing the second ground for the petition, Justice Singh found that that Election Law, (Amendment) Act No. 22 of 1997 (which required voters to have a Voters' Identification Card) was *ultra vires* Article 59 and 159 of the Guyana Constitution, thereby rendering the Act null and void. The consequence of this, according to Justice Singh's judgement was that the 1997 elections were vitiated and therefore null and void.
- 3.9 It is against this background of social unrest and increasing tension between the two major political parties and constitutional crisis that the election of 19th March 2001 was conducted.
- 3.10 The official election results were announced at 04:20 in the early morning of Friday 23rd March 2001. These were subsequently corrected to account for some untabulated votes in Albouystown in Georgetown.
- 3.11 The Election was won by the PP/CIVIC with a majority of three seats. The PPP/CIVIC won 210,013 votes; the PNC/Reform won 165,866 votes; Guyana Action Party/Working People's Alliance 9,451 votes; Rise, Organize and Rebuild 3,695 votes; The United Force 2,904 votes; Justice For All Party -2,825 votes; the Guyana Democratic Party 1,345 votes, and the national Front Party 417 votes. The total number of valid votes cast was 396,516. The numbers of seats allocated to each list of candidates were as follows: PPP/C 34; PNC/Reform 27; GAP/WPA 2; ROAR 1; TUF 1
- 3.12 The conduct of the electoral process which culminated in polling on the 19th March 2001 election was married by limited acts of violence before the elections and more violence afterwards, as well as by numerous allegations of mal-administration, incompetence, deliberate manipulation and corruption of certain aspects of the electoral process. It is these areas which have been selected by GECOM, and confirmed by the Scoping Report,

as being the subject of assessment and examination by the Audit and Systems review Commission.

4. THE LEGISLATIVE FRAMEWORK FOR THE MARCH 2001 ELECTION

- 4.1 The elections held in Guyana in March, 2001 were conducted on the basis of the following legal framework:
- 4.1.1 The Constitution (1980)
- 4.1.2 The National registration Act (1967)
- 4.1.3 The Representation of the People's Act (1964)
- 4.1.4 The Local Democratic Organs Act (1980)
- 4.1.5 The National Assembly (Validity of the Elections) Act (1964).
- 4.1.6 The Elections (Amendment) Act 2000 provides for the regional allocation of seats for each of the 10 regions.
- The 2001 elections were the first to be held under a new electoral system which is based on both geographic representation and the Remainder Principal of Proportional Representation (PR), with a mandatory quota of women on the nomination list. There are ten new geographical constituencies, which coincide with the ten regions of Guyana and constitute the ten electoral districts. Twenty-five of the sixty-five seats in the National Assembly are allocated to the geographical constituencies and are elected directly by PR. The remaining forty seats are allocated to the parties in proportion to the votes they receive in the entire country. These members do not represent a geographical region, but rather the entire country.
- 4.3 It is not intended to comment on the legislative framework of the election in any detail. However, concerns were raised by election commissioners, senior management of GECOM as well as by the major political parties that there was an urgent need for legislative review of the electoral legal framework which would involve rationalization and modernization of the electoral laws.
- In particular, concerns were expressed by GECOM and political parties about the adequacy of the new electoral system under which the March 2001 Elections were held. The need was expressed for assessment and evaluation of the electoral system which they stated to be complex and difficult for officials to understand, and even more difficult for the political parties and electorate to understand.
- In view of the terms of reference of the Audit and Systems Review and Systems Review Commission, a detailed assessment was not made of the legislative framework and the electoral system. It is suggested that this should take place as soon as possible.

5. ELECTION MANAGEMENT & ADMINISTRATION

- The Guyana Elections Commission (GECOM) sets policy for voter registration maintenance of voters, and the administrative of legislation within the legislative framework. The Chairman of GECOM during the 2001 elections was Major General (retired) Joseph Singh who demitted office on the 30th June 2001. The Chairman of the Commission is chosen by the President from a list presented by the Opposition that includes the names of six candidates. There are also six Commissioners at present. Three of the Commissioners are appointed by the President acting on his own deliberate judgement, and three in accordance with the advice of the Minority Leader. In practice, this means three Commissioners from the governing party and three from the Opposition parties. The current Commission, appointed in May, 2000 is intended to be a permanent Commission appointed for a five-year term.
- The Permanent Elections Secretariat (PES) implements the policy under the supervision of the Chief Elections Officer. Mr. Gocool Boodhoo is currently acting in this position due to the sudden departure of the CEO Mr. Stanley Singh in September 2000, due to illness and his subsequent death in July 2001.
- The PES also performs the task of the National Registration Center under the National Registration Act and the CEO acts as the National Commissioner for Registration. The National registration Center has responsibility for the registration of electors and maintenance of the registers, whereas the PES has the responsibility for administering the elections.
- The PES is headed by the Chief Elections Officers and supported by the Chief of Operations, the Deputy Officer and a full staff complement. There are also ten Returning Officers (RO), one in charge of every region of the country, and Deputy Returning Officer (DRO), in charge of the 94 sub-districts. Each Polling Station has five polling staff.

CHAPTER TWO

6. MANDATE AND TERMS OF REFERENCE OF THE AUDIT AND SYTEMS REVIEW TEAM

6.1 OBJECTIVE

- 6.1.1 The objective of the Audit and Systems review is to assess GECOM's conduct of the Election March 2001 by making an examination of certain identified areas of the electoral process, with a view of detailing the strengths and weaknesses of the conduct of the elections in those specified areas.
- 6.1.2 In addition, the objective of the Audit is to make findings and recommendations in relation to each of the specified areas in order to contribute to the building of public confidence to GECOM and to improve the efficiently and professionalism of GECOM in their delivery of transparent and fair electoral process.

6.2 TERMS OF REFERENCE FOR THE AUDIT AND SYSTEMS REVIEW TEAM

- 6.2.1 The following specific areas are the subject of the Audit and Systems Review Commission requested by GECOM.
- 6.2.1.1 Determination of the Final List of Electors. This includes the registration of Voters and Compilation of the Voter's Roll. This should include an evaluation of the development of the voter's role culminating in the Official List of Electors.
- 6.2.1.2 The production and distribution of the Name Identification Card.
- 6.2.1.3 The arrangements for the casting of votes. It is not possible for the Audit to cover all of the areas that would fall under the heading "arranging for the casting of votes". Accordingly, it has been necessary to priorities the areas under this heading into the following specific areas of examination.
 - (i) Sitting of the polling stations
 - (ii) Operational and contingency planning
 - (iii) Human Resource and Training components which includes the following:-
 - (a) Recruitment and appointment of staff
 - (b) Competency and capacity levels of staff
 - (c) Training of staff
 - (d) Assessment of deployment of staff regionally
 - (e) Human resource management system

6.2.2 In cases where there has been an identification of other areas of concern by political parties and stake-holders, these items are listed in the Audit and Review Report and recommendations are detailed in respect of each area. It should be noted however that they have not been investigated in detail by the Audit and Systems Review Team, due to the constraints detailed above.

7. TIMEFRAME FOR AUDIT

7.1 The time frames which governed the Scoping Mission, the assembling of the Audit and Systems Review Team and the actual implementation of the Audit and Review were extremely constrained. The Scoping Report was completed and dispatched on schedule to GECOM on 22 May 2001 for consideration by GECOM. Thereafter, the mandate was given by GECOM for the Audit Team to be assembled. GECOM confirmed that the Audit and Systems Review Report should be completed by 31st July 2001.

8. COMPOSITION OF AUDIT AND REVIEW TEAM

8.1 The Team which conducted the Audit and Systems Review, appointed by GECOM was as follows:

8.1.1	Mr. Peter Harris		Team Leader (South African)
8.1.2	Mr. Carl-Olle Blomberg	-	Database and Voter Registration Expert (Swedish)
8.1.3	Mr. Roy Dalle Vedove		Database and IT Forensic Expert (Swiss)
8.1.4	Mr. Carl-Goran Gustafsson		Voter Registration and list Expert (Swedish)
8.1.5	Ms. Amy Lu		Database, Voter Registration and List
8.1.6	Mr. Patrick McDonagh -	-	Voter Registration, Enrollment and List Compilation (Australian)
8.1.7	Mr. Svante Renstrom -		Logistics and Operations (Swedish)
8.1.8	Mr. David Storey		Human resources and Management Systems (South African)

The individual Curriculum Vitae which detail the expertise and experience of each of the Commission member are available on request from GECOM.

9. METHODLOGY OF TEAM

9.1 INFORMATION GATHERING PHASE

- 9.1.1 This component of the Audit and Systems Review ("Audit") consisted of a comprehensive gathering of all relevant information in each of the specified focus areas of the audit. This information included legislation, reports of observation groupings, political party correspondence and documentation, voluminous documentation including reports, forms and technical documentation supplied by GECOM relating to each of the focus areas.
- 9.1.2 Much of this documentation was dispatched by courier and by e-mail to the audit team some weeks before the commencement of the mission in Guyana, with the bundle of documentation sent by courier arriving, in most cases, on Friday, the 15th of June 2001. Each of the experts comprising the audit team were requested to work through this documentation in detail before their arrival in Guyana. Specific confirmation was received from each of the Audit team that they had prepared thoroughly for the mission by going through the documentation and comprehensively acquainting themselves with the key issues that would be the subject matter of the audit.
- 9.1.3 Data collection and preparation for the examination of the database continued in Guyana with the arrival on Thursday 21st June 2001 of the Audit Team's forensic specialist. The information gathering phase continued on Sunday the 24th of June as well as meetings with GECOM, political parties and other stakeholders during the course of the period Monday 25th June to Friday 29th June 2001. In addition, methodologies were also discussed in this phase and agreed in relation to the nature and extend of the various systems tests that would need to be carried out in each area.

9.2 ANALYSIS AND ASSESSMENT PHASE

- 9.2.1 This involved a period of substantial discussion and analysis of the information received by the Commission members. The results of "Systems Tests" were analysed and commented on. Numerous meetings were held with GECOM staff and senior management in order to obtain information in relation to the allegations made by the political parties and other stakeholders. Due to the extensive nature of the forensic tests carried out on the GECOM database, it was necessary for certain members of the forensic information technology team to continue these tests and analysis until the 2nd July 2001 at GECOM
- 9.2.2 Numerous internal meetings were held to analyse information and assess findings as well as the results of the numerous "systems tests" that were undertaken by the team. Where necessary, further meetings were held with GECOM, political parties' witnesses and other stakeholders in order to confirm and verify facts and circumstances.

9.3 FINALISATION OF REPORT PHASE

9.3.1 Following the analysis and assessment, detailed discussions were held in relation to the structure and content of the report. Drafting was carried out by each expert focusing on specific areas and integration then took place with special emphasis on consistency and uniformity. Thereafter, each member of the team was given opportunity to read and comment on the Report.

WORKING METHODOLOGY PER FOCUS AREA

The methodology followed by the Commission in relation to each is set out below:

10.1 METHODOLOGY FOR COMPILATION OF REPORT

- 10.1.1 A description of the process and procedure used to plan and execute the activities required in each specified area.
- 10.1.2 An assessment of the suitability of the process and procedures used to accomplish the task/s.
- 10.1.3 An identification of the problem areas in each specified area and the cause/s of the above.
- 10.1.4 An evaluation of the extent and geographic location of the problem/s
- 10.1.5 An evaluation of the impact of each problem on the level of the achievement of the task/s
- 10.1.6 Recommendations on contextual framework, business process and procedural improvements and efficiencies that should be created and implemented
- 10.1.7 Specified safeguards that should be implemented in each area.
- 10.1.8 A brief operational plan for implementation of the deliverables detailed in paragraphs six and seven above.
- These were used as guidelines. In certain cases, particularly with regard to the allegations and concerns raised about the database, IT and information software, a different methodology was followed. This is detailed below.
- 10.2.1 Definition of problem
- 10.2.2 Elaboration of risk
- 10.2.3 Description of tests
- 10.2.4 Comment on tests
- 10.2.5 Conclusion
- 10.3 It should be noted that where systems errors were found, these have been identified and their impact assessed. However, it extremely difficult to assess the prejudice or advantage

to a particular political party in view of the fact that it cannot be stated with any certainty how a potential voter, affected by a problem or issue, may have voted.

CHAPTER THREE

11. THE REGISTRATION OF VOTERS AND CMPILATION OF THE VOTERS ROLL

11.1 TIMEFRAMES AND CRITICAL DATES

May 2000	GECOM established		
20 July 2000	Database Integrity Test Committee (DITC) Report		
16 October 2000	Preliminary Voter List (PVL) published		
21 September 2000	GECOM Decision to Issue New National ID Card		
12 October 2000	Regulation No. 5 signed in to law		
16 October 2000	Photographic exercise begins		
20 December 2000	GECOM declaration on the composition of the Official List Of Electors (OLE)		
4 January 2001	Photographic exercise ends		
15 January 2001	Esther Pereira Ruling		
19 January 2001	GECOM Field test Exercise (GFTE) Report		
26 January 2001	ID Card production commences		
27 January 2001	GECOM corrects Bug in statistics reporting tool on New		
	Registrants. Corrected figures (22, 184) subsequently published		
31 January 2001	Revised Voters List (RVL) published listing 433,478 electors		
2 February 2001	Distribution of ID Card commenced (Region 1)		
24 February 2001	Extended Claims and Objections Period expires		
5 March 2001	Official List of Electors (OLE) published listings 438,940		
	electors		
16 March 2001	Production of National ID Cards ceased		
16 March 2001	Addendum published final number of electors listed was		
	440,185		
19 March 2001	Election Day, ID Card distribution continued on this day		
20 March 2001	ID Distribution ceased, recommenced between 23 April &		
	24 May 2001		

11.2 PROCESSES AND PROCEDURES USED TO PLAN AND EXECUTE THE REGISTRATION OF VOTERS AND LIST COMPILATION

- 11.2.1 A Systems Development Plan was developed by GECOM.
- 11.2.2 GECOM decided to use the existing National Register of Registrants (NRR) database as a basis. It was planned that a Preliminary Voters List mirroring the content of the NRR would be produced and distributed to local offices where it was to be published and posted. Only those people who were not listed or those who wanted to alter information would need to register or make changes during the Claims and Objections period.
- 11.2.3 The Manual for filling in the voter registration forms at local level was prepared by GECOM.
- 11.2.4 The plan also called for the recruitment of local staff.
- 11.2.5 The training of local staff
- 11.2.6 A manual for data entry at GECOM to be compiled
- 11.2.7 The recruitment of data entry staff
- 11.2.8 The training of data entry staff
- 11.2.9 Voter education
- 11.2.10 During the claims and objections period, electors had to go to a Registration Office and provide information to correct the NRR. The information was given to a Registration Officer and where appropriate the following forms were completed:
- 11.2.10.1 Form 3: National registration card and Form 1: Registration Application if it is a new registration, that is, if the voter is not in the NRR database.
- 11.2.10.2 Form 5: Claim for requisite alteration by registrar if a voter wants to correct errors in the registration card and/or application, or wants to give notice of certain changes that have occurred after the qualifying date.
- 10.2.10.3 Form 7: Claim to entry in a preliminary list (together with Form D2 Declaration for persons who failed to have their photographs taken before the publication of the preliminary voters list).
- 11.2.10.4 Form 8: Claim for rectification of an imprecise entry in a preliminary list.
- 11.2.10.5 Form 9: Notice of objection to an entry in a preliminary list
- 11.2.10.6 Thereafter, Form 10: containing the alterations to the list was posted at the regional office.
- 11.2.11 The completed forms were then to be sent to GECOM for data entry
- Administrative staff at GECOM was to batch each type of form per division/subdivision. Maximum size for a batch was 50 registrations. Staff was to fill in a batch form with a batch number indicating form type, batch number and division/subdivision. The similarly forms batching requirements for data entry were however abandoned at a later stage.

- 11.2.13 Information System Department ISD would receive the batches. The batches were logged by the supervisor and then distributed to workstations for data entry.
- Data entry was via a dedicated screen for each type of batch. Data entry was done in real time. That is the data entry updates the database directly. After all forms in a batch had been captured, a report showing what data had been captured was to be produced.
- The list and the batch was passed to another operator who would perform a manual check of the forms against the list.
- 11.2.16 If errors were discovered, the batch was returned for correction of the faulty records, a new list was then produced.
- The Final Voters List, mirroring the content of the updated NRR, would then be printed for use at Polling Stations.

11.3 ASSESSMENT OF THE SUITABILITY OF THE PROCESS AND PROCEDURES USED TO ACCOMPLISH THE TASK/S

- 11.3.1 The System Development Plan allocated a time of seven months for the project. Based on international experience of similar systems, it should be eighteen months. By way of illustration, development of the Swedish system for the September 2002 General Elections started in August 1999 with a feasibility study. A decision on the Systems Plan was taken in February 2000 and real development started in March 2000. The first part commenced in October 2001 and the Final Voters list is to be printed in August 2002. The Swedish system does not include the photographic exercise.
- One should also remember that in Sweden there is a Population registration system where all citizens are registered with addresses. When a Voters List is produced 30 days before Election Day, one simply prints all the voters from the Registration Database. No Voter has to register as in Guyana.
- The decision to use the NRR database as a basis was rational at that time. That would have minimized registration. However, due to legal reasons, the old Voters Card could not be used and everyone therefore had to be issued with a new card with a new photograph.
- This meant that everyone had to be registered. This was not included in the initial planning and there was no allowance for this enormous increase in work load.
- 11.3.5 The manual for data entry at GECOM was good and appropriate for the task.
- 11.3.6 Recruitment of data entry staff was suitable for what was originally planned for.
- 11.3.7 Training of data entry staff was suitable for what was originally planned for
- 11.3.8 The registration forms generally do not appear to be designed for data capture and are inappropriate.

- 11.3.8.1 Form 3: National Registration card is the most suitable and it is not difficult to fill on or to capture data from. The Form 1: Registration Application is inappropriate for data capture. 11.3.8.2 Form 5: is more of an application for alterations and it is not marked in any way to indicate what data to capture. 11.3.8.3 Form 7 (together with Form D2) are application forms and are not marked in any way to indicate what data to capture. 11.3.8.4 Form 8: is an application form and it is not marked in any way for data capture: it is difficult to understand when to use this form and not form 5. 11.3.8.5 Form 9: is an application form and it is not marked in any way for data capture. 11.3.9 The screens were effective for data entry but only a few automated tests. 11.3.10 Manual verification by another operator is, however, not sufficient to capture a high rate of typing errors. ISD was aware of this but had not alternative due to the lack of time. Verification by double data entry may take longer in terms of elapsed time if it is not adequately resourced but it would have led to greater accuracy of data capture. 11.3.11 The methods used by GECOM to print the lists were quite suitable to the task. 11.4 IDENTIFICATION OF THE PROBLEM AREAS AND POINTS OF BREAKDOWN AND THE CAUSE/S OF THE ABOVE. 11.4.1 Many of the problems that arose were the result of changed plans and the consequential vast increase in workload required in order to address the concerns that were raised by the political parties. These concerns related to the integrity and accuracy of database. While a Final Voters List could have been printed in a more timely fashion, as originally planned, it would not have been acceptable to the political parties. Gecom amended its plans to accommodate the following unplanned activities. 11.4.1.1 Registering for and issuing of the National Identity Card. 11.4.1.2 Migration from ACCESS to SQL SERVER. The GECOM Field Test Exercise 11.4.1.3 11.4.1.4 The photographic exercise and the production and distribution of a new National ID card. Printing of an RVL not initially planned for 11.4.1.5
- The original plan had to be changed many times. In addition, certain decisions were taken by the Commission without having examined all the consequences in terms of resources and consequences for time deadlines.

New application development for claims and objections to RVL.

11.4.1.6

11.4.1.7

Bulk objections

The integrity Test in July took few resources from ISD and the result was useful. It should, however, have been done earlier.

- The discussions within GECOM about the printing of the PVL lasted for several weeks before a decision was taken. This delayed the printing of the PVL.
- The discussion within GECOM on the photographic exercise took considerable time before a decision was made. Consequently, the photographic exercise started late. This exercise was monumental and required more than five times the workload that was originally planned for.
- The migration from ACCESS to SQL SERVER took significant resources but was probably necessary since ACCESS is not a database appropriate for professional and sensitive application. It was, however, a mistake not re-design the database. A more rational design would have avoided some of the data capture errors and Voters' lists errors that occurred later.
- 11.4.2.5 The GECOM Field Test Exercise used significant resources and other work had to be halted. The test did not give results that could really be used, apart from building confidence that the database was accurate.
- Printing of the RVL was initially not planned. It used resources but more importantly the CD-application/presentation that was presented to the political parties had several programming errors. The database at GECOM was correct, but the presentation on the CD was wrong and caused much extra work at GECOM in the form of investigation of cases brought by the political parties, contributed to perceptions of maladministration by GECOM and also gave rise to unsuitable but damaging allegations about the accuracy of the voters list (See section on Data Driven Forensic Examination).
- 11.4.2.7 New application development for claims and objections to the RVL was not planned for and was developed in two weeks.
- Bulk objections were not planned for as, to date, there had only been individual treatment of each objection. The objections were also given in a format that made checks and corrections time-consuming. In addition, an application had to be developed for this.
- 11.4.3 A mentioned above, the test to verify the database took substantial resources away from other tasks and yielded little results, apart from building confidence about the database.
- In spite of the fact that there was insufficient time to produce good manuals or conduct proper training for the unscheduled exercises, field staff managed to perform their tasks surprisingly well and deserve full credit for this.
- 11.4.5 New manuals had to be written for data entry staff. Due to the short time these manuals were not a s good as the initial ones.

- 11.4.6 The number of data entry staff had to be increased, network and workstations had to be upgraded and staff had to work long hours and in shifts, leading to higher data entry errors. Considering the circumstances, data entry staff worked well.
- 11.4.7 It should be noted however that the same unsuitable forms were used.
- 11.4.8 Handling batches was no obstacle during the data capture. However, batching by forms type within Division/Subdivision had to be abandoned in favour of batching by form type within district.
- 11.4.9 The data entry screens were generally suitable and the controls and field edit checks that were in place were effective.
- 11.4.10 Double entry verification was used for the objections to the RVL.
- 11.4.11 Instead of a Final Voters List (FVL) an extra Revised Voters List, the official List of Electors (OLE) and an Addendum had to be printed. All of these had errors as described elsewhere. These errors occurred due to data capture errors, programming errors and inappropriate database design.

11.5 EVALUATION OF THE EXTENT AND GEOGRAPHIC LOCATION OF THE PROBLEM

The problems identified affected all regions, although it must be said that more densely populated areas, such as Region Four, suffered more severely purely as a result of the concentration of voters in that area. It is however not possible, due to the general consequences of the problems detailed above, to make a finding that one political party was disproportionately prejudice to the advantage of another political party.

11.6 EVALUATION OF THE IMPACT OF EACH PROBLEM ON THE LEVEL OF THE ACHIEVEMENT OF THE TASK/S

- There were errors in name fields, date of birth and other information fields in the database as well as the lists. These were mostly due to data capture error and absence of certain data capture checks such as a list of valid addresses.
- Most errors in the RVL occurred because of an error in the Claims and Objections application. This error is directly attributed to the time constraints that applied during the development and testing of this application which was compressed into just one week. These time constraints came about as a result in delays in the migration from ACCESS to SQL SERVER. This compounding error allowed an elector to be listed under an invalid combination of Division/Subdivision. Because of this a considerable number of electors were listed incorrectly.
- One reason for this is that allocation of polling stations was not really a part of the IT system. This allocation is undertaken by staffs of the Logistics Department who

maintain a spreadsheet for this purpose. The spreadsheet is the basis for results tabulation but is not linked to details in the database (This explains why the results tabulation did not work, as there were duplicate divisions and incidents where some polling stations did not exist in the database.)

- 11.6.4 It must be mentioned that there are Divisions/Subdivisions with only one elector on the voters list. In the final tables, one can see if and how this electors has voted, which is clearly problematic. In region Four, there are six Divisions/Subdivisions where all the voters have voted for the same party, the largest had 21 votes cast. Generally, there are too many small polling districts. According to the law, transfers cannot be made if the application forms are not signed by an official or the wrong form is used. These were purely bureaucratic hindrances and delayed data entry. In cases where insufficient information was provided on the forms, electors' records could not be found on the database and transfers were delayed.
- The tests conducted confirm that the 400, 185 voters printed on the OLE and the Addendum would be a more than 90% accurate representation of the registered electorate. It should be noted, however, that internationally there are few countries that do not have a functioning people registration system or where the voters and the political parties have such a long period for claims and objections.
- 11.6.6 Despite the extra workload and the time consuming decision making, GECOM achieved its objective of producing a voters list that was highly accurate and internationally comparable. ISD and data entry staff at GECOM must be credited for this.
- 11.7 RECOMMENDATIOSN ON CONTEXTUAL FRAMEWORK, BUSINESS PROCESS AND PROCEDURAL IMPROVEMENTS AND EFFICIENCIES THAT SHOULD BE IMPLEMENTED (INCLUDING SAFEGUARDS)
- 11.7.1 Since certain obstacles were caused by delays in decision making, GECOM should address this at a process and procedural level. It should also be possible for GECOM to allocate polling districts by considering only numbers of voters in an area and should not have to follow an obsolete division/Subdivision system.
- 11.7.2 ISD should be strengthened and must have a greater influence on decision making.
- 11.7.3 In relation to Information Technology, GECOM should rely on well trained national staff. International experts are only required if special skills or experience is required.
- 11.7.4 The new system should build on the existing Master Registration Database (MRDB). It would be a waste of resources to start all over again when there is such a good base.

- 11.7.5 The system should be developed with the Population registration System and should link with the production of the National Identity Cards (NIC).
- 11.7.6 For development, ISD should follow internationally accepted standards. The existing Microsoft environment is suitable. Even if there are more efficient systems like UNIX/ORACLE, the knowledge of the Microsoft platform is valuable.
- 11.7.7 In waiting for the new development, GECOM should make corrections to the existing system as follows.
- 11.7.7.1 A system Development Plan for a time span of 6 months should be developed at GECOM. This would enable local government elections to take place any time after March 2002. This reduced timeframe is possible because the present voters list can be used.
- 11.7.7.2 The existing MRDB is good basis. A database re-designed is the most important factor. Minor cleansing needs to be done as part of the plan. GECOM should verify for itself that it no longer possible to create invalid combinations of Division/Subdivision. A PVL mirroring the content of the MRDB should be produced and distributed to local offices where it should be published and posted and copies should be given to the parties. For Claims and Objections only, those who are not in the database or those who want to alter information need to be registered. Only new applicants have to be photographed.
- 11.7.7.3 Existing manuals should be refined
- 11.7.7.4 There should be sufficient for recruitment of local staff
- 11.7.7.5 There should be proper training of local staff
- 11.7.7.6 The existing manual for data entry at GECOM should be changed new forms are developed, as suggested below.
- 11.7.7.7 Minor training of data entry staff is required if there are new form. There should be an assessment and evaluation of data entry staff and skills enhancement and training given where necessary.
- 11.7.7.8 It is recommended that forms be reviewed and amended as follows:
 - (i) Form 3: National Registration card and Form 1: Registration Application if it is a new registration, (that is the voter is not in the MRDB database) should be merged into one and given a format suitable for data entry.
 - (ii) Form 5: Claim for requisite alteration by registrar if a voter wants to correct errors in the registration card and/or application, or wants to give notice of certain changes that have occurred after the qualifying date and Form 8: Claim for rectification of an imprecise entry in a preliminary list, should be merged into one and given a format suitable for data entry.
 - (iii) Form 7: Claim to entry in a preliminary list should be merged with Form D2: Declaration for persons who failed to have their photographs taken

- before the publication of the preliminary voters list and be given a format suitable for data entry.
- (iv) Form 9: Notice of objection to an entry in a preliminary list should be given a format suitable for data entry. This should be the only form for objections and if someone gives in bulk objections they must present one form for each objection.
- (v) Forms should then be sent to GECOM for data entry as is currently the practice.
- (vi) The maximum size for a batch should be 100 registrations.
- (vii) The database should be redesigned so that, wherever possible, data entry errors are automatically detected.
- (viii) Data entry is made using a dedicated screen for each type of batch
- (ix) In addition, double data entry verification should be used.
- (x) GECOM should correct the bugs identified in the CD Rom application and continue to provide it to Stakeholders in this format.

11.8 BRIEF OPERATIONAL PLAN FOR IMPLEMENTATION OF THE DELIVERABLES DETAILED ABOVE

- 11.8.1 The strengthening of ISD with national staff can be done within two months.
- 11.8.2 The existing MRDB should be updated with "Deaths" (that stopped 1 January 2001).
- 11.8.3 If the system is developed with the Population Registration System and the production of the NIC, GECOM should undertake a feasibility study with the assistance of an expert with experience in that field. Thereafter, the development should commence and would last approximately one year in order that a new system can commence by 1 January 2003.
- 11.8.4 The existing Microsoft environment is suitable and does not need anything more than upgrading to later software releases.
- 11.8.5 GECOM should make corrections to the existing system as follows.
- A System development Plan for a time span of 6 months should be developed at GECOM. This will enable proper planning and preparation for the Local Government elections to take place any time after March 2002. The short time frame is because much of the present voters list can be used.
- The existing MRDB is a good basis in terms of data. Database redesign and cleansing needs to be made a part of the plan and could take two to six months,

depending on how many of the recommendations from Chapter Five are implemented. A PVL mirroring the content of the MRDB is produced and distributed to local offices where it is published and posted. Copes should be given to the parties in the existing format or the raw data format.

- 11.8.5.3 Existing manuals can be refined and will take approximately 2 weeks
- 11.8.5.4 The existing manual for data entry at GECOM will need to be changed if new forms are developed as suggested below. This can be achieved in one week.
- 11.8.5.5 Data entry staff has already been recruited.
- 11.8.5.6 Minor training of data entry staff is required if there are new forms. This will take approximately three weeks.
- 11.8.5.7 For the claims and objections period:
 - (i) The new Form 3 incl. Form 8 is designed and printed. Time for design 2 days
 - (ii) The new Form 5 incl. Form 8 is designed and printed. Time for design 2 days.
 - (iii) The new Form 7 incl. Form D2 is designed and printed. Time For design 2 days.
 - (iv) The new Form 9 is designed and printed. Time for design 2 days
- 11.8.5.8 New screens for data entry to be developed, time 4 weeks
- 11.8.5.9 The Final Voters List, mirroring the content of the updated MRDB, should be produced and sent to the Polling Stations.
- 11.8.5.10 The final Voters' List on CD should be given to the political parties
- 11.8.6 The time available for planning and implementation for the registration of voters and list compilation was approximately seven months. Ideally, in order to complete a project of this magnitude and based on experience of similar projects and systems, amore appropriate time would be in the region of 18 months. It should be stated however, that the initial database was reasonably accurate and that the time allowed for claims and objections to the list was longer than that given in most election systems. Accordingly, it would have been possible to print a highly accurate final voters list in time for the elections data that was prescribed. The problem lay, however, in that an immense amount of extra tasks were decided upon before the election date, and those extra tasks required substantial human material resources and had a determination negative effect upon the implementation of this crucial area of the electoral process. The decisions to undertake the extra tasks, it is submitted, were not taken in the context of the effects of the performance of those extra tasks on the system.

- 11.8.7 In spite of this, GECOM managed to print a final voters list of reasonably high accuracy which can stand to international scrutiny and is comparable internationally. In essence, in voters list of approximately 440,185, the errors discovered were fewer than 1,000 and were due to polling station misallocation. Even if the problems had been 1% or 4,400, this would have had virtually no effect on the distribution of seats, due to the fact that the electoral system is high proportional.
- 11.8.8 The existing system for the registration of voters and list compilation is very good base for the continued administration of elections. As such, it should be developed into a more permanent system for population registration, of which elections are no one component. There is no doubt that the elections database is by far the most accurate database in Guyana and it would be a waste of resources for it not to be properly utilized. It also remains a good premise for the census that is planned for 2002. In this respect, the census, the population registration system and the elections database should be coordinated.
- 11.8.9 it is submitted that the existing IT system requires refining such as certain areas of database redesign, minor cleansing and introduction of more efficient data capture forms and screens that are able to detect logical errors such as non-existent divisions/subdivisions. Specific recommendations are made in relation to this area in Chapter Five.

CHAPTER FOUR

12. THE PRODUCTION AND DISPENSING OF THE NATIONAL IDENTITY CARD

12.1 INTRODUCTION

- 12.1.1 This section of the audit report looks at the Photographic Exercise, the Production and Distribution of the National ID Card and the data entry and verification process used to amend the voter lists for the 2001 Guyana Election.
- 12.1.2 The Photographic Exercise was virtually the equivalent of a complete voter re-registration process. This exercise and the production and distribution of new National ID Card were not originally planned for by GECOM, but were undertaken in response t concerns raised by the political parties in relation to the number of persons listed on the Preliminary Voters List (PVL). In addition, the old Voter ID card could not be used as it remained impounded by the courts in connection with the Esther Perreira case.
- 12.1.3 On 21 September 2000 GECOM decided to issue a new National Identity Card. Note that GECOM has the power to specify the acceptable forms of identification required at polling places.
- 12.1.4 The production and distribution of the new ID card would require the following component activities to take place:
- the confirmation of the identity and the photographing of the entire electoral population;
- the production of a new National ID card for every elector identified;
- 12.1.4.3 the distribution of the ID cards back to the electors.
- 12.1.5 It is intended to deal with each of the above component parts separately.

12.2 THE PHOTOGRAPHIC EXERCISE

12.2.1 PROCESS AND PROCEDURES USED TO PLAN AND EXECUTE THE PHOTOGRAPHIC EXERCISE

12.1.1.1 The Photographic Exercise commenced on 16 October 2000. The PVL was published that same day and a statutory Claims and Objections period also commenced. It had been just over three weeks since GECOM took the decision to issue a National Identity Card. Consequently, there was very little in the way of forwarding planning.

- 12.2.1.2 During this time GECOM had to:
 - (i) complete the recruitment of staff
 - (ii) update the manual;
 - (iii) set up premises;
 - (iv) advertise the process
 - (v) purchase additional cameras (initially 100 were ordered from the US);
 - (vi) move the master registration cards to the local offices; and
 - (vii) provide the newly established offices with sufficient materials.
- 12.2.1.3 Staffing at the Photographic Centers consisted of:
 - (i) 1 x Registration Clerk (supervisor)
 - (ii) 1 x Records Clerk
 - (iii) 1 x Photographer
- Two camera operator manuals were checked. One of them indicated that camera operators were required to record their activities and monitor stocks of film and batteries on a daily basis. The procedures that were to be followed by staff in dealing with members of the public wishing to have their photo taken were set out step by step in the manual. In addition, the manual contained copies of the log sheets that were to be used to record transactions and monitor stocks of film on hand.
- The majority of the electors who visited centers imply had to have a new photograph taken. These electors were on the PVL and had not changed wither their name or address details since the original Master registration Card (MRC) or Form 3 was issued in 1996/1997. In these circumstances, the steps (slightly condensed) that were followed are set out below.
 - (i) The elector would state their particulars and present validating documents to the Registration Clerk.
 - (ii) While the Registration Clerk checked the validation documents the Records Clerk would locate the original MRC.
 - (iii) Once the Registration Clerk had verified the elector's identity, the name of the elector on the list (copy of PVL) would be ticked. If the elector's name was not found on the list, they were directed to the Divisional Registrar.
 - (iv) The Records Clerk would check the physical features of the elector against the photograph on the original MRC and record the elector's name on an unnumbered replacement MRC. They would also record the original MRC number on the replacement MRC and on the front of the counterfoil of the replacement MRC. The elector's address (from the original MRC) would be recorded on the back of the counterfoil of the replacement MRC.
 - (v) The height of the elector would be taken and recorded in centimeters on the replacement MRC.

- (vi) The elector would then be asked to check the details recorded and sign the replacement MRC (if the elector could not sign they could provide a thumb print).
- (vii) Once the elector had signed (or provided a print), the records Clerk would staple all of the documents together, hand them to the elector and direct the elector to the photographer.
- (viii) The elector would hand the documents to the photographer who would take two photographs (the elector could reject the photos for reasons of satisfactory quality, presentation or likeness). If they were acceptable, the photographer would record the elector's name and the original MRC number on the back of each photograph, staple the photographs to the documents and record the date, office name and their name on the from of the counterfoil of the replacement MRC. The photographer would then record the date, elector's name and registration unit into a logbook, pass the documents to the elector and direct them back to the registration Clerk.
- (ix) The Registration Clerk would check that the documents had been completed correctly, tear the counterfoil off of the replacement MRC, and hand it to the elector to keep the counterfoil safe and to produce it when they came to pick-up their ID Card.
- Any electors who also needed to notify a change of address, change their name or correct other particulars would be directed to the Divisional Registrar, who would complete Form 5 to change the elector's address or Form 8 for a change to the name. If the elector needed to change both name and address, then both Form 5 and Form 8 were required. Then steps similar to 1 9 above applied.
- Those electors who were clerically registered in 1996/1997 did not have their photograph taken at that time but who had retained a copy of their original MRC, were directed to the Divisional Registrar. The same applied to those who were clerically registered in 1996/1997, did not have their photograph at that time who had not retained a copy of their originally MRC. These people would have to complete additional forms, such as a D2 declaration (a declaration that original paper work had been completed but that a photograph was not taken) and an A3 (a direction to the registrant to have a photograph taken). Once the appropriate forms were completed, the steps were similar to 1-9 above.
- 12.2.1.8 Electors who were not registered 'New registrants' were directed to the Divisional Registrar and would have to complete Forms 1, 3, A3 and Form 7. Once the appropriate forms were completed the steps were similar to 8 and 9 above.

12.2.1.9 Note that electors could gain exemption from the requirement to be photographed of they were disfigured and had completed the required form.

12.2.2 SUITABILITY OF THE PROCESS AND PROCEDURES USED TO ACCOMPLISH THE TASK/S

- 12.2.2.1 Some 440,185 people were photographed by time this exercise eventually ended on 4 January 2001. To that extent at least the process and procedures (as they finally evolved) that were used to accomplish this task, were effective.
- The process was not sufficiently resourced in all respects. As the exercise went on, the staffing and equipment resources devoted to it had to be increased significantly.
- The process was overly bureaucratic for people who were previously registered and were not making any changes. These electors had previously proven their identity and only where the appearance of the elector or their signature had changed significantly, should any other validating documents have been required.
- 12.2.2.4 The manual could be improved and the forms are in need of review.

12.2.3 IDENTIFICATION OF PROBLEM AREAS AND THEIR CAUSES

- 12.2.3.1 Given the very short implementation timeframe, the lack of opportunity to properly plan and the lack of resources, problems were inevitable. Stakeholders reported the occurrence of the problems listed below.
 - (i) Not all photographic centers were ready. By 15 October 200 only 199 out of the initial 239 photographic centers were established, while not all of the initial complement of staff identified as required, had been appointed.
 - (ii) Initially there were not enough cameras available as there was insufficient time to effect procurement. On 21 September 2000 GECOM had 108 cameras, by 23 October 2000 they had 273 cameras, 3 of which were not working.
 - (iii) There were not enough centers and the parties made representations to GECOM demanding that the number be increased.
 - (iv) Some centers ran out of forms and/or film as a result of administrative failure that is directly attributable to the timelines, planning, communications and logistical field support.
 - (v) Centers either closed down or were unable to take photographs when the staff went mobile and visited other locations to photograph the local elector population. While notices were posted, these events were not well communicated and as a result potential electors visited centers only to find that they were closed or that there were no cameras available. Where

this occurred, the potential electors had to return at a later date if they wished to be able to vote at the election.

- (vi) it has been reported (GECOM file on complaints from the parties no response from GECOM found) that some centers did not open on time causing inconvenience to the public. Provided that this was not a case of the office being closed without notice – then local management was at fault. In any event, the effect on the elector was the same; they would have to come back.
- (vii) Centers closed at normal time even though GECOM had announced extended hours. In these instances, the requirement to remain open was not communicated effectively.
- (viii) While not reported by the parties, it is understood that many forms were not properly completed and that some electors were incorrectly identified as new registrants when in fact they needed to complete Form 5 or Form 8. There was a clear direction in the manuals that forms were to be checked by staff to ensure that they were completed correctly. In some cases this was not done.
- As a result of most of the problems identified above, GECOM faced heavy public criticism from the political parties along the lines that it was 'administratively disenfranchising' electors. GECOM have advised that, in response, it increased the number of cameras and Photographic Centers so that by the time the exercise was finally concluded, it had over 400 cameras photographs had been taken at over 700 locations across the country. In addition, GECOM extended the Photographic Exercise to 12 November 2000, then added a 7- day extension and further period of extension so that the exercise was finally concluded on 4 January 2001. This was nearly 9 weeks behind the originally schedule.
- There were a number of allegations by the parties in relation to the photographic exercise. The first allegation was that electors might have been disenfranchised as a result of deliberate misinformation. The second was that the process was somehow compromised because of a difference between the estimated number of people photographed, provided at a meeting between the parties and GECOM on 11 March 2001, and the statistics published in the GECOM report. The report entitled 'Guyana Elections Commission Registrars' report on Photography period 16th October 12th November and 7 day extension' showed that 438,636 people were photographed while the meeting was told that 438,934 people had been photographed.
- In relation to the allegation concerning the Photographic Exercise statistics, the party representative was unable to demonstrate how the discrepancy in the statistics compromised the process or the result of the election, but states that 'if there was a difference of two, there was a problem'. Accordingly, the matter is covered below.

- 12.2.3.4 GECOM have advised that both figures were tabulated from hand written returns received from the field and the figure in the Report corrects the figure supplied at the meeting on 11 March 2001. Nevertheless, the provision of such a precise and incorrect estimate before the figure had been checked was unwise and damaged the credibility of GECOM.
- The figure in the report does not include the 980 electors who were photographed between 24 December 2000 and 4 January 2001, which yields a total of 439,616. The figure is 569 short of the 440, 185 electors listed on the Official List of Electors and the Addendum. GECOM have advised that only one elector gained a photograph exemption. This gives a difference of 568 between the numbers of people identified as photographed to the Master registration Database (MRDB), and therefore included on the lists. The manually compiled statistics, subject as they are to transposition and omission errors, should be regarded as a guide only. Had they indicated that large numbers of people were photographed and were not included on the lists there would have been caused of concern. The statistics did not indicate that this had occurred and essentially verify the number identified as photographed on the database.
- 12.2.3.7 A further allegation, more relevant to the Claims and Objections periods, was that in small number of cases (no figure supplied) officials were deliberately giving out false information that electors had to return to the areas in which they were previously registered, in order to complete a Form 5 to notify a change of address and have their name included on the list for their new area.
- In relation to this allegation, GECOM were emphatic that Form 5 could be completed at any office and that an elector did not have to return to the place where they were previously registered, and that staff should have been aware of this. In relation to the incorrect information that was given out, it is not possible to judge whether it was based on error or a willful intent to mislead. Once again, no evidence to support the claim was provided.
- 12.2.3.9 It was not feasible to deal with the allegations of biased performance on the part of GECOM employees as no concrete evidence in support of these claims was ever presented. The claims that people might have been disenfranchised, as a result of deliberate misinformation was not substantiated and no evidence to support was provided.

12.2.4 EXTENT AND GEOGRAPHIC LOCATION OF THE PROBLEM/S

These problems were widespread and occurred to varying degrees in every Region of the country. Report form observers indicate that Region 4 was the worst affected. However, as time went on and resources were increased, reports of problems decreased.

12.2.5 IMPACT OF EACH PROBLEM ON THE LEVEL OF ACHIEVEMENT OF THE TASK/S

- 12.2.5.1 It is not possible to quantify the number of people who, having attempted to have their photograph taken and failed, gave up and were subsequently excluded form the lists of voters.
- 12.2.5.2 There are also no reliable figures available in relation to others who, more persistent, returned to have their photograph taken. These people were at best inconvenienced and some may have incurred unnecessary costs.
- While the Photographic Exercise suffered enormous problems, the steps taken by GECOM to increase resources and extend the period during which photographs could be taken, as well as its decision to stagger the 7-day extension across the country, eventually achieved the required results.

12.2.6 RECOMMENDATIONS (INCLUDING SPECIFIC SAFEGUARDS AND OPERATIONAL TIMEFRAMES)

- 12.2.6.1 GECOM must take steps to improve the quality of statistical information being provided to political parties by resisting pressure to provide precise estimates before final figures have been compiled and checked. This will cost nothing to implement and should be done immediately.
- 12.2.6.2 GECOM must be allowed to develop its institutional infrastructure if it is to develop its credibility with the public and the parties. Better planning, proper evaluation of resource and materials requirements, the development of a reliable materials ordering and distribution system and the setting of achievable timelines are likely to occur over the time that will elapse between now and the next election. However, direct service to the public is delivered in the field and serious attention needs to be given to empowering the regions at the level of authority, capacity and resources. A revision of the method of achieving national coverage in the event that a similar Photographic Exercise is required is within GECOM's current capability as is the update of the manual.
- 12.2.6.3 If GECOM is to go down the path of a full Photographic Exercise again, it would be more appropriate to establish the photographic Centers at the Divisional level in the first instance. An alternative method would be to undertake the exercise Region by Region with at least two sweeps.
- The manuals should be updated to include a list of acceptable validating documents, a clear direction to provide statistics to the Divisional Registrar with master copies of the returns to be provided, information on minimum film stock, instructions on how to order addition film stock, film stock order forms and samples of the forms to be completed by electors.

- The requirement that electors who were being photographed for the new ID Card and who were not making any name or address changes, provide validating documents, where the previous photograph and signature match, should be reviewed. GECOM should also consider reviewing these requirements where the signature and photograph match and the elector wishes to advise a change of address within a Division.
- Divisional Registrars should be able to check previous registration details of electors who claim to have been registered in another Division. This could be done by telephone where coverage exists. Other alternatives would be to provide a complete print of the roll for all areas (this would be a large document) or a CD based search tool.
- 12.2.6.7 The review and amalgamation of forms is dealt with in details above. It is recognized that a complete overhaul of the forms may only be possible of the legislation is also amended. It is recommended that GECOM obtain the services of a forms specialist with a view to streamlining and modernizing the current forms.

12.2.7 OPERATIONAL PLAN

Many of the recommendations will cost nothing to implement and should be implemented immediately. In the next six months GECOM should review and document the options available that can provide Divisional Registrars with the ability to check the details of people claiming to have been registered in another Division. If these are suitable they should be implemented. If there are no suitable options available, then a proposal should be developed and implemented.

12.3.1 PROCESS AND PROCEDURE USED TO PLAN AND EXECUTE THE PRODUCTION OF IDENTITY CARDS

- The Identity (ID) cards were produced using the Multiple Identification Document Issuing System (MIDIS) supplied by De La Rue Identity System Ltd. This system had been in place since 1997 and the hardware and software were upgraded in October 2000 to me the requirements of the 2001 election. The supplier provided system manuals as part of the package. This upgrade took place under the auspices of the GECOM Technical Oversight Committee. GECOM advise that the system is backed-up and that the back up is stored off-site.
- The steps involved in the production of the ID Card are may and there would be no benefit in full detailing them in this report. These procedures are set out in two documents 'ID card description' and 'Operator Manual Image Capture'. These documents are available from GECOM.

12.3.1.3 Briefly the process involved:

(i) the sorting of Master Registration Cards into Division/Sub-division

- (ii) the imaging of the Master Registration Card to capture the signature and photograph of registrants;
- (iii) a one off upload of selected text data from the Revised Voter List;
- (iv) the merging of the text data with the corresponding images;
- (v) the printing of the merged data on Teslin; and
- (vi) finishing, where the cards were laminating and punched.
- 12.3.1.4 The Completed cards were then passed back to the National Registration Centers where they were visually verified against the Master registration card source documents.
- 12.3.1.5 The verified cards were packed into canisters and shipped, together with the corresponding Master registration Cards (packed separately) to the returning Officer for eventual distribution. These shipments were progressive by region.

12.3.2 SUITABILITY OF THE PROCESS AND PROCEDURES USED TO ACCOMPLISH THE TASK/S

The implementation methodology was sound and adequate documentation existed. The processes procedures put in place to accomplish the task were generally suitable and comprehensive. However, timelines were once again underestimated with very little or no contingency planning.

12.3.3 IDENTIFICATION OF PROBLEMS AREAS AND THEIR CAUSES

- 12.3.3.1 The main problem was that the production timeframe was unrealistic and the resulting distribution schedules were not achievable.
- The production system required that the Master Registration Cards be pre-sorted into surname with Division/Sub-division and that ID cards be produced in this order. The long-term observers reported that there was a delay in the production of the ID cards as Master Registration Cards were not sorted as required and that GECOM had to enlist the aid of postal workers to achieve this. The Deputy Chief Election Officer confirmed this and Information System Department staff corroborated that the ID Cards were then produced in accordance with the documentation. This delay occurred early in the production process and had a negative impact on the schedule.
- The requirement that the Master registration Cards needed to be sorted was known in advance. The root of this problem lay in the abandonment of similar forms batching requirements for data entry, which was also known in advance. This was a clear illustration of how a decision to amend procedures in a previous process (in this case data entry) was made in order to meet an already difficulty timeline and had a negative impact on a downstream process (in this case the production and distribution of the National ID Card).

- 12.3.3.4 It was also alleged that many duplicate cards had been issued and that this compromised the election result. Evidence of eight instances of this occurring was presented. On 10 March 2001 one of the parties informed GECOM that four ID cards and a photograph stub (counterfoil) was found at a rubbish tip. This event received media attention and led to a police investigation. In relation to the ID cards reported found at the rubbish tip, GECOM believe that an unauthorized person removed the ID Cards from the production area. This matter was referred to the police and had not been concluded as at 30 June 2001.
- In relation to the claim that many duplicate ID Cards were issued and that this compromised the election result, GECOM confirmed that they had retained the ID Cards that were printed during the ID Card production process, but were subsequently rejected as not suitable for showing the card number and the number of times it was printed. The report shows that 4532 additional cards were printed, and indicates that the production errors were randomly distributed across regions.
- 12.3.3.6 In order to put a ceiling figure on the number of duplicate cards that were issued in error, GECOM undertook a reconciliation exercise and matched the reject cards on had to the report. This exercise indicated that more than 324 duplicate National ID Cards were issued.
- There is no evidence to support claims that the erroneous issue of such a small quantity of duplicate cards could have a material effect on the result of the election. The possession of duplicate ID Card did not mean that a person could vote more than once, unless that person also appeared twice on the voter's list. This is unlikely as there were checks and balances in place, such as the use of inedible ink to prevent multiple voting. The ability to reprint cards is an essential system requirement and without it the production system would not be complete.
- 12.3.3.8 Information System Department staff confirmed that ID Card production levels slumped during the last two weeks that the cards were produced. They reported that the Master Registration Cards were not being delivered quickly enough and that it was becoming increasingly likely that ID Cards for some electors would not be produced in time for the election. This corresponds with information received from the long-term observers. It is of some concern that there is disagreement within GECOM Operations as to the cause of the production slump, and no satisfactory alternative explanation for this delay has been put forward.

12.3.4 EXTENT AND GEOGRAPHIC LOCATON OF THE PROBLEM

The initial delays in production arising form the time taken to sort the Master registration Cards into the required order affected every region as it rippled through the production schedule. The production schedule was set up so that cards for Region 1 would be produced first and as the production for Region 1 finished late, the production for Region 8 started later than planned and so on. In addition, the post production processes of 100% visual verification, packing and

transportation to the local distribution centers also took up time. For Region 4 in particular where ID Card distribution only started to gather pace after 7 March, levels of concern increased as the election loomed and over half of the voting population had not received their ID Cards.

The number of duplicate ID Cards issued was small and was spread across the Regions. Region 10, being the last in-time would have been the most affected by the slump in the production rate. In addition, reprint request due to photo mismatches would have held up the process.

12.3.5 IMPACT OF EACH PROBLEM ON THE LEVEL OF ACHIEVEMENT OF THE TASK/S

- The problems associated with the sort order of the Master registration Cards flowed through the production schedule and consequently delayed distribution GECOM have advised that ID Card distribution for Region 1 commenced on 2 February 2001.
- 12.3.5.2 The impact of the slump in production would not have helped to build confidence in GECOM but, in the end, the impact on electors and the result was not significant.
- Delays with the distribution of the ID Cards to electors gave rise to significant concerns and led to GECOM's 16 March 2001 decision to allow other forms of ID. Due to this demonstration of pragmatic policy flexibility, no electors were disenfranchised as a result of not having received their National ID Card and therefore there was no impact on the result of the election.

12.3.6 RECOMMENDATIONS (INCLUDING SPECIFIC SAFEGUARDS AND OEPRATIONAL TIMEFRAMES)

- 12.3.6.1 GECOM must allow for reasonable contingency in the timeframes it develops and publishes in the future.
- 12.3.6.2 It is recommended that GECOM consider abandoning the verification process during which the printed cards and the source documents are visually compared prior to distribution. In terms of quality control, this process repeats steps that are already part of the production process and delays distribution. If this is to happen, the documented procedures must be followed consistently and this requires an adequate production timeframe.
- 12.3.6.3 It would also be useful in the future if the electoral area number were uploaded form the Master Registration Database into MIDIS. When the ID Cards are produced, an accompanying report can be printed. The report should list the MRC Code, Surname, Given Names, Division ID and Subdivision. In this way, the ID

Cards, which are urgently required, may be able to be dispatched without the master registration card, which is not required at polling stations until polling day.

- The Deputy Chief Election Officer has advised that the requirements to send out the Master registration Cards to the Divisions for Election Day is a policy rather than legislative requirement. Therefore, it is recommended that GECOM review the need for this practice to continue and consider terminating it.
- 12.3.6.5 Within the next six months GECOM should review the requirement to send the Master registration cards to the polling places. Changes should be made to the MIDIS system programs so that a list with the voters' details, including electoral area number, can be printed when the ID Cards are produced. The changes should be tested and implemented.
- 12.3.6.6 Appropriate changes to manuals and producer will also need to be put in place. These changes can be implemented using 'in-house' resources with minimal costs.

12.4 ID CARD DISTRIBUTION

12.4.1 PROCESS AND PROCEDURE USED TO PLAN AND EXECUTE THE DISTRIBUTION OF ID CARDS

- 12.4.1.1 Once received by the Returning Officer, the master registration cards were stored for later distribution while the ID Cards were forwarded to local ID Card Distribution Centers. The electors had to pick up and sign for their cards and Party Agents and Scrutineers observed this process.
- The procedures to be followed in the ID Card Distribution Centers are fully documented in the GECOM document 'the Process Production and Distribution of Identification cards.' These procedures included:
 - (i) Returning Officer certification of receipt;
 - (ii) Deputy Returning Officer Certification of receipt;
 - (iii) Distribution Clerk certification of receipt;
 - (iv) Distribution sign off by GECOM officials, Party Agents and Scrutineers;
 - (v) Specific directions for Information, Distribution and Records Clerks; and
 - (vii) Master copies of the various logs and returns to be completed.

12.4.2 SUITABILITY OF THE PROCESS AND PROCEDURES USED TO ACCOMPLISH THE TASK/S

12.4.2.1 Given the sensitive nature of the material being distributed, the arrangements put in place covering the distribution of the cards are considered to have been suitable.

- In particular, the procedures for the initial uplift required the reconciliation of the ID cards being shipped with both the source documents and computer generated lists for each district. The procedures indicate that this checking was to be carried out by:
 - (i) The Returning Officer or representative;
 - (ii) The Supervisor of Records;
 - (iii) Party Agents/Scrutineers; and
 - (iv) The supervisor of ISD
- 12.4.2.3 Errors were being detected on the Revised Voters Lists throughout February and the figures on the defective entries were being revised upwards with each succeeding advice that GECOM provide. As the ID Cards were distributed, it would appear that where there was a discrepancy between the computer generated list and the Master registration Cards and that the ID Cards were packed for distribution according to the Master registration Cards as a matter of policy (if this is the case, it was not indicated by GECOM staff).
- According to an internal GECOM document, about 30627 errors were found on the RVL. These errors spanned 21 categories with errors in category 1 to 13 detected by interrogating the system and errors in category 14 to 21 being reported by Divisional Registrars. The actual number of errors was lower due to overlap between the groups of categories. For example, the different effects of the incorrect combination of divisions and subdivisions were reported as different errors in six categories. That the uplift checking procedures were not followed is not identified as a problem in this section as it means that the ID Cards were distributed despite the errors on the Revised Voters List.

12.4.3 IDENTIFICATION OF PROBLEM AREAS AND THEIR CAUSES

The ID Cards were received late at the local distribution centers across the regions. There were complaints that when people went to collect their cards, they were not immediately available and they had to return later. In addition, in some areas staff did not arrive to distribute the cards.

12.4.4 EXTENT AND GEOGRAPHIC LOCATION OF THE PROBLEM

Distribution was late in all areas. The worst affected areas were Regions 3, 4, 5 and 6.

12.4.5 IMPACT OF EACH PROBLEM ON THE LEVEL OF ACHIEVEMENT OF THE TASK/S

In regions 3, 4 and 5, the dress rehearsals for results and of materials and the training schedule set for the last two weekends before polling day were abandoned. Region 6 managed to make the rehearsal but still abandoned the training. As states above, GECOM's decision to allow other forms of ID ensured

that there was no disenfranchisement as a result of electors not having received their national ID Card.

12.4.6 RECOMMENDATIONS (INCLUDING SPECIFIC SAFEGUARDS, CHECKS AND BALANCES)

As with the other matters covered by this report, the main a problem was lack of time to plan and execute the required task. In this instance, the immediate cause was delays in the production process. However, the schedule for that process was also inadequate and the delivery expectations based on it were unrealistic. It was a classic case of trying to do too much with too little in too short a timeframe. GECOM must allow and be allowed a more reasonable timeframe in the lead up to the next election.

12.4.7 OPERATIONAL PLAN

GECOM should commence planning its activities for the next election as soon as possible. Useful tools that should be developed in the next six months include a realistic and achievable election timetable and project specific timetables and checklists.

12.5 DATA ENTRY TEST REPORT ONLY

- 12.5.1 Limited user testing of the data entry screens was undertaken on Thursday 28 June 2001. This testing was limited due to programme bugs introduced where code changes were being and were not yet tested or implemented. That is, the test code was not the same as the code in the live system. These bugs however do not invalidate the findings below.
- During these tests it was not immediately possible to place electors in valid Division/Subdivisions as the user had to select from a valid list. GECOM staff confirmed earlier information that this had been tightened up.
- However, the tests on the **Edit Registrants** option confirmed auditor assumptions, and information supplied in copies of internal GECOM documents, that it was possible to select/change the electoral area at will and create invalid combinations of address and area. This could easily occur due to error, negligence or willful intent. Where the area number is changed, the system prompts the user to change the address but does not force a change. In any event, there is no system check to enforce a rule that an address must be in the area selected. There is a similarly lack of control in the **Insert Registrants** option.
- This is one explanation of how an elector's record could appear to 'disappear' from the correct lists and be listed on the wrong list. Where this occurs, the elector is currently 'administratively disenfranchised'.

- 12.5.5 If the person is on the wrong list and/or their address is not shown correctly the source of the error could be data entry.
- 12.5.6 Verification of data entered into the live database was in the forms of checking the details on the source documents against reports. This method of verification is prone to error.

12.5.7 RECOMMENDATIONS (INCLUDING SPECIFIC SAFEGUARDS AND OEPRATIONAL PLANNING)

- 12.5.7.1 Introduce full data entry verification. This will not stop mistakes entirely, but it should reduce them considerably. The downside is that data capture will take longer unless the number of input terminals and staff are increased.
- Define streets within area to the system. This option has an ongoing administrative overhead as new streets are added and streets may cross boundaries. This option will have processing implication, as the system would have to check for valid street/area combinations at data entry. Street Add, Update and Delete facilities would be required.
- Define addresses within area to the system. This option has a greater administrative overhead than the streets option, as addresses are likely to change more often than streets and a list of valid addresses would have to be maintained. This option may have processing implications, as the system would have to check for valid address/area combinations at data entry. Address Add, Update and Delete facilities would be required.
- In the event that the streets or address definition options are considered, a full analysis should be undertaken before attempting to proceed. This maintenance of accurate street and/or address files will require the gathering of information from the filed and should be subject to some form of authoritative verification such as postal service information and land title information. These realities must be fully considered against the practicalities.
- 12.5.7.5 The introduction of complete data entry verification will require programming resources and the impact on the timelines for data capture and the possible need to increase hardware (e.g. the number of input terminals or grunt) will need to be examined. GECOM should analyse these requirements within the next six months.

CHAPTER FIVE

13. DATA DRIVEN FORENSIC INVESTIGATION INTO CONCERNS AND COMPLAINTS ON THE SOFTWARE AND DATA BASE USED BY GECOM

13.1 INTRODUCTION

- 13.1.1 The Official List of Electors (OLE) is maintained in a Microsoft SQL 6.5 database. The data contained in this database was the primary source for all secondary versions of the list electors, and it was these that gave rise to many of the queries. The secondary versions of the list, disturbed in the form of a CD-ROM are, in essence, an electronic report, and therefore our tests were focused on this database, as this is the only place where errors or unauthorized manipulation of the data would have had any possible impact on the outcome of the election.
- 13.1.2 Nevertheless, given the context of the allegations, we scrutinized and investigated the secondary electors' list to the point that we were able to confirm whether these allegations had any merit, and if so we established the cause.
- 13.1.3 Numerous discussions were held with GECOM and the political parties during the course of which a number of complaints and concerns were raised in relation to the software and database used to compile the different versions of the voters roll. It should be stated that, despite numerous requests, very little evidence was produced to corroborate a number of the allegations made. Notwithstanding this, the allegations are detailed below and have been fully investigated.

13.2 PROBLEMS AND CONCERNS: APPLICATIONS

13.2.1 BACKLINK SYNDROME

13.2.1.1 BACKGROUND

- (i) It is alleged that a flaw called 'Backlink Syndrome' on the CD distributed to the political parties results in unauthorized relocation of voters and that changes were easily made permanently to the hard drive of the computers. "Backlink Syndrome" is described as 'a system that facilitates the backlinking of the record of an elector's particulars to a record selected earlier containing particular of another electors'.
- (ii) The software, FeSHA 11, on the CDROM was developed in Fox Pro using Fox Pro Tables. The data was encrypted after being extracted from the SQL Server 6.5

database, which is the primary data source for the OLE. The software was not and cannot be used on the SQL Server 6.5 database.

13.2.1.2 RISKS

The risk that the alleged flaw will affect the official lists of electors (OLE) and the Addendum.

13.2.1.3 TESTS

(i) Description of Tests

Find out if the encryption and decryption programs are flawed. If they are flawed, incorrect results may be returned.

Result

There is not flaw.

Comment

This result is acceptable

(ii) Description of Tests

Find out if the table structure is flawed. If it is flawed, incorrect results may be returned.

Result

There is not flaw

Comment

This result is acceptable

(iii) Description of Tests

Find out f the data views are flawed. If they are flawed, incorrect results may be returned.

Result

There are two views fv12001_mrc is to return results if search by MRC Code.fvl2001 is to return results if search by other criteria. There is not flaw.

Comment

This result is acceptable

(iv) Description of Tests

Find out if the forms are flawed. If they are flawed, incorrect results may be displayed.

Result

There are two grid objects on the form. Grid 1 is to display results if the query is by MRC Code. Grid2 is to display results if the query is by names, addresses and divisions. There are three errors in the definition of the columns in Grid 2, namely the first name, the surname and the division id columns.

The following screen shows the first error, where the physical position of this column is the second (which should display Surname) in Grid 2. It is set to match the surname from the search result. However, the Column Order is set to 3.

The following screen shows the second error, where the physical position of Column 3 is the third (which should be first name) in Grid 2. It is set to match the first name from the result. However, the Column Order is set to 2.

The following screen shows the third error, where Column 9, the division id column, should use view fvl2001_mrc, not fvl2001.

Comment

If an elector is searched for by MRC Code, the errors will cause the Grid 2 to display the surname as first name, first name as surname and to display the division id form view previously run for Grid 1. This is a bug in the program and it only affects the presentation of the data. It does not change the underlining data.

(v) Description of Tests

Find out if the programs used for the SQL Server 6.5 database have the same logic. If they use the same logic, i.e. using databound fields and linking one elector's details with another elector's details, the problem could occur in the main database.

Result

Applications developed for the SQL Server 6.5 database are written in MS Access 2000. Fields are not databound. Each field is populated through specific queries. The previous elector's details are not kept in any fields. Therefore, there is no 'Backlink Syndrome' risk in the SQL Server 6.5 database. It should be noted that although there had been a program error in the Correction & Objections application and more than 6000 records on the RVL were affected, the problem was rectified and the records were corrected before the production of the OLE and the OLE was therefore not affected by the error. See DROPPING ON AND OFF THE LISTS tests for details.

Comment

There is no 'Backlink Syndrome' in the applications for the SQL Server 6.5 database.

Conclusion

Although the bug in the FeSHA 11 application caused the incorrect presentation of the search result, the data on the CD and the SQL Server database were not affected by this bug.

13.2.2 DROPPING ON AND OFF THE LISTS

13.2.2.1 Background

- (i) Complaints have been made that certain persons on the Preliminary Voters List (PVL) were taken off the revised Voters List (RVL, and then put back on the OLE. A related problem is that lists for invalid division/subdivisions were printed as part of the RVI.
- (ii) To investigate the problem, the structure of the divisions and subdivisions need to be explained. The country is divided into ten districts. Each district is divided into many divisions. Some division are further division id uniquely identifies a division in the whole country. A division is denoted by its division id.
- (iii) Each subdivision has a unique identifier (subdivision id) i.e. the subdivision id uniquely identifies a subdivision in the whole country. A subdivision is denoted by its division id, followed by an alphabetical letter. The alphabet is only unique within the division. This means that two or more subdivisions in different divisions may have the same alphabetical letter e.g. 221211A and 622431A. Although subdivision A exist in both division 221211 and division 622 431, they have different subdivision ids.
- (iv) Electors were listed under a division where there are no subdivisions or under a subdivision where there are subdivisions. It was also alleged that there were instances where an elector was only printed under one division or subdivision. Therefore, electors under invalid divisions or subdivisions would not be able to find their names in their normal divisions or subdivisions.

13.2.3 INVALID DIVISION/SUBDIVISION STRUCTURE IN THE DATABASE

13.2.3.1 DEFINITION

Invalid divisions and subdivisions are stored in the database.

13.2.3.2 RISK

If invalid divisions and subdivisions are stored in the database, electors could be assigned to the invalid division/subdivision. This would disenfranchise electors.

13.2.3.3 TESTS

(i) Description of Test

Find out if the districts, divisions and subdivisions are unique.

Result

Each record in the district, divisions and subdivision tables is unique.

Comment

The result is acceptable

(ii) Description of Test

Find out if the districts, divisions and subdivisions are unique.

Result

Each record in the district, divisions and subdivision tables is unique.

Comment

The result is acceptable

(iii) Description of Test

Find out if the districts, divisions and subdivisions are unique.

Result

Each record in the district, divisions and subdivision tables is unique.

Comment

The result is acceptable

(iv) Description of Test

Find out if the districts, divisions and subdivisions are unique.

Result

Each record in the district, divisions and subdivision tables is unique.

Comment

The result is acceptable

Conclusion

The divisions and subdivisions are stored correctly in the database.

13.2.4 DIVISIONS/SUBDIVISIONS AR ENOT CORRECTLY STORED IN THE ADDRESSES TABLE FOR THE PVL, AND OLE

13.2.4.1 DEFINITION

An elector's division and subdivision are not correctly stored in the addresses table, in the form of division id and subdivision id. The information from this table was extracted to produce the tables for PVL, RVL and OLE.

13.2.4.2 RISK

If the combination of division id and subdivision id for an elector does not exist in the division/ subdivision structure, the elector's name will not be listed under the elector's normal division or subdivision.

13.2.4.3 TESTS

(i) Description of Test

Find out if the districts, divisions and subdivisions are unique.

Result

Each record in the district, divisions and subdivision tables is unique.

Comment

The result is acceptable

(ii) Description of Test

Find out if all division/subdivision combinations are valid in the PVL.

Result

The subdivision (the alphabet) instead of the subdivision id is stored in the PVL2001 Snapshot table. This table was used to print the PVL. Although the subdivisions (the alphabet) were correct in the PVL2001 Snapshot, the audit trail shows that the subdivision id for three records was wrong in the addresses table.

Comment

Subdivision id can uniquely identify a subdivision in the country. Using subdivision (the alphabet) alone can be misleading in the sense that although the electors seemed to be printed under the correct division/subdivision (alphabet) on the PVL, the original data in the addresses table remains incorrect.

The effect of the three incorrect records on the election is significant. However, the table structure for printing the list needs to be improved to include all the keys fields.

(iii) Description of Tests

Find out if all division/subdivision combinations are valid in the RVL.

Result

6897 records have the invalid combinations of division and subdivision. The subdivision id is used in the RVL 2001 table. This table was used to print the RVL. However, the incorrect combinations of divisions and subdivisions were not filtered out by the non-existent combinations of divisions and subdivisions.

Comment

Insufficient data validation before populating the RVL2001 table caused the late detection of the problem, namely the incorrect combination of division and subdivision for some electors. This would have been a serious problem if it had not been fixed before the printing of the OLE. The electors would not have been able to vote at their normal division/subdivision. Later tests prove that the problem had been fixed before the printing of the OLE. As a result, the voters were not disenfranchised.

(iv) Description of Test

Find out if all division/subdivision combinations are valid in the OLE.

Result

Subdivision (the alphabet) instead of the subdivision id was used in the FVL_2001_Table table. This table was used to print the OLE. The subdivision (the alphabet) was correct and the subdivision id in the addresses table confirmed that the subdivision (the alphabet was extracted from the correct subdivision.

Comment

Subdivision id can uniquely identify a subdivision in the country. Using subdivision (the alphabet) alone is not sufficient. Although there was not an invalid combination of division and subdivision in the OLE, the table structure of FVL_2001_Table still needs to be improved to prevent similar problems in future elections.

(v) Description of Tests

Find out from the audit trail if there is any pattern indicating that the division/subdivision changes from PVL to RVL were a result of deliberate manipulation.

Result

From PVL to RVL, 5906 records were changed to invalid combinations of divisions and subdivisions. The audit trail shows that the update transactions occurred throughout the period between the migration from Access 97 to SQL Server 6.5 and the printing of the RVL. Different users made the changes.

Comment

The result does not show any pattern of irregularity. The Information Systems Department stated that there was an error in the Correction & Objections application, which caused the wrong subdivision to be assigned to some electors. The patters in the update transactions confirm that the changes originated from an application. The application error will be investigated in the next test. The fact that 5906 records with invalid combinations of division and subdivision exist in the RVL, highlights the lack of data validation before the RVL was printed.

(vi) Description of Tests

Find out if the invalid combinations of divisions and subdivisions were caused by an error in the Correction & Objections application.

The ISD stated that the error allowed the change of an elector's division id without changing the subdivision id. This would create the invalid combination of the divisions and subdivisions.

Result

The original application has been updated after the error was found. Therefore, the review of the application was based on the updated application.

The updated application still shows some traces of the error.

Firstly, the function Validate Divisions still has the flaw in determining whether there is a need to validate subdivision id or not. Secondly, the whether there is a need to validate subdivision (the alphabet) is displayed under the division id. In the case of an elector transferring from subdivision 'A' of one division to subdivision 'A' of another division, there is no indication on the screen that the subdivision id of the first subdivision 'A' is different from the subdivision id of the second subdivision 'A'. Although the current application forces the data entry operators to select a subdivision after changing the division field, by using the re-query method, it is clear that this was not done in the original application because the requery method is not widely used in the application. This method overcomes the flaw in the Validate Divisions function.

Comment

It is clear that the error, as stated by the ISD, was the caused of the invalid combinations of divisions and subdivisions. This kind of programming error is common, especially when there is not enough time for structured review and testing of the application. To further test whether the invalid combinations of divisions and subdivisions in the RVL were caused by the application error, we searched for a distinct pattern in the RVL. The pattern is that for the division in the invalid combination, there should exist a subdivision that has the same alphabet as the incorrect subdivision in the combination. This patter is used in the next test to determine if the incorrect combination caused by the application.

(vii) Description of Tests

Find out if the pattern of the invalid combination of divisions and subdivisions confirms that the cause of the problem was an application error and find out if the corrections of the invalid combinations of divisions and subdivisions were legitimate.

Result

6380 records with the invalid combinations of divisions and subdivisions on the RVL were changed before the printing of OLE. The pattern of the invalid combination confirms that the cause of the problem was a programming error in the Correction & Objections application. The authorized bulk update correctly fixed 5635 records. The other 745 records were updated by Corrections to RVL application.

Comment

The pattern of the invalid combination of divisions and subdivisions in the RVL confirms that the problem was caused by an application error. The corrections made to the invalid combinations were correct and were authorized. The effect of the correction was that the people who had been misplaced on the RVL were listed under their normal divisions or subdivisions on the OLE. This could be seen by the electors as being 'dropped back on the list'. The divisions and subdivisions combinations are correct in the addresses table before the OLE was printed and are still correct.

Conclusion

Although the programming errors cause more than 6000 electors to be listed under the incorrect combination of division and subdivision on the RVL, the mistake was rectified. As a result, those electors were listed under their normal division/subdivision on the OLE. Therefore, those electors were not disenfranchised in the 2001 election.

The data in the database is in very good shape. However, if the application is not fully reviewed or if the insufficient data validation problem is not addressed, the accuracy of the data will be compromised and the haphazard fixes, like the ones used for the 2001 Election, will be required for the next election. The outcome may not be as good as the 2001 Election.

13.2.5 FAULTS IN QUERIES FOR DATA EXTRACTION AND PRINTING OF THE LISTS

13.2.5.1 DEFINITION

The electors' details are stored in the RegistrantsMain, RegistrantsOther and Addresses tables in the MRDB database, which is one of the SQL Server 6.5 databases. Before a list (PVL, RVL or FVL) was printed, the data from these three main tables, as well as the districts, divisions and subdivision tables, were extracted by a query and stored in one table, which is referred by the ISD as a 'flat file'. The printable file for a list was then constructed by an Access 2000 report, which uses a query on the 'flat file'.

13.2.5.2 RISK

If the query for constructing the 'flat file' or the query for the Access 2000 report was flawed, the incorrect list could be produced.

13.2.5.3 TESTS

(i) Description of Tests

Review the queries that construct and print the PVL, RVL and OLE

Result

The queries did not have sufficient joins between the addresses, divisions and subdivisions table. When producing the RVL, the queries failed to filter out the invalid combinations of divisions and subdivisions caused by the application. There was no problem in producing the OLE because the underlining data was correct.

Comment

One could always argue that the data should be validated before being extracted for the production of the voters list. Nevertheless, the data extraction queries and the queries for printing the lists should stipulate the referential integrity rules of the database and filter out the invalid data.

Conclusion

The data extraction and report printing queries did not slightly to the printing of the invalid combinations of divisions and subdivisions for the RVL in the sense that the queries accepted invalid data and used invalid data. Although the 2001 Election was not affected, the queries should be reviewed and improved.

13.2.6 ABUSE OF THE SYSTEM

13.2.6.1 **DEFINITION**

The data entry operators may have deliberately entered the wrong information through the applications.

13.2.6.2 RISK

If the abuse of the system occurred, some eligible electors could have been taken off the OLE and therefore not been able to vote in the 2001 Elections.

13.2.6.3 TESTS

(i) Get the error rate of each operator who had entered an invalid combination of the division and subdivision.

RESULT

64 data entry operators had entered invalid combinations. The average error rate was 1.8%. 17 operators have an above average error rate. 11 operators had an error rate of more than 3%. Three operators had an error rate pf 7% or more.

Comment

Although the programming error in the application can be explained as the cause of the invalid combination of the divisions and subdivisions, the high error rate of the three operators cannot be dismissed without further analysis of the operators' skills level and their understanding of the application. However, we could not obtain the information on the skills levels of the operators. Therefore, there is no conclusive evidence of the abuse of the system through this test.

(ii) Description of Tests

Get the list of electors whose new photograph "status" had been changed from Yes to No. Electors without new photographs were not listed on the OLE.

Result

63 electors have had their new photo taken status changed from Yes to No. However, they were all changed back to Yes before the OLE was printed. Some of them were changed back by the same operators who made the original change.

Comment

The 63 changes could be interpreted as abuse of system because once the photo was taken; the status should not be changed. However, the fact that the new photo taken status can be accidentally changed while updating other details of an elector cannot be ignored.

Conclusion

Although it cannot be ruled out, there is no conclusive evidence of occurrences of the abuse of the system. In any case, the elector records were corrected before the printing of the OLE. Therefore, those incorrect changes either made deliberately or by mistake, did not affect the 2001 Election.

13.3 PROBLEMS AND CONCERNS – DATA

13.3.1 DUPLICATION OF NAMES

13.3.1.1 **DEFINITION**

Elector that appear more than once one the OLE.

13.3.1.2 RISK

The risk that an elector is registered more than once on the OLE can arise as a result of administrative error (details are captured more than once), electors negligence (voters re-register, instead of updating their existing registration), elector fraud (the elector intentionally registers more than once), and manipulation of the database.

13.3.1.3 TEST – DUPLICATE MRC CODES

(i) Description of Test

The MRC Code field is set as unique in the SQL database, and this control is in itself sufficient to ensure that there are no duplicates. Nevertheless, we conducted a test that confirms this is the case.

Result

We confirmed that there are no duplicate MRC Codes on the database.

Comment

This result is acceptable.

13.3.1.4 PEOPLE WITH THE SAME SURNAME AND FIRST NAME AND MIDDLE NAME LIVING AT THE SAME ADDRESS

(i) Description of Tests

This is a fair test, but as it excludes birth date, and is therefore likely to include family members from difference generations who share the same address with identical names.

Result

There are 35 duplicates with the same surname, first name, middle name and living at the same address, with no more than 2 duplicates for any one instance. This result includes the 9 exact duplicates found in the test below. Although we do no have conclusive evidence, circumstantial evidence suggests that the majority of the remaining 26 are duplicated with a member of the family.

Comment

In a data set of this magnitude, this result is normal.

13.3.1.5 PEOPLE WITH THE SAME SURNAME AND FIRST NAME AND BIRTH DATE LIVING AT THE SAME ADDRESS

Description of Tests

This is the most conclusive test of duplicate registration.

Result

There are 9 duplications that have the same surname, first name and birth date living at the same address with no higher than 2 duplicates for any one instance.

Comment

This is an easy test to perform, and therefore while the numbers are not material, it is surprising that they have occurred at all.

13.3.1.6 PEOPLE WITH THE SAME SURNAME AND FIRST NAME AND BIRTH DATE (THESE AR ENOT NECESSARILY THE SAME PERSON)

Description of Tests

This test compares persons that have the identical Surname, First Name and date of birth. This test is not conclusive, as it is possible for persons to have identical Surname, First Name and date of birth. Since this is the case, the results require careful scrutiny to determine whether the matches are in fact the same person or not.

Result

There are 255 people (including the 9 with the same address) with the same surname and first name and date birth with no more than 2 duplicates for any one instance. The visual scrutiny established that there are a high proportion of common surname first name combinations. For example, Bibi Khan occurs 879 times in the database. However, when the middle name is used, the most common occurrence becomes Harry Persaud, with 102 incidents. The date of birth appears to contain some inaccuracies, with the 1 January appearing 5,378 times while the next highest occurrence is 1,870.

Comment

This test cannot be relied on as an accurate method of identifying duplicate registrations. Nevertheless, in the overall context of the database, the figures are low.

13.3.1.7 PEOPLE WITH THE SAME SURNAME AND FIRST NAME AND MIDDLE NAME AND BIRTH DATE.

Description of Tests

This test compares persons that have the identical Surname, First Name, Middle Name and date of birth. This test is more conclusive than the previous test that ignores the Middle Name.

Result

There are 62 people (including the 9 with the same address) with the same surname and first name and middle name and date of birth with no more than 2 duplicates.

Comment

The visual scrutiny of the data confirmed that this match is an accurate method of detecting duplicates, and that these 62 persons appear more than once on the database. Deletion from the database is potentially more serious than duplication, as there are other controls that prevent a person from voting more than once. Erroneous removal could disenfranchise an elector, so a physical confirmation needs to be undertaken to confirm that these individuals are in fact duplicated before they are deleted from the OLE.

It should be noted that in a database of this magnitude, the duplications are not material, representing 0.014% or 1 for every 7,000 electors.

13.3.1.8 PEOPLE WITH THE SAME SURNAME, FIRST NAME, MIDDLE AND AGE

Description of Tests

This test is not intended to be a definitive test of duplicates. The intention of this test is to establish whether capturing errors of the birth date may have concealed actual duplicates, and is a test of reasonability.

Result

There are 185 duplication (including 62 persons with the same name and birth date identified above) with the same surname and first name and middle name and age none higher than 3 duplicates for any one instance.

Comment

Given that the 185 persons identified, includes the 62 with an exact match of match and birth date, this test indicates that very few, if any, undetected duplicated electors with an incorrect birth date exist on the database.

13.3.1.9 PEOPLE WITH SIMILAR SURINAME, FIRST NAME MIDDLE NAME AND AGE

Description of Tests

This test is not intended to be a definitive test of duplicates. The intention of this test is to establish whether capturing errors for the surname and date of birth may have concealed actual duplicates, and is a test of reasonability.

Result

There are 254 duplicates (including the 185 persons with the same surname and first name and middle name and age identified above) with similar surname and first name and middle name and age with no higher than 3 duplications for any one instance.

Comment

Given that the 254 persons identified includes the 185 with the same name and age, this test indicates that very few, if any, undetected duplicated electors with incorrect surnames and date of birth exist on the database.

13.3.1.10 PEOPLE WITH A SIMILAR SURNAME, FIRST NAME, MIDDLE NAME AND AGE

Description of Tests

This test is not intended to be a definitive test of duplicates. The intention of this test is to establish whether capturing errors for the surname, first name, middle name and date of birth may have concealed actual duplicates, and is a test of reasonability.

Result

There are 596 duplicates with similarly surname first name and similar middle name and age with no higher than 5 duplicates.

Comment

Given that the 596 persons identified includes the 254 with a similar surname, name and age, this test indicates that very few, if any undetected duplicated electors with an incorrect surnames, first names, middle names and date of birth exist on the database.

13.3.1.11 SWITCHING OF FIRST NAME AND SURNAMES

Purpose of the Test

To identify the occurrence of the switching of First Names with Surnames to conceal duplications in the database.

Description of test

We compared Surname = First name and First Name = Surname and Birth Date = Birth Date where the MRC Code was not equal to MRC Code (to eliminate persons who have the same first name and surname). We then compared similar Surname = similar First Name and similar First Name = similar Surname and Birth Date = Birth Date where the MRC Code was not equal to the MRC Code. This second test is not conclusive evidence of duplications, but merely a test for reasonability to establish persons who may have disguised the spelling of their name to further conceal the duplication. We then conducted a visual inspection of the results.

Result

There are 42 duplicates where Surname = First Name and First Name = Surname and Birth Date = Birth Date where the MRC Code was not equal to MRC Code. The second test produced 88 matches.

Comment

These figures are not cause for concern, as they are not large in the context of the size of the database.

13.3.1.12 ELECTORAL ASSISTANCE BUREAU (EAB) REPORT OF DUPLICATED NAME ON THE ESHA DATABASE

Allegation

The EAB provided us with a report containing the names and MRC Codes of individuals that they believe were duplicated on the Electors List.

Description of Test

We compared the persons with duplicated Surname+First Name+Middle Name+Birth Date (62 persons) and Surname+First Name+Birth Date (255 persons).

Result

Of the examples on the EAB list, 5 appear on our list of 62 persons with the same Surname, First Name, Middle Name and Birth date. The remaining 5 appear on our list of 255 persons that have the same Surname, First Name and Birth date.

Comment

The EAB report is correct and agrees with our reports, except that our reports are definitive, and have detected all instances of duplications.

Conclusion

We have established that there are 62 identified duplicate electors on the database. Our test to establish whether capturing errors have concealed other duplicated electors has established that where this may have occurred, the impact would not be material to the electoral process. There is no evidence of manipulation of the database, and it appears that the duplications are mostly as a result of elector negligence, and possibly to a very small extent there may be elector fraud.

13.3.1.13 DUPLICATION OF ADDRESSES

RISK

The risk that an elector may have duplicate addresses. This test can also assist in identifying manipulation of the database.

TESTS

(i) Frequency distribution of address duplications Description of Tests

This is the initial test of the database, and establishes whether there is potential manipulation of address information. This test also determines whether further tests on addresses are likely to produce and results. To perform this test, we performed a match on LotNumber+StreetName+DistrictID+DivisionID+SubDivision ID, counting the number of duplications for each instance. We then analyzed the resultant table to determine whether the distribution of duplications were statistically abnormal.

Result

The frequency distribution of address duplications did not produce any abnormalities.

13.7.3.2 AGE ANALYSIS

Purpose of the test

To establish whether the ages represented in the database resemble those one would expect in the distribution of a population with a positive growth rate.

Description of Test

We analysed the ages of the electors using a 10 years grouping, starting at 10 Results

1	27,020
2	127,424
3	110,801
4	81,573
5	45,943
6	26,683
7	14,891
8	4,533
9	580
10	17
11	2
12	1
15	1
20	1
23	2

Comments

The ages of the persons represented on the electors' lists closely resembles what would be expected of a growing population. It is obvious from the last few groups that there are a few capture errors with the dates of birth that have been detected using normal validation routines.

Conclusion

There has not been any mass manipulation of the OLE.

13.8 UNDERAGE ELECTORS

13.8.1 DEFINITION

An elector who was less than 18 years old on 1 January 2001.

13.8.2 RISK

That persons under 18 years old 1 January 2001 were allowed to vote.

13.8.3 TESTS

13.8.3.1 AGE TEST

Purpose of the test

To confirm that no underage had been allowed to vote

Description of test

We counted the number of persons included on the OLE who were under 18 years old at 1 January 2001.

Result

There were no underage electors included on the OLE.

Comments

The results of this are satisfactory.

13.9 TRANSFER OF DATA

13.9.1 DEFINITION

There are two databases that are used to update the elector data in compiling the OLE, MRDB and RCDB. MRDB is the primary database, and is the data sourced from the 1997 electors' list RCDB is made up of changes to the MRDB. Shortly before the election (before OLE was printed), all the changes in RCDB were transferred to MRDB.

13.9.2 RISK

The idea of two databases containing the same set of information carries the risk that both sets of data are updated for the same record. The risk then exists that out of date information from the one set overwrites the latest information in the other set.

13.9.3 TEST

13.9.3.1 CONTROL TEST

Purpose of the test

To establish whether any controls exist to prevent new information in MRB from being overwritten by old information from RCDB. One of the commonly used controls is comparing the last updated date and time of the same elector's record between the two databases before transferring data from one database to another.

Description of test

We interviewed the developer of the system to establish whether the necessary controls existed to prevent new data in MRDB being overwritten by older information contained in RCDB.

Results

There are no controls.

Comments

This explains why in some instances changes were made to the database, and then the data appeared to change back again. Having two sets of data in this manner always carries this risk, and therefore it is considered to be a practice to be avoided, unless there are extreme circumstances where the sets of data reside in different locations that cannot be linked. There were no extreme circumstances that should dictate the use of dual database, as both sets of data reside on the same server. We asked the programme developer why this highly risky approach

had been adopted, and he confirmed that he had recommended against it, but had instructed to adopt it in spite of his recommendations to the contrary.

Conclusion

It is imperative that IT decisions of this nature are left in the hands of persons who have an understanding of the implications, so that errors of this kind are avoided.

13.10 SUMMARY OF DATABASE TESTS

- The tests we conducted were comprehensive, and covered all the aspects of potential manipulation, and a large proportion of the potential errors. We are satisfied that no mass manipulation of the database occurred, and that there was no evidence of user manipulation that could have affected the outcome of the election. The anomalies that we found could have been attributed to human error, and numbered less than 10 in most serious instance, and these had been rectified before the OLE was published.
- We identified a number of programming and capture errors, but in many instances these were detected and corrected before the publication of the OLE. We are therefore satisfied the database is an accurate representation of the Official List of Electors. We are also convinced that this represents the most accurate database of its kind in Guyana at present.
- 13.11 RVEIEW OF THE APPLICATIONS DEVELOPMENT METHODOLOGY AND IMPLEMENTATION

13.11.1 DATA

- 13.11.1.1 The electors' details captured in the database were based on the forms supplied by the Operations Department. By default, the Operations Department should be the owner of the data, whether the data is in paper format or electronic format. The Operations Department should also be the owner of the applications that were used to update the data. However, the Operations Department did not play a major role in the systems analyses and testing phases. Because of the time constraints, the applications development was not well planned. As a result, the requirement analysis was superficial and narrowly focused. Numerous quick and dirty applications were developed just to address a specific issue. There was not enough consideration given to well-structured and re-useable applications with seamless integration with the database and there application.
- The testing was insufficient. The programmer did most of the testing. Some of the testing was done by the Technical Oversight Committee (TOC). There was no user testing or group testing before implementation. Sometimes, the programmer only tested the changes because they were perceived as minor changes or there was not enough time. E.g. eSHA was tested by the TOC while FeSHA 11 was only tested by the programmer with a very high tight deadline and the bugs (so called backlink syndrome) in FeSHA 11 were not detected until it was found by the political parties.

13.11.2 THE APPLICATIONS

- 13.11.2.1 Many applications perform the same or similarly functionality. This practice will:
 - (i) Increase the maintenance cost because the same changes will need to be made to multiple applications.
 - (ii) Increase the possibilities of inconsistent behaviour the applications. The inconsistent behaviour will in turn cause the inconsistent data.
 - (iii) Increase the testing cost because multiple applications will need to be tested for one change.
- The applications do not have sufficient validations for individual fields. This will allow human errors to pass undetected. The applications do not have sufficient validations before saving data into the database. This will increase the chance of having inconsistent data in the database. As demonstrated in the Problems and Concerns section, insufficient validations in the applications have already caused problems in producing the RVL. The problems caused by the application in turn redirected the ISD's time to fixing the problems.

13.11.3 THE SYSTEMS SECURITY

The current security arrangement gives the programmer unlimited access to the whole computer system. This makes the venerable and also places the programmer at risk. The developers and database administrators have system authority to perform any and all functions, without restraint. While this is convenient for them, it is extremely high risk to give them this degree of responsibility.

13.11.4 STRUCTURES ARE NOT NORMALISED TO BEST EFFICIENCY

The database structures are the result of expediency, and not a systematic design. This is analogous with a house that has had too many alterations, so that the functionality is severely hampered. In the case of the database, this leads to efficiency, error an increased risk of manipulation and potential fraud.

13.11.5 FULL CAPABILITIES OF DATABASE NOT UTILISED

Microsoft SQL server has extensive capabilities that are capable of improving the security and the integrity of the database. Those features that are operational have been used as a matter of expediency, and not as a result of systematic design.

13.11.6 NO EVIDENCE THAT AUDIT TRAILS ARE AUDITED

Although there are audit trails, they have no use unless there is a formal process in place to ensure that they are checked for irregularities.

13.11.7 NO FORMAL SYSTEM SECURITY POLICY IN PLACE

Best practice suggests that organizations, especially those with high sensitive electronic data, adopt and adhere to a stringent systems security policy. We found no indication that such a policy exist, although security measures, particularly physical security are enforce with varying degrees of stringency.

13.11.8 LOGICAL SECURITY NOT ADEQUATE

The systems security, (as opposed to physical security) does not appear to follow best practice, and is implemented on an ad-hoc basis.

13.11.9 BACKDOOR PASSWORDS IN OPERATION AND AVAILABLE TO DBAS AND DEVELOPERS.

Backdoor passwords are usually set up in case the administrator's password is forgotten, or someone maliciously alters it. The establishment of a backdoor password in this fashion should be strictly controlled, and should not be known to anyone who is directly responsible for the systems. In addition, it should be kept under lock and key.

13.11.10 NO STRUCTURED PROJECT PLANNING

The successful management of any project depends on the efficient management of resources, particularly in the context of strict deadlines. The absence of proper project planning is extremely risky as it increases the possibility of misjudging the extent of a project, thereby necessitating risky short cuts or alternatively, missed deadlines.

13.11.11 NO PROPER SYSTEM TESTING IN PLACE

It is necessary to a test a computer system thoroughly, taking into account as many eventualities as possible before introducing it into the operations environment. Many of the programming problems that gave rise to a number of the allegations surrounding the election could have been prevented if there had been a formal system testing procedure in place.

13.11.12 SYSTEM DOCUMENTATION IS HAPHAZARD AND INCOMPLETE

The lack of proper system documentation is an extreme risk. No organization can afford to be totally dependent on any individual in matters of strategic importance. The lack of proper systems documentation puts GECOM in this position, as at this point they are totally dependent on the systems programmer, and should he leave, or something happen to him, he would be difficult to replace.

13.11.13 NO INDEPENDENT SYSTEM SECURITY AUDIT

The scope of this audit did not include a formal system security review. The lack of a formal and independent system security audit increases the risk that unauthorized persons could gain access to the data, and manipulation it for their own ends.

13.11.14 NO DOCUMENTATION OR TOOLS TO DOCUMENT AN DAUDIT SYSTEM SECURITY

Documentation of system security, and tools to perform this function would facilitate a system security audit, as well as reducing the cost, and improving the results.

13.11.14 POLICY OF NETWORK ISOLATION CAN BE EASILY BREACHED

GECOM has a policy that the network housing the OLE is physically separated form any other networks. There is a network cable passing through the ceiling in the Information Systems Department (ISD) that when connected to the hub² breaches this security measures altogether.

13.11.16 NO AUTOMATED RECONCILIATION BETEWEEN MIDIS AND MRDB

The OLE is printed on the basis that individuals have been photographed for the purpose of producing an identity card. It is therefore necessary to ensure that persons who have been photographed receive, or are in the process of receiving an identity card, and similarly that all persons who have officially received an identity card appear on the OLE. An automated reconciliation process secures the likelihood that both systems accurately reflect the status of the elector and reduces the risk that electors are disenfranchised, or that identity fraud can influence an election.

13.11.17 DUAL UPDATE SYSTEM (SIMULTANEOUS UPDATING OF RCDB AND MORE) NOT GOOD PRACTICE

There is a very high risk that when two systems exist with each carrying the same set of data and where both sets of data can be updated, that both are updated, for the same records. This makes it almost impossible to identify which update reflects the correct information, and also increases the potential for error. We establish that this was the cause of some of the errors found on the database.

2

²

A network hub is a piece of equipment that when placed at the centre of a local area network links Every system on the network to all other systems attached to that network.

13.11.18 AUDIT TRAILS DO NOT INDICATE WHICH FIELS HAVE CHANGED

The lack of audit trails at a field level allows fraudulent transactions to be disguised using legitimate transactions, and makes the identification of fraudulent transactions more difficult to identify and trace.

13.11.19 SYSTEM DOES NOT HAVE A PUNCH AND VERIFY AUTHENTICATION PROCESS.

The lack of punch and verify validation increases the risk of fraud and reduces the likelihood that punching errors will update the data undetected.

13.12 RECOMMENDATIONS

13.12.1 INTRODUCTION

The numerous systems tests as well ad the review of the applications development methodology and implementation highlighted certain strengths as well as certain weaknesses of GECOM and particularly the ISD Department should be complimented for doing a competent and professional job under severe time constraints and stressful conditions. In this context recommendations have been detailed below under the following headings:

- 1. Information Technology Management;
- 2. IT Committee:
- 3. Choice of IT Systems;
- 4. Applications;
- 5. Database:
- 6. Timing:
- 7. International Steering Committee.

13.12.2 INFORMATION TECHNOLOGY (IT) MANAGEMENT

A key component of any IT Department is the capacity and calibre of its senior management. In this respect, we would recommend that senior management should have, at least, the following experience and competencies.

Technical competence in managing large national database registers
Strong management skills
Security minded
Authority and responsibility balance
Preferably have database and system design experience/expertise
Must have experience in project planning in strict deadline environments

13.12.3 IT COMMITTEE

The IT Committee has an important advisory and consultative role to play in assisting GECOM and the ISD Department. The following recommendations are made in relation to the IT Committee:

- 13.12.3.1 Preferable representatives that have no political affiliations
- 13.12.3.2 Preferable have two or more members with experience of managing an IT centered organization.
- 13.12.3.3 Preferable have a thorough understanding of the implications of IT related decisions.

13.12.4 CHOICE OF IT SYSTEMS

- 13.12.4.1 Adopt technology that is simple to use and easy to implement
 13.12.4.2 Should be easy to understand for both electoral officers and electors
 13.12.4.3 Must be tried and tested
 13.12.4.4 Does not need to be expensive
 13.12.4.5 Does not need to be from an electoral origin
 13.12.4.6 Must have the confidence of all stakeholders (especially the electors)
 13.12.4.7 Must be failsafe;
- 13.12.4.8 Must have the ability to:
 - (i) validate the identity of electors
 - (ii) ensure that no elector votes more than once
 - (iii) produce results of elections accurately and quickly.

13.12.5 APPLICATION

- 13.12.5.1 Merge similar applications. Proper analysis, design and testing should be done as part of this exercise. Minor database structure changes may also be required.
 - (i) Merge Claims & Objections, Corrections to RVL and Corrections to FVL applications. Use one database, the Master Registration Database (MRDB) instead of creating separate database to store the intermediate data. If the intermediate data is required, use a table in MRDB.
 - (ii) Merge eSHA, FeSHA and FeSHA 11.
 - (iii) Merge Disciplined Forces and Disciplined Forces Addendum applications.
- Make applications data driven³ to minimize the changes to the applications and thus reduce accidental programming error.
 - (i) Make the merged eSHA application data driven. The titles and headings can be stored in a table. This will reduce the application changes caused by the change of title or headings. The table name and table structure for the PVL, RVL and OLE can be the same.
 - (ii) Make the merged Claims and Objections application data driven to maximize the flexibility and re-usability.

13.12.5.3 Review and improve the SQL and data validation logic in the applications

- (i) Enhance individual field validations, paying special attention to where referential integrity might be broken.
- (ii) Enhance validations before Save.
- (iii) Detect duplicated entry automatically when new registrants is entered.
- (iv) Review all SQL statements in the applications to eliminate the query error.
- 13.12.5.4 Implement online verification process. If the complete double entry of all the details is not acceptable, at least the key fields like the names, date of birth and addresses should be verified online.

13.12.5.5 Application Development

- (i) The Operations Department should play a more active role in the systems development life cycle.
- (ii) As the default data owner, the Operations Department should contribute more to the systems requirements analysis, user testing and group testing of the applications.
- (iii) With the assistance form the Information Systems Department (ISD) and the Technical Oversight Committee (TOC), the Operations Department should build up expertise in Computer usage and applications testing.
- (iv) The TOC should continue to perform the quality assurance role.

Modern database environment permits attributes to be associated with the data. For example Heading labels can be associated with the data. If this had been possible and had been applied, the switching of Surnames and First names would not have occurred in the eSHA application.

³

13.12.6 DATABASE

- 13.12.6.1 Upgrade the database platform to SQL 2000 and Windows 200 for the following features.
 - (i) On-Line Analytical Processing (OLAP) cubes. This feature facilitates the production of standards reports, so that complex queries that would normally take extensive processing are available instantly. We anticipate that audit reports, including a number of the Data Driven Forensic Investigation (DDFI) tests conducted in the most recent audit, would fall into this category.
 - (ii) User Defined Functions (UDFs) give the programmers the capacity to extend the SQLs built in programming language, making programming quicker, more consistent, less error prone, more reliable and more efficient.
 - (iii) Built in security In our audit, we were dependent on the audit trails, but these were subject to the control of the database administrators (DBAs). The built in security measures of SQL 2000 are beyond the control of any level of user, including the DBAs, increasing the overall level of security considerably.
- 13.12.6.2 **Built in Data Driven Forensic Investigation (DDFI) routines** the database, (using SQL 2000) can be set up to conduct many of the DDFI tests that the audit team performed, on an ongoing basis, turning the expense of the audit into an investment, including:
 - (i) Testing that all persons issued with an identity card are flagged as photographed on the database.
 - (ii) Testing for duplication registrants
 - (iii) Testing that transactions have been processed through the audit trail.
- Normalize database normalization requires that the database is structured so that duplications do not exist in the data. The primary benefits of a database are increased security and the ability to detect and prevent irregularities more efficiently:
 - (i) Addresses there should only be one instance of each address on the database. Effective normalization of address is a complex process beyond the scope of these recommendations.
 - (a) Design database structure to accommodate normalization of addresses within the context of Guyana.
 - (b) Implement controls to ensure that additions (inserts) and alterations (updates) are authorized.
 - (c) Internal audit of changes to verify that new structures accurately represent current data.
 - (d) Use data used for DDFI to verify validity of changes to address data.

(ii) Names

- (a) Design database structure to accommodate normalization of names within the context of Guyana.
- (b) Implement controls to ensure that additions (inserts) and alterations (updates) are authorized
- (c) Internal audit of changes to verify that new structures accurately represent current data.
- (d) Use data used for DDFI to verify validity of changes to names data.
- (iii) Photograph flag the photograph flag should not be a field in the master table. This information should be normalized into a new table, containing the fact that the person was photographed, the date that the photograph was taken and when the identity document was sent to the elector.
- 13.12.6.4 **Data history** the data structures should permit the recording of historical data including:
 - (i) Addresses
 - (ii) Names for electors who gets married or use different aliases

13.12.6.5 Keep database up to date

- (i) Make changes in respect of known errors on the database
- (ii) Determine a strategy that facilitates constant maintenance of the database, including:
- (a) Matching with reliable 3rd party databases
 - (b) Legislating requirement that electors notify GECOM of changes
 - (c) Use database for other purposes that encourage users to keep the OLE up to date e.g. NIS lists, births and deaths register.

13.12.6.6 System security policies

- (i) System documentation GECOM must ensure that there is always proper system documentation supporting the structure of the databases and nay applications that are used within the organization. The documentation includes:
 - (a) Source code documentation
 - (b) Data dictionaries
 - (c) System diagrams
 - (d) Business policies and rules built into the system
 - (e) Source code
 - (f) User manuals
 - (g) Technical manuals

(ii) Password policies:

- (a) Passwords should be changes regularly every 30 days is normal.
- (b) The length should be greater than 7 characters.
- (c) Passwords should be made up of special characters, numbers as well as normal characters
- (d) The sharing of passwords is normally considered to be a dismissible offence.
- (iii) The Triggers* to update audit trail should be audited (to ensure that they have not been switched off)
- (iv) The audit trails should be independently audited on a regularly basis
- (v) Improve server security and the database security regularly by following the Microsoft Developer Network's (MSDN) latest guides on security measures.
- (vi) Establish a development environment, test environment and production environment. Each environment should have its own database. These should be physically separated on the network.
- (vii) The programmer should not have systems administrator and database administrator access to the production environment. Preferable, the systems administrator and the database administrator of the production environment should be different people. The programmer should only have the administrator and database administrator access to the development and test environment, and not in the production environment.
- (viii) Implement change control procedures*. All applications should be source controlled. The migration of the application from the test environment to the production environment should be done by either the systems administrators or the database administrator of the production environment.
- (ix) Implement security at network level, database level and application level. Integrate the users groups at the network level with the user roles in the database and enforce specific security rules at application level.
- (x) Improve the audit trail facilitate. Add update time and last editor to all the main tables and the audit tables.
- (xi) We recommend that GECOM purchases software tools that check, document and monitor all aspects relating to the network and database security including:
 - (a) Users access rights
 - (b) Network protocols and ports in use
 - (c) Monitors and reports hacking attempts and use of unauthorized software designed to hack into the system

65

A trigger is an automated process that is programmed to occur when a specific event takes place.

^{*} Change control procedure is a process whereby the programmer is authorized to make a change to the system, the change is specified in detail, the programming changes are made in the development environment. Once completed, they are transferred to the test environment, where they are thoroughly tested. Once tested is complete, the changes are signed off, and then the changes are transferred to the production environment.

- (d) The use of any other unauthorized software
- (e) Security breaches
- Share database the Official list of Electors (OLE) is almost certainly the most up to date and accurate citizen registry in Guyana at present, but databases of this kind degrade very rapidly unless constantly maintained. There are various government agencies that would benefit substantially if they were permitted to verify the accuracy of their data against the OLE. These systems could then be used in the future as a reliable test for the OLE. For example:
 - (i) National Insurance System (NIS)
 - (ii) National Register of Births and Deaths
- 13.12.8 Must have complete political, managerial and user commitment and support the most common cause of failure of hi-tech solutions is the absence of the commitment or support from any one of these three groups.

13.13 GENERAL RECOMMENDATIONS

- 13.13.1 Address details should be confirmed by electors at regular intervals and consideration should be given as to whether failure to update address details should be subject to sanction.
- Direct access to the database should not be available to third parties, including political parties, as this increases the risk of illegitimate alteration of the data.
- 13.13.3 Triggers to trap errors and identify potential errors
- 13.13.4 Implement On-Line Analytical Processing (OLAP technology (SQL 2000)
- 13.13.5 Implement data mining* technology (SQL 2000)
- 13.13.6 Implement punch and verify* authentication this long standing solution still officers one of the most effective methods of preventing manipulation at a user Level, and effectively eliminate data capture errors.
- 13.13.7 Validate input wherever possible validations ensure that the most common capturing errors can be checked by the system and trapped at the input stage
- 13.13.8 Updating of primary database (OLE) should occur only when the transaction or batch has been authenticated.
- 13.13.9 Batch control system should ensure that all documents are processed
- 13.13.10 Batch control system should ensure that all batches are processed
- 13.13.11 Stakeholders can be provided with data in a raw format (This will prevent a repetition of the problems relating to the application used to review the data) with details including:
 - (i) The rules that determine qualification to vote
 - (ii) The structure of the data

^{*} Data mining is the term used to describe the process of identifying and analyzing valuable trends and patters in the data.

^{*}Punch and verify is a process of double capture, where the two sets of data are compared Electronically and differences are investigated, virtually eliminating punching errors and fraud. *Defined a precise rule (or set of rules) specifying how to solve some problem.

- (iii) Qualifications relating to the data, including:
 - (a) incomplete processing
 - (b) known anomalies in the data
 - (c) algorithms* to determine:
 - Qualified electors
 - Methods of validating data
 - Method to find details relating specific electors
- (iv) We suggest that the national Register of Birth and Deaths be computerized – the National Register is not computerized, and this has a direct impact on the quality of the OLE. Death notifications use name details, and thus with common names, incorrect identification is possible, and is known to occur. The National register is unable to confirm whether a person is dead unless one is able to provide the date of death. The OLE would provide an ideal foundation for the NR database, and this would in turn improve the ability to test the OLE in the future.

13.4 TIMING

- 13.14.1 Planning and implementation well in advance
- 13.14.2 Ongoing database maintenance
- 13.14.3 Implement and follow formal project planning methods

13.5 INTERNATIONAL STERRING COMMITTEE (ISC)

- 13.15.1 Consider the establishment of an international IT steering committee with responsibilities to:
 - (i) comment on proposed strategy changes
 - (ii) notify GECOM of developments that could offer innovative solutions
- 13.15.2 GECOM has significant investment in the technical knowledge that foreign observers and audit team members have acquired and modern communication facilitates cheap and defective advice.

CHAPTER SIX

- 14. OPERATIONS AND LOGISTICS
- 14.1 POLLING STATION SITTING AND ALLOCATION

Concerns were expressed on the issue of polling station sitting and allocation. In particular, it was stated that decisions on the location of Polling Stations were late and that the decisions were poorly communicated. Voters had, in certain cases, difficulty in finding their Polling Stations. Although observation reports do not indicate this as being a substantial problem, it was decided to examine this issue in more detail.

- 14.1.1 PROCESS AND PROCEDURE USED TO PLAN AND EXECUTE POLLING STATIONS SITTING AND ALLOCATION
- 14.1.1.1 CRITERIA USED BY GECOM FOR ALLOCATION OF VOTERS TO POLLING STATIONS.
 - (i) The number of potential voters was the key deciding factor for the allocation of voters to Polling Stations. Each Polling Station was designed to accommodate a maximum of 450 voters. If the voters' lists indicated a larger number of voters in a particular area then further Polling Stations were allocated to ensure that the excess potential voters were accommodated or similar terms.
 - (ii) In case were more than one polling station was needed in an area the stations were, if possible, located in the same building and voters were divided between them alphabetically using their surnames. Poll Clerks were present to direct the voters to the correct Polling Station within the Polling Center.

(iii) The system described above and legal constraints preventing the merger of polling stations (see section 6 (3) of the Representation of the People Act) resulted in some anomalies in that some Polling Stations had a very small number of voters – 145 polling stations had 50 or less registered voters*.

14.1.1.2 CRITERIA USED BY GECOM FOR SITTING OF POLLING STATIONS:

- (i) A form/checklist listing factors that sitting officials should consider when making decisions was used to ensure consistency when gathering and processing information collected on potential sites*. Unfortunately, the forms did not provide guidance on how to prioritize the criteria.
- (ii) Polling Stations were sited to avoid voters having to travel substantial distances and priority was given to Government-owned Buildings and Schools. If such facilities were not available, private houses were to be rented. The landlord was not to be affiliated to a political Party.
- (iii) Political parties were not directly involved in the sitting process but the proposed list of Polling Stations was sent to political parties for their consideration in October/November 2000. In certain cases, the parties objected to particular sitting decisions resulting in some changes being made as late as February 2001.

14.1.1.3 PROCEDURES USED BY GECOM TO INFORM VOTERS ON WHERE TO VOTE

- (i) GECOM attempted to ensure that voters fetched their ID card from the same venue that they would finally vote. When each person collected their ID card, they should have been given a pamphlet indicating/confirming the venue*.
- (ii) In addition, advertisements identifying the location of polling stations were placed in newspapers fourteen days before election-day.
- (iii) The official voters' lists were published at the Polling Stations 14 days ahead of the election giving information on the voters in that Polling Station.

69

^{*} In fact, 12 Polling Stations had one registered voter and 25 polling stations had 2 registered voters.

^{*} Criteria included: Government or private owned, lighting, exits and entrances, presence of toilet facilities

^{*}Interviews and other observer reports indicate that this was not, in fact, the case.

14.1.2 ASSESSMENT OF THE SUITABILITY OF THE PROCESS

- 14.1.2.1 The existence of a number of extremely small Polling Stations must be regarded as a serious flaw. In addition to creating unnecessary administrative and logistical problems it is against international practice since the small number of voters is not conducive to maintaining the basic democratic principle of the secrecy of the vote.
- Apart from the above, the procedures detailed by GECOM appear to be consistent with international standards. It should however be noted that, in a later election where no ID cards will be given out, GECOM will have to ensure that alternative appropriate measures are taken to inform voters of the sitting of polling stations.

14.1.3 IDENTIFICATION OF ISSUES

- 14.1.3.1 Procedures are generally acceptable. Measures, including legal reforms, should be taken to ensure the secrecy of the vote and the avoidance of Polling Stations with very few potential voters must be prevented.
- There were problems in relation to implementing the pamphlet system and discussion s with staff, include returning Officers (ROs) and Deputy Returning Officers (DROs) working on Polling Day indicate that pamphlets were only handed out at a few sites during ID collection periods. Instead, there was reliance on media.
- 14.1.3.3 Observer reports and interviews server to identify confusion within Polling Centers (more than one station in a building or site) as a key are of breakdown. Dividing voters alphabetically by surname between several Polling Stations in a common location is theoretically simple, but difficult to implement. Both the concept and the distinctions (alphabetical range of advertisements in the newspapers and complementary, visible signs within polling centers. In addition, extra staff must be present at the Polling Centers to assist the voters.

14.1.4 THE EXTENT AND GEOGRAPHIC LOCATION OF THE PROBLEM

14.1.4.1 The problems with the sitting of polling stations occurred all over Guyana.

14.1.5 RECOMMENDATIONS AN DOPERATIONAL PLANNING

- 14.1.5.1 Review the legal framework with the objective of identifying and removing legal constraints currently preventing the merger of smaller, sub-economic stations. This should be preceded by the setting of a minimum number of potential voters per station accompanied by a set of criteria allowing for exceptions where justified.
- 14.1.5.2 Where necessary, based on updated rolls and the experience of the 2001 Elections, take steps to ensure the merger of small stations.

14.1.5.3 New methods to ensure smooth voter flow within Polling Centers should be designated and complemented with information integrated into the general electoral communication strategy. Operational planning for the next election should include an information plan, covering all aspects of the issue of directing voters to the Polling Stations.

14.2 OPERATIONAL AND CONTINGENCY PLANNING

Operational planning is aimed at ensuring the efficient, cost effective and timeous procurement and deployment of human and material resources to meet the needs and sequence of the electoral process.

Contingency planning is a sub-set of operational of planning and entails the development of fall back processes and plans in the event that critical elements of the operational plan fail or external factors/events/actions prevent them from being carried out.

The administration, movement, storing use and return of all non-sensitive and sensitive equipment necessary for polling is a critical component of operational planning. Another vital element is the establishment of reliable and secure communication networks to facilitate timeous, accurate and confidential information sharing and reporting.

This section of the report focuses on the results of investigations into allegations associated with the distribution of materials and communication networks supporting the transmission of results and other forms of reporting.

14.2.1 PROCESSES AND PROCEDURES USED TO DEVELOP OPERATIONAL AND CONTINGENCY PLANNING

- 14.2.1.1 Contingency planning requires a systematic review of the operation plan against a set of possible internal and external events and actions that might lead to a breakdown. Examples of areas where contingency planning should have taken place include:
 - (i) Inadequate supply of ballots at a Polling Station;
 - (ii) Shortages of sensitive election materials such as forms and indelible ink;
 - (iii) Procedures and decision-making framework during emergencies that might entail the suspension or termination of voting due to safety concerns or a need to prevent prejudice to a political party or the enactment of electoral fraud;
 - (iv) Communication system failures;
 - (v) The destruction of one or more polling stations through sabotage or natural disasters shortly before or on Election Day; and
 - (vi) Technical breakdowns in central systems used to capture reporting information and calculate seat allocations.

- 14.2.1.2 The following methodology should be used to plan for contingencies:
 - (i) All possible areas of contingency planning should be listed;
 - (ii) A risk assessment should be combined with an impact assessment to prioritize areas requiring contingency planning i.e. the higher the risk and the greater the possible impact on the smooth running of the election, the greater the need to contingency plan.
 - (iii) Contingency plans should be developed to a greater or lesser degree depending on the priority with detail plan being developed for high risk/high impact issues.
 - (iv) Access rights, decision-making authority and procedural responsibility should be carefully allocated per plan.
- Both non sensitive and sensitive materials were delivered according to plan through the chain of command-returning Officer (RO), Deputy Returning Officer (DRO) and the Presiding Officer responsible at each Polling Station. The material was delivered to the regions in such a way that those furthest from Georgetown received their supplies first. The sensitive material (ballot boxes, voter's lists, addendum, MRC's) were distributed in containers/canisters to subdivisions level. Presiding Officers prepared the equipment for their Polling Station at the Returning Officer's office at a locally arranged time (generally the weekend of 17 18 March 2001). Presiding Officers, accompanied by members of the Police, collected the equipment from the DRO's in the early hours of 19 March 2001.
- 14.2.1.4 Communication procedures based on mobile phones and VHF radio were put in place to enable Presiding Officers (Polling Stations) to communicate with DRO's and GECOM headquarters.
- 14.2.1.5 Operation planning did not include systematic contingency planning.

14.2.2 THE SUITABILITY OF THE PROCESS AND PROCEDURES USED

- The operational plan for delivery and collection of non-sensitive and sensitive material was adequate for the task and relatively well co-ordinated.
- The use of a sophisticated, nation-wide communication system, especially one relying on mobile phones, requires substantial preparation in certain areas if it is to work reliably and securely.
 - (i) Sufficient time should be allocated to distribute the equipment and train the staff who are supposed to use it.
 - (ii) Equipment must be available to the degree required to accomplish the task.
 - (iii) Equipment, and the communication network, must be thoroughly tested before Election Day.

14.2.3 IDENTIFICATION OF PROBLEMS AREAS

- The communication system in place was severely hampered by mobile phones arriving very later and in insufficient number. Despite limited instructions, some PO's and DRO's did not manage to use the network but in many cases experienced severe network traffic or coverage 'gaps'.
- The lack of a contingency plan for communication caused a situation where the officials in question had nothing to fall back on when the phone communications system did not work. They therefore had to create their own means of communication. This had a major impact on the reporting system and will be further discussed under that heading.

14.2.4 IMPACT OF THE DESCRIBED PROBLEMS

- 14.2.4.1 The partial breakdown in the communication system caused a substantial delay in the reports of preliminary results. It also meant that the polling stations lacked proper communication during Election Day. This situation would have been even more harmful if an emergency situation had developed and there was no method of communication available to address it.
- 14.2.5.3 Contingency planning should be a required element of operational planning in respect of high risk and high impact areas. With common sense and foresight most eventualities can be overcome at little extra cost.
- 14.2.5.2 Communication is one obvious high risk-high impact area and it is imperative that alternative means of reporting with adjusted deadlines are worked out in advance. Similarly, it is imperative to plan for a breakdown in the software set up to receive and process the results once they arrive from the field.
- The shortcomings described above were, in the opinion of the Audit Team primarily caused by lack of time for proper planning and, to a lesser degree, lack of experience. In this regard, some responsibility must also fall on the international advisors and consultants who suggested high tech solutions to problems with insufficient time for effective implementation.
- 14.2.5.4 Adjustments to the means of communication between Polling Stations, DROs, ROs, and the CEO will need to take into account the time available and the technical and economic viability of the equipment as well as the practical difficulties associated with the:
 - (i) Delivery of technical equipment to be used during elections in time for training and tests; and the
 - (ii) Proper training of all staff involved in the process to make sure they understand their task at a procedural and operational level.

- 14.2.5.5 Full-scale tests of all systems should be performed well before the elections to ensure sufficient time is available to correct deficiencies.
- 14.2.5.6 In the context of the Elections Operations plan it is necessary to develop detailed plans to ensure:
 - (i) Technical equipment and technical specifications necessary to make sure communications work through all levels of command
 - (ii) Procedures to follow for communication relation to routine reports at prescribed time during elections day; security issues; and reports of results
 - (iii) Prepare training of staff on communications.

14.3 THE COMPILATION AN DCOUNTIGN OF VOTES

14.3.1 THE PROCESS AND PROCEDURE USED FOR THE COUNTING AND COMPILATION OF VOTES

- 14.3.1.1 The Polling Station closes and the Presiding Officer briefs the persons entitled to be present in the Polling Station during the count.
- 14.3.1.2 The ballot box is opened and the contents emptied on a table.
- 14.3.1.3 The ballot papers are counted in batches of 25 and the ballots for the General election are separated form the ballots for Regional elections.
- 14.3.1.4 The batches of 25 are maintained for both sets of ballots.
- 14.3.1.5 After a recount each ballot is unfolded and the name of the party is called out.
- 14.3.1.6 The front of each ballot and the official stamp on the back is displayed
- 14.3.1.7 The votes per party are recorded on the Tally Sheet (marked as 'Form 23A').
- 14.3.1.8 The presiding Officer completes Form 23A, statement of Poll, giving the votes for each list of candidates, spoiled ballots, rejected ballots, destroyed ballots and the grand total of voters.
- 14.3.1.9 The Presiding Officer prepares and certifies a sufficient number of copies of the form for both national and regional ballots, requests witnesses to the count to countersign and distributes to all authorized persons present. The Presiding Officer may have to fill in 3 forms by hand if many political representatives are present.
- 14.3.1.10 A copy of Form 23A is posted outside the Polling Station.
- 14.3.1.11 Based on Form 23A, one for the general election and one for the regional election, the Presiding Officer forwards the figures to the DRO per mobile phone, radio or other means of communication decided based on the circumstances.
- The DRO writes by hand the figures for each reported Polling Station in a "Summary of Results" form covering all Polling Stations in the subdivision. When a certain number of polling stations are gathered, the DRO is supposed to relay the figures to the RO by mobile phone, radio or other means of communication based on the circumstances.
- 14.3.1.13 Results arrive in batches from the RO, mainly by fax and phone.
- 14.3.1.14 When the results arrive, they are entered into the newly designed computerized results system.

- 14.3.1.15 When all the results are there, a "preliminary result" can be announced.
- 14.3.1.16 When the DO has the figures from the Polling Stations they must be sent to the CEO in Georgetown, in most cases by fax.
- 14.3.1.17 The Form 23 A, Statement of Poll, is delivered up the chain to the CEO's office.
- 14.3.1.18 The results are checked and verified against the preliminary results.
- 14.3.1.19 When all final results have been entered, the results and the number of seats won per party can be calculated.
- 14.3.1.20 At the CEOs office, the figures are entered into computer using software specifically designed for the compilation results and seat allocation.
- The Elections Commission publicly declares the results and they are published in the Official Gazette. This should be done "as soon as practicable" (See Representation of the People Act., Chapter 1:03 section 99).

14.3.2 ASSESSMENT OF SUITABILITY OF THE PROCESS

- 14.3.2.1 The procedures for the counting process itself follows international practice and has the necessary security measures built in to make it secure.
- The process at the CEO's office for handling preliminary results and the processes and procedures leading to the announcement of the final results seems to be a reasonable compromise between the need to announce results fast and the need for sufficient lead-time to avoid mistakes. The problems that occurred do not seem to be related to the process it self but rather relate to the transmission of results and the implementation of the process.
- The Form 23 A, Statement of Polls is finalized and signed by everyone entitled to sign at the Polling Station. If an error is discovered in the addition of votes per party, the law prevents the RO from changing the statement of poll, even if it contains obvious mistakes. An addendum in the law is recommended to make it possible for the RO to make such changes as may be necessary in the presence of a political representatives at his/her level.
- 14.3.2.4 A major flaw with the plan for reporting and transmission of results is that it is built on mobile phones in a context where infrastructure and circumstances, discussed above, make it unlikely that the plan will work.
- Even if the communication system does work, the results are prone to error. This is because the large amount of figures (due to the number of parties contesting) multiplied by the number of Polling Stations reporting by phone, and transmitted through two levels and written down by hand, is likely to result in a lot of errors.

14.3.3 IDENTIFICATION OF PROBLEMS AREAS

- 14.3.3.1 The communication breakdown at the majority of Polling Stations caused problems in the transfer of preliminary results. In many cases, these figures were delivered together with the election material early the next morning.
- The two layers of oral transmission, combined with Communication breakdowns, caused serious delays and errors in the reported figures. By 08.00 on the morning of 20 March 2001 GECOM had only announced approximately one fifth of the results.
- The delays and errors caused a breakdown in the confidence of the public in the system for compilation of results and seat allocation at GECOM. Incorrect data capture at GECOM due to fatigue, combined with the lack of public confidence in the system, caused GECOM to abandon the computer results system and move to a manual count.

14.3.4 EXTENT AND GEOGRAPHIC LOCATION OF THE PROBLEMS

No statistical analysis has been done on how the problems were distributed over the country. However, it is reasonably to think that the problems were nationwide. Region four, being the largest in terms of electorate, experienced a relatively greater degree of problems.

14.3.5 THE IMPACT OF THE PROBLEMS ON THE ACHIEVEMENT OF THE TASKS

- 14.3.5.1 Clearly the late input of preliminary results, and the errors linked to verbal transmittance, caused a breakdown in the production of a preliminary result that was supposed to be announced only hours after Election Day. A full national preliminary result was never declared. The process became mixed up in the production of final results through the form Statement of polls, and when the manual tabulation took over from the computerized system, the focus changed to the production of final results.
- 14.3.5.2 If a system of preliminary reporting is used, it is imperative that the preliminary results are published when promised. If that does not happen, tensions and suspicions are created, particularly if the political situation in the country is tense.
- 14.3.5.3 If it is decided to continue with the system of preliminary reporting, then it is important to identify and use means of communication that will work under the conditions in the areas in question.
- More reliable preliminary reporting may mean a delay, but as long as the timeframe is announced in advanced the negative factors are limited.

14.3.5.5 The final result was not seriously delayed. The problems were linked to the compromised system for delivery of a preliminary result.

14.4 CONTEXTUAL FRAMEWORK AND PROCEDURAL IMPROVEMENT

14.4.1 RECOMMENDATIONS

- 14.4.1.1 Any change in the relationship between the preliminary report of the result and the publication of final elections in the Official Gazette requires statutory amendments. The Representation of the People's Act should be amended to enable the ROs to make changes in the Form Statement of Poll signed at the polling stations, if obvious mistakes in the tabulation have been made. This should be done in the presence of political representatives.
- 14.4.1.2 Consideration needs to be given to whether the risks associated with the preliminary result outweigh the benefits, especially since a final result can be produced just four days after Election Day.
- 14.4.1.3 If there is a political need for a fast preliminary result, then the following is recommended:
 - (i) Avoid oral transmission of results. Errors are bound to occur.
 - (ii) It is imperative that the communication set up between Polling Stations and CEO's office is tested. Time must be available for contingency planning at all levels.
 - (iii) It should be made clear to the public to the public advance that the concept of a preliminary result means that may be subject to change.
 - (iv) Test the computerized result system with several sets of figures covering all possible outcomes of the election.
 - (v) Have a manual system on stand by. Use that system randomly to run a manual verification of the results system.
 - (vi) Avoid oral transmission of preliminary results. Use fax (where possible) road-ink, and in certain instances where distances make it necessary radio (VHF).
 - (vii) If radio must be used, try to develop specific specify safety measures, a system of reporting the same figures twice may be considered.
- 14.4.1.4 In the context of the Elections Operations plan it is necessary to develop detailed plans for:
 - (i) When to report. A plan should be developed giving standard times for reporting, for example after the opening of the Polling Stations, at certain hours during the day, at closing, when counting is finished (report of the count), and on specific occasion. For example, if specific instructions are needed or if a problem related to security occur.

- (ii) Who to report to. Under normal circumstances reports are going to the next level of command, form the Presiding Officers to the DROs. But it may be decided, for example, that issues related to security should be reported through a separate chain of command, to a Security Officer linked to police or military structures.
- (iii) **How to report**. The operation plan must give information on what mean of communication should be used in different parts of the country.

CHAPTER SEVEN

15. HUMAN RESOURCES AND TRAINING

15.1 INTRODUCTION

- 15.1.1 Elections involve two types of people the people who exercise their democratic rights and the people who work to enable them to do so. Regardless of the degree of sophistication of systems and the importance of information technology in the modern election, people can and do influence processes for better or for worse. Recruiting, selecting, appointing, training, managing and rewarding these people is therefore a crucial aspect of any successful election process.
- 15.1.2 The human resources element of an election becomes even more important within a divided society where an election also has been 'seen' to be successful by the losing parties. If the electorate, or political parties that represent it, are suspicious or fearful of the individual electoral officials they interact with, it tends to cast a clod over the entire election and, ultimately, the outcome itself.
- 15.1.3 This audit and systems review regarding human resources comprise two tasks auditing those aspect of the human resources function that have been identified by political parties for external scrutiny, and making recommendations regarding the broader system within which these aspects operate.

15.2 HUMAN RESOURCE RELATED ALLEGATIONS

- 15.2.1 The vast bulk of the human resource related concerns and allegations are focused on, or are a consequence of, one or more aspects of the recruitment and appointment of temporary staff. When interacting with the political parties and discussing these allegations and concerns, there was agreement that their real interest was to understand what happened during recruitment and to ensure that the same problems did not occur in the future.
- 15.2.2 All the parties accepted that concerns and allegations regarding training, competency, staffing levels and management were secondary to, and generally flowed recruitment issue. For example, competency issues of polling staff would have been prevented with a better recruitment and appointing process.

- 15.2.3 Due to these discussions with the parties, this section of the report focuses in detail on recruitment and only superficially covers the other areas listed in the Assessment Mission document.
- 15.2.4 This Audit needs to establish whether the problems that occurred were due to systems failure, human error or deliberate acts/omissions. Without exception and despite being asked directly, the parties, in explaining their concerns, however, serious, *did not or could not show* how the issue prejudiced them in particular nor how possible prejudice would have impacted on the results in a material way:
 - (i) Throughout the discussions with political parties regarding their concerns, no direct accusations were made in regard to misconduct by polling station staff (which may have been a consequence of their potential/alleged bias).
 - (ii) Where mistakes of polling staff were detailed by parties, they were not able to point to *male fides* or how they would have been prejudiced in particular.
 - (iii) The human resource related allegations are all vicarious and of a 'systems' nature once removed from any possible prejudice that may have related. For example, a party expresses concern that the recruitment and selection process resulted in the appointment of persons who are either less competent than they should be or have a bias for or antagonism against one or other party. This concern, however, valid in respect of general transparency issues and the party's acceptance of the process, only becomes important in regard to the acceptance of the results if something prejudicial can be shown to have occurred as a consequence of the concern i.e. the electoral staff in question committed an act of misconduct.
- In fact, most of the human resource related allegations were already registered before Election Day. This, combined with the absence of direct accusations regarding the conduct of polling day staff on the day, seems to suggest that these allegations should examined in order to improve systems rather than as a part of an investigation into deliberate abuse. Analyzed on their own, regardless of their merit, they do not constitute a reason for a party to not accept the results of the election.

15.3 RECRUITMENT AND APPOINTMENT OF STAFF

15.3.1 INTRODUCTION

The recruitment and appointment process for both permanent and temporary electoral staff was not governed by nay formal policy or procedure. In the absence of such a policy it is necessary to:

- 15.3.1.1 Examine the legal basis for the recruitment and appointment process and, combined with information gleaned form interviews and documents, infer policy; and
- Detail the recruitment and appointment process form its description by GECOM officials, political parties and Returning Officers and compare it to the inferred policy as well as best practice.

15.3.2 LEGAL FRAMEWORK AND POLICY FRAMEWORK

15.3.2.1 POLICY REGARDING THE APPOINTMENT OF ELECTORAL STAFF

- (i) The Election Laws (Amendment) Act No 15 of 2000 was passes by the National Assembly on 23 November, 2000 as the overriding Act to cover the conduct of General and Regional Elections and provides the legal authority for the recruitment and appointment process. The Act provides for the establishment of a permanent secretariat to the Commission in order to "ensure institutional memory and capacity". The same Act in section 17 (2) provides that:
 - "the Commission shall be responsible for appointment on such terms and as may be determined by the Commission such permanent and temporary staff to the offices of the Commission as are considered by the Commission to be necessary for the discharge of its functions under the Constitution and any written law".
- (ii) This section both authorized the Commission to recruit and appoint all (permanent and temporary) electoral staff and, in keeping with the autonomous nature of the Commission itself, effectively removes these staff from the realm of the Public Service by authorizing the Commission to determine their terms and conditions of employment.
- (iii) Thus the Commission is directly responsible for the appointment of all staff rather than being responsible for the appointment of senior officials who then take responsibility for the appointment process of staff failing under their responsibility. This important distinction was adhered to throughout the recruitment and appointment process as every appointment was either made directly by the Commission or the lists of persons for appointment developed by officials were amended and confirmed by the Commission. This is further borne out by GECOM officials with human resource responsibilities interpreting their role only as "formalizing" and making practical Commission decisions but taking no

responsibility for their substantive merits*. In other words the responsibility for all appointments, both by law and the practical interpretation thereof by officials, rests with the Commissioners themselves.

(iv) In addition, the Commission's actions when appointing staff were governed by their general constitutional obligation under s162 (1) b of the Constitution to:

"act with impartiality and fairness in the execution of its duties"

- (v) Finally, the Commission made numerous public statements to the effect that it was committed to maximum transparency and accountability. It can be assumed that this commitment was applicable in respect of their actions regarding recruitment and appointment of staff**.
- (vi) In summary, the commission was directly responsible for the recruitment and appointment of all staff and needed to pursue this responsibility impartially, fairly and with maximum transparency and accountability.
- (vii) It is important to note, both in respect of the related allegations and statements/recommendations made in reports from observer missions, with respect to the recruitment and appointment process there was no direct/specific legal or policy obligation for the Commission to:
 - (a) adopt any specific process of recruitment;
 - (b) develop one or more forms of evaluation;
 - (c) make decisions based on one or more sets of criteria;
 - (d) hire, in the main, from the public service;
 - (e) have due regard to 'regard sensitivity' and or 'equal opportunities';
 - (f) involve political parties, in the form of scrutineers, in any ways;

15.3.3 CATEGORIES OF EMPLOYEES AND PERMISSIBLE ORIGIN

- 15.3.3.1 The Commission appointed three categories of employees:
 - (a) GECOM staff (permanent and temporary)
 - (b) Registration Staff spanning two phases claims and objections and elections (temporary)
 - (c) Elections Field Staff (temporary)

^{*} This interpretation was strongly and consistently expressed during interviews with Human Resource Department officials is borne out by the introduction to the Human resource department "Elections report" submitted to the Commission in April 2001 where it states the chief function of the Department as "formalizing all appointments of staff both permanent and temporary".

^{*} This backed up by a reference in the minutes of the statutory GECOM meeting held on Monday 12 February 2001 where the Commission decided that it would "seek to ensure there was no political bias or discriminatory practices in the selection of district's staff".

The majority of serious allegations regarding recruitment related to the employment of temporary staff and in particular, election field staff. As such, and by agreement with the political parties who provided information, this report will focus on the recruitment of temporary election field staff and only deal with other issues where necessary.

Category	Permanent	Temporary	Further/Extra Staff
GECOM	104	359	No info*
Registration (Claims		1015	No info**
and Objections)			
Registration		331	No info***
(Elections)			
Elections Staff (Polling		8908	
Day)			
Totals	104	10613	

Extra staff were employed as *encoders to capture photographs and filing clerks re master Registration Cards; **distribution of National Identification Cards; and *** staff to assist returning Officers with Administration

Source: GECOM Human resource Department 'Elections report April 2001'

- 15.3.3.3 Sections 17 (3) a-c of the Election Laws (Amendment) Act No. 15 of 2000 details the three categories of persons from which the Commission is entitled to employ staff. The Commission's options under these sections include:
 - (i) Seconding, by agreement with the relevant department, a person currently in the public service:
 - (ii) Appointing a persons who had resigned and/or retired from the public service; and
 - (iii) Appointing a "fit and proper person" who is not a public officer.
- The last category of permissible persons effectively enables the Commission to appointment any person whether or not they have public service experience. This represented an important break from the past, since under s15 of the Elections Laws (Amendment) Act No 12 of 1996 the previous (temporary) Elections Commission was much constrained regarding its choice of staff*. Under s15 the Commission was only entitled to "designate" current or ex-public servants' employees for a temporary period, thus being limited to public service secondees and the temporary employment of persons who had resigned or retired from public service.

* This section was specifically repealed by Election Laws (Amendment) Act No. 9 of 2000 passed by the National Assembly on 20 July 2000. The current Commission operated under the terms of this law until the passing of Election Law (Amendment) Act No. 15 of 2000.

^{*} Although the intention was to permanently transfer these staff members to the Commission upon formation it was not possible to do so until legal provision had been made in respect of their pension's rights and benefits which they had earned while in the public service. Provision in this regard was only made after the election thus allowing the Commission to transfer the staff permanent and make changes to their terms and conditions.

15.3.4 RECRUITMENT AND APPOINTEMNT CONTEXT

Three contextual issues merit mention:

- Time pressures: The Commission was recruiting and appointing under very serious time pressure, made even more extreme by virtue of the fact that the Commission was directly involved in the process and the involvement of political party representatives delayed decisions. It is important to remember that most of the recruitment design was completed at a time when it was still anticipated that the election would take place on the 19th of January 2001 and there was intense pressure to appoint staff to begin work.
- 15.3.4.2 **New process, new people:** The electoral legislative and the processes it provided for were new, and finality on many sections thereof was only reached at a late stage of the process. This meant that the understanding of what type of persons would be required, how many of these persons would be required and for how long, was uncertain; making recruitment very difficult.
- New institution, old regulatory framework and approach: The Commission, in its permanent form, was created by laws as a new institution yet inherited staff, policy framework and attitudinal approaches from the public service. All staff in working for the National records Center within the Department of Home Affairs were seconded to the authority of the Commission*. While consolidating experience and providing immediate access to skills, the process also constrained the Commission from making all the appointments it may have wanted to.

15.3.5 PROCESS AND PROCEDURE USED TO PLAN AND EXECUTE REQUIRED ACTIVITIES

Process Steps Followed to recruit and Appoint Electoral Staff			
Permanent Staff	Temporary Staff (Phase 1 & 11)		
Advertise Positions	Advertise Positions		
Receive Applications until Closing Date	Distribute & Receive Application until Closing Date		
Commission Shortlists Applications	Sort Applications and Distribute to Regions		
Commission Invites Short-listed Candidates for Interviews and	Registrants acknowledge receipt of Application and invite		
sends out letters of Regret	Applicant to Training Session		
Commission Interviews Short-listed Candidates	Applicants Attend Training		
Commission Selects	Applicants Evaluated and Scored		
Commission Makes Officer of Employment to Successful	Evaluation results made available to Regions		
Interviewee			
Successful interviewee accepts/rejects the offer	Regions select Preliminary List		
Letter of appointment is drawn up	Regions compiled list and submit to GECOM		
Letters of regret are sent to unsuccessful interviewees	GECOM Sub-committee reviews regional staff lists and submits		
	to Chief Scrutineers		
	Form for Regions		
	Regions Distribute Appointment letters/oaths of office		
	Successful applicant accepts/rejects officer		

As mentioned above, the major concerns raised and allegations made by the Political Parties relate to the recruitment of temporary, non-central employees, and as such, the heading that follow will not go into details regarding permanent employees.

15.3.6 SUITABILITY OF THE PROCESS AND PROCEDURES USED TO ACCOMPLISH THE TASK/S

15.3.6.1 SYSTEM RATIONALE

- (i) Although costly, complicated and bureaucratic, the recruitment and appointment process and procedures did have a logical and rational base. The Commission devised a system under pressure that was a mixture of public service tradition, an attempt at uncovering and promoting merit and a desire to ensure transparency and avoid political criticism. In the final event, it was not an unqualified success in producing a merit based outcome and it was made the butt of substantial, and often unfair, political attack.
- (ii) There are four main aspects of the recruitment and appointment process that, in hindsight, were less than ideal:
 - (a) Training all applicants and using scoring as basis for selection While the motivation for training and testing so many people and attempting to use the scores as the primary basis for selection may have been well intentioned, the omission of a screening and/or shortlisting process to provide a smaller number of persons for training and evaluation was unfortunate. Screening and shortlisting would have eased the pressure on the recruitment process and training system, and costs and time would have been saved. However, in fairness to the designers, the inclusion of a screening stage would also have provided a further opportunity for a political suspicion and consequent interference exactly what the scoring system was aimed at reducing.
 - (b) Selection Criteria Assuming the rationale described above, the selection criteria should either have been limited to scores, or should have been formally extended and a 'weighting' system implemented to provide for consistency. Scores would then be one 'weighted' aspect of a larger set of formal criteria. No other criteria were explicitly stated but public service tradition, and logic 'experience' as a further factor to be looked at when selecting. Furthermost, with the ever-present threat of political objections and the importance of staff being seen as impartial, selectors needed to ensure that 'visible 'political activists were not selected. Thus the three criteria of scores, 'experience' and low political profiles were centrally promoted as a *de facto* basis fro regional selection.

However, in the absence of clearly stated criteria and a well-designed weighting system, it is not surprising that inconsistent approaches were taken. Interviews with regional staff involved in selection indicate that many other criteria were taken into account including but not limited to*:

^{*} Although all the Returning officers agreed that they had used a number of criteria in making their selection decisions, these 'additional'/'alternative' criteria were specifically generated from discussions with only two returning Officers. It can be assumed that the list could be extended if all returning Officers were questioned directly.

- 'maturity' (ability to manage and/or handle pressure);
- Leadership and team-building capacity;
- Direct experience (good or bad e.g. not signing a statement of poll in last election) of previous elections
- Personal knowledge of individuals regarding reliability and commitment:
- Community standing;
- Observations during training and DRO preference;
- Ethnic and gender mix of list;
- Local knowledge of community and conditions;
- Proximity to stations;
- Willingness to take on responsibility (when choosing exact position for appointment);
- Relationships and family links: and
- Whether or not the person was on the Preliminary Voters List.

All of these criteria are reasonable and had a set list of criteria been produced would, in all likelihood, have been included. The problems are that a set list of criteria was not agreed to and did not form part of a broader recruitment policy. This means that the criteria were used to different degrees in different ways and with different emphasis and there are obvious concerns regarding consistency of application that might have led unfairness or the best people not being chosen.

- (c) Commission-driven, Centralized system. The recruitment and appointment process was centrally controlled and regionally implemented. The control was necessary in that the process was Commission driven and every single appointment required Commission confirmation. A combination of factors serves to explain this failure to delegate:
 - A desire for consistency and uniformity:
 - A literal interpretation of the enabling legislation and the overall executive role played by the Commission in directing the secretariat;
 - A lack of trusted capacity/high level skills within he secretariat that would have allowed the Commission to delegate further;
 - An understandable desire to appear directly accountable; and
 - The desire of Commissioners to be party to the selection process

Even with sufficient time and political goodwill, this key design aspect of the process was always going to be difficult. Given the context of the recruitment process, it is a credit to the Chairman of the Commission that any appointment took place at all. (d) Public service Legacy – The influence of the standard public service approach to recruitment was evident throughout the process. Recruitment within the 'career-driven' public service is indivisible from 'promotion' and only takes place externally when it is adjudged that there is no suitable internal candidate with the skills for the job. This reliance on internal 'experience' clashed with the expectations generated by the creation of a newly created permanent elections structure* and may have contributed to an unfortunate view that the process was a farce and motivated only by the desire to be seen to be transparent. Another example of the influence of public service tradition lies in the application process – if there was no intention of screening prior to training then allocations could have been left out completely. Advertisements indicating the positions available, the process to follow and the dates of training could have replaced applications and interested persons hoping to be trained simply could have submitted their names in relation to a convenient date. This would have facilitated planning value*. Yet despite this obvious logic and the work and risks associated with it the process began with 'applications' because all public service recruitment processes do*.

15.3.6.2 POLTICAL INTERFERENCE AND SYSTEM DESIGN

- (i) Essentially the Commission should have chosen between driving the recruitment and appointment process internally and relying on the political oversight of parties and its reputation for impartially to legitimize the oversight of parties and its reputation for impartially to legitimize the outcome, or developing an entirely political process that would have further institutionalized party involvement. In other words the Commission could have:
- (a) Conducted the recruitment process transparently but only allowed the political parties to oversee/observe the process rather than get directly involved in the selection; or
- (b) Succumbed to the inevitability of the process being political. The behaviour of the parties in objecting to so many of the temporary staff selected by the Commission and attempting to influence the Commission to hire people that they put forward suggests that, short of getting their own way, they would have criticized any process developed by the Commission. If this approach and behaviour was to be expected then the Commission would have been better served opting for a simpler process whereby applications were sought and then political parties were allowed

^{*} The recently adopted (post-election) terms and conditions of employment for GECOM staff still bear a close resemblance to public service rules.

^{*} Applications would only have been valuable if they were to be used to screen in order to have a smaller group train.

^{*} Note the similarity of the processes to select permanent (based on public service rules) and temporary staff under section 2.3 above despite the substantial differences associated with them.

to haggle over the composition of Registration and Polling teams before sending the agreed persons for training. In this was the process would have been seen as the political process it ended up being, and only training those persons who were acceptable to the parties would have saved money.

(c) Instead the Commission chose a middle road that relied, in hindsight unwisely, on a degree of maturity not exhibited by the political parties and ended up with the "worst of both worlds" – a complex recruitment process allowing for large scale intervention by political parties without the concomitant responsibilities**.

15.3.7 IDENTIFICATION OF SPECIFIC PROBLEM

An analysis of problems and related allegations concerning the recruitment and appointment of temporary staff (unless stated otherwise, the following table relates to both phases of the election).

* The guid pro quo of institutionalized political party involvement should be their preparedness to accept the consequences of their actions – particularly in respect to the meeting of deadlines.

88

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Recruitment & Appointed Step	Process Components	Related Allegations by Polling Parties	Audit Concerns
Advertise Positions Receive applications up until closing date of Advert	 Compile Role Profile and Job Description and specification (see manuals) Decide relevant qualifications and experience required Draft Advert Place Advert in two daily newspapers and release to TV stations Distribute applications forms to interested persons Central and Regions provide for applications to be received, logged, secured Central categories for future distribution to regions 	 Applications given out to interested persons after closing date (central and region 4) Written confirmation of application never sent or sent too late to act upon 	 The process of receiving the applications could tighter to ensure that none are lost and closing date enforced Applications for a region could be sent to region or lodged at GECOM
Sort Applications and Distribute to Regions	Central transfers regional batches to regions	Written confirmation of application never sent or sent too later to act upon	See above
Regions acknowledge receipt of application to Training Session	 Regions to consolidate new batches from Central with those applications already collected directly Regions to generate letters of confirmation and invitations to attend training that correspond with log of applications received Regions to be in a position to handle inquires generated from the receipt of the letters or non-receipt of letters Regions to ensure that letters are sent out timorously 	Written confirmation of application never sent or sent too late to act upon Failure to send confirmation and invitation to training was selective (i.e. deliberate – 'selective bureaucratic control') Regions did not handle inquires re training	It is unclear whether there was intended to be basic/initial screening applications or whether all applicants were to be invited to training – some regions may have conducted some basic screening and thus not invited all applicants. If so, it is unclear what criteria they used. Some applicants did not receive letters thus creating suspicions of discriminatory practices Some applicants received letters too late to act upon them thus creating suspicion of being deliberately marginalized. Applicants who did received letters had no choice of training no little time to make alternative arrangements
Applicants attend Training	 Plan for training (material, trainers and facilitates) Conduct training for applicants 	Applicants who did not receive letters or receive them too late could not attend training and thus were effectively shut out of the recruitment process	There was no way of knowing how many applicants who were sent letters would attend training. This is very problematic regarding planning.
Applicants Evaluated and Scored	 Applicants complete training course and write and complete other forms of evaluation Tests are marked by applicant number and not names to avoid possible identification and discrimination by NCERD. 	Testing format favoured people who had recently completed schooling Testing format favoured those who received manuals on time – this is particularly important re the scores in Region 4 since these trainees received their manuals last and had	Testing would have been more effective if there had been aninitial screening exercise Testing would have been better received had applicants understood the role it would play in their selection/rejection i.e. one of a number of factors Unclear whether all regions applied the non-written evaluation consistently (Some RO's and registrars seemed

		less time to prepare for the test.	to think they were entitled to select.
Evaluation Results submitted to Regions	NCERD submits result by fax to Regions in sequence of high to low scores.		Overall score was used to rank applicants which in some cases entailed applicants being very good at one section and very bad at another – no minimum score on either side was required.
Regions select preliminary list of temporary staff	Regions evaluate list of score results and decide on which applicants to choose to as registration (phase 1) or polling (phase 2) staff.	Many people too young to do the job/be respected were chosen as Presiding Officers simply on the basis of being able to complete the tests effectively Applicants with lower marks were selected over applicants with high marks using the 'excuse' of them having 'experience' Civil servants were chosen over more competent civilians Applicants were chosen despite their obvious political bias Applicants already objected to during, or dismissed from phase 1 brought back in during phase 11 Racial/ethnic sensitivity' was not exercised 'selective bureaucratic control'	The absence of a formal process to conduct selection undermines consistency and fairness across regions No formal criteria and weighting system to allow for objective comparison between applicants (committees simply told to use scores 'experience' and avoid 'political activist' With the absence of a screening step and no defined set of criteria Some regional staff consulted deputy chief scrutineers on lists.
Regions compile and submit staff list to GECOM for confirmation	Compile listSend list to Commission		
GECOM reviews staff list	 Commissioners with staff/HR oversight responsibilities examines regional lists 	Commissioners conducted exercise in partisan manner under pressure from parties	CEO and GECOM HR personnel not formally include in exercise
GECOM submits to party scrutineers	 Commissioners and party scrutineers and CEO evaluate lists Scrutineers make objections to names on list and discuss with Commissioners and CEO 	Commissioners and scrutineers conducted exercise in partisan manner under pressure from parties at national and regional levels 'Racial insensitivity' displayed by Commissioners regarding the balance	

		of ethnic groups at specific polling stations. Scrutineers made objections without objective basis Scrutineers were deliberately given too little time and information to contribute effectively (e.g. not provided with candidate scores to compare scores to selection)	
Commission confirms revised lists and gives to CEO	 Commission make amendments after parties reach consensus Commission adopts list and gives to CEO to operationalise 	Names that were objected to and removed were later placed back on the lists when there was an opportunity created through no shows and/or persons too young being asked to play role other than PO	
Letters of appointment are prepared and distributed to Regions	 GECOM HR function prepares letters of appointment for all temporary staff on lists GECOM HR function distributes letters to regions 	 Some letters of appointment were only delivered to successful applicants days before the election therefore creating uncertainty and encouraging drop-outs 	Delays were often a result of consensus only being reached very late in the process by chief scrutineers
Regions distribute letters of appointment	Regions distribute letters of appointment	Some letters of appointment were only delivered to successful applicants days before the election therefore creating uncertainty and encouraging drop-outs	Obvious problems results from late confirmation of appointments including low morale and increased risk of drop-outs
Successful applicant accepts or rejects post	 Applicants replies yes or no to Region and acts accordingly 	 Inadequate recruitment process resulted in incompetent staff being appointed 	Operated on assumption that applicants would accept if chosen – this may not always be the case – especially if replies are not timely

15.3.8 EXTENT AND GEOGRAPHIC LOCATION OF THE PROBLEM/BREAKDOWN/S

- 15.3.8.1 Complaints, concerns and allegations in respect of recruitment and appointment issues were widespread (see 'related allegations' and 'audit concerns' section of above table). However, the major allegations were in respect of:
 - (i) The alleged failure to confirm receipt of applicants and/or invite applicants to attend a training session;
 - (ii) The regional selection process (to generate list to be sent to GECOM for confirmation) and especially the selection of persons for DRO positions who did not achieve pass rate and/or high scores relative to other candidates and the absence of 'ethnic sensitivity' in the composition of lists.
- 15.3.8.2 It seems that both areas of focus were widespread and took place across regions although complaints regarding application 'loss' were more focused on region 4 and some regional selection processes were more controversial than others (see regions 3, 4 and 5).
- 15.3.8.3 Specific instances reported as example to prove the veracity of allegations were not investigated in detail because no prejudice was shown directly and they did not seem important enough to make a material difference even if prejudice was shown. Instead, these examples were treated as valuable indications of the systems breakdown or the potential for inconsistency within a policy vacuum and/or as a result of vague criteria and political mistrust*.

15.3.9 IMPACT OF EACH PROBLEM/BREAKDOWN ON THE LEVEL OF THE ACHIEVEMENT OF THE TASK/S

15.3.9.1 PROBLEMS CONCERNING APPLICATION/INVITATIONS

(i) It is common cause amongst the parties and GECOM officials that there were substantial problems regarding the handling of applications and the issuing of invitations to attend training. Since there are no precise figures available regarding how many applications were received and how many applications were actually, issued, it is difficult to be certain of the number of applications that were either lost or not responded to and to isolate the severity of these problems on a regional basis*.

^{*} For example, an allegation was made regarding the finding of large pile of unopened, crumpled/torn acknowledgement letters that were 'deliberately' not sent out. While serious if proven to be true, the allegation was not investigated in dept since prejudice to one particular Party could not be shown. Even if it was true and the result of a deliberate attempt to 'stack' the Recruitment process, the Radio/TV call by the Chairman for all applicants to attend training would have ameliorated any potential harm. Even if this were not the case, a link would still have to be drawn to misconduct at polls by staff as a result of other potential staff not being trained and appointed because of the failure to deliver the letters.

^{*} According to interviews with GECOM officials, no overall application log was kept. GECOM officials estimated that approximately 9000 applications were originally received. This figure is backed up by a report made by Keith Hathaway (Report no. 4 to Donor Group) and the final report of the Guyana Long Term Observation Group and European Union Observation Mission mentions on page 14 a figure of 8,400 (GECOM officials guessed that this figure must have been drawn from counting trainers rather than from access toapplication forms).

- (ii) As mentioned above in the introduction to this section, the allegations associated with the problems relating to applications and invitations are limited to specific concerns and did not contain, despite frequent questions to the political parties concerned, either proof of misconduct or direct linkages to subsequent misconduct by polling staff. No political party was able to show any reason why the administrative blunders regarding application handling and invitation delivery were not of equal application, and therefore could have caused prejudice to a particular party. Furthermore, efforts by the chairman of GECOM to use mass media to communicate to persons who might have applied and not received confirmation of invitation to training, to invite them, would have dramatically reduced such prejudice, even if it had occurred.
- (iii) Nonetheless, despite the lack prejudice to any political party, the difficulties experienced by GECOM in handling applications and issuing invitations did not result in widespread confusion. In many cases applicants were angered by either not being informed of the need to attend training until very late (in some cases too late to attend) or not at all. This angered and confusion, within the context of a divided society and politically charged environment, laid the basis for political parties' suspicions of the recruitment process from the very problems related to the suspicions they founded and the consequent confrontational manner in which political parties approached the selection process.

15.3.9.2 PROBLEMS REGARDING CONSISTENCY

- (i) The absence of a recruitment policy and the failure of GECOM to develop a set of objective selection criteria over and above test scores and the ambiguous "need for experience" led to alack of consistency in the regional selection process. Interviews with GECOM officials, ROs and DROs established that regions varied in both the processes they followed, as well as the criteria they used. As a result of this lack of consistency, the recruitment process was very vulnerable to attack by political parties and observers. This is not to say that any direct evidence was found of deliberate attempts by regional officials to use recruitment as a basis for "stacking" polling station staff with the intent of undermining the democratic process, nor does it mean conclusively that the "best people" were not selected. It simple means that GECOM did not have a very strong platform to defend itself against such criticisms.
- (ii) The objective of fair and equitable recruitment relies on the consistent application of principles, processes and criteria. Similarly, lack of consistency can render a fatal blow to the perceived fairness of the recruitment process. In this case, the lack of consistency affected the legitimacy of the process and left GECOM vulnerable to objections by political parties at later stages in the selection process. This vulnerability to subsequent objections by political parties resulted in many selection decisions being

delayed, thus severely impacting on the ability of new appointees to prepare sufficiently to conduct the activities on Election Day*.

15.3.9.3 SUSPICIONS REGARDING ETHNIC SELECTION AND/OR THE ABSENCE OF "RACIAL SENSITIVITY"

- (i) Administrative problems, an overly complex process and a lack of consistency are sufficient in themselves to create suspicion. However, within a divided society and a politically charged atmosphere, it is not surprising that allegations were made regarding ethnic bias and concerns raised in respect of a lack of racial sensitivity in terms of the composition of polling stations. Once again, although no real proof was put forward by any party, general problems associated with the recruitment process and the lack of comprehensive and accurate record keeping at very stage of the process, made such allegations and concerns difficult to disprove*.
- (ii) Even if accurate figures containing ethnic categorization existed for applications, coupled with confirmation of applications and invitation to training; attendance at training, persons who passed minimum scores at training, and persons appointed, such figures would not, on their own, provide conclusive evidence of ethnically biased recruitment. Even when correlated with regional and district demographic figures, such a statistical exercise can only indicate anomalies and it is still possible that the process followed was fair. It is also important to note that, as previously stated above, GECOM was under no statutory obligation to produce racially balanced teams of electoral officials; rather they were obliged to select persons capable of carrying out the duties impartially and competently. Once again no evidence was produced of a pattern of incompetent or partial behaviour that could be linked to one or more ethnic groups
- (iii) Finally, it should be noted that all political parties interviewed shied away from making direct correlations between the ethnic composition of polling station staff and their propensity for bias. Specifically, in response to direct questions concerning the potential need for a policy on "ethnic sensitivity" all the political parties responded that such a policy would be likely to create more problems that would solve and rather emphasized the need for more transparency in the selection process. Once again, however, perceptions are powerful forces and the general problems related to recruitment and selection at various stages of the process provided fertile ground for allegations and suspicions in this regard.

* Minutes of the Statutory GECOM meeting held on Monday February 12th, 2001 indicate that some DROs had still not been appointed in district three and four and many district four appointments of polling staff had still not been made. Obviously, the later the appointment of a person to a critical position in the election machinery and the less time they have to prepare, the more prone they will be able to make mistake and not performing as well as they should.

^{*} Table 4 and 5 on page 15 of the final report: Guyana Long term Observation Group and European Union Observation Mission, describe the ethnic composition of applicants and recommendations for appointment for Deputy Returning Officers and Election Clerks. While the tables are useful indicators of regional variations of ethnic mixes, they are neither conclusively accurate (it is understood they were drawn up on the basis of surnames being associated with certain ethnic groups –GECOM does not keep track of the ethnic status of either its permanent or temporary employees) nor a definitive expose of ethnically biased recruitment practices. Furthermore, no conclusive link is drawn (nor was any specific allegation made) regarding persons who were selected despite relatively low test scores and their ethnic origin.

(iv) Once again, the main consequence of the above allegations was to do delegitimise the process and fuel the political parties' desire to intervene in the recruitment process.

15.3.9.4 UNINTENDED CONSEQUENCES

- (i) The absence of a screening process to shortlist applicants as opposed to using training and testing as the screening mechanism, combined with a failure to have applicants apply for specific polling day positions resulted in a number of unintended consequences. The most important of these unintended consequences were:
 - (a) A perceived disproportionate number of young persons, often fresh out of school and therefore used to learning and testing, scores high marks in the testing process. Based on their marks rather than any number of other characteristics/criteria, these persons were put forward for senior positions. Many young people who marks alone should have been presiding officers of the merit" system had been strictly applied either disqualified themselves by indicating that they did not feel comfortable supervising adults and/or were not selected for those positions due to a lack of "experience".
 - (b) Many persons with previous elections experience scored badly in tests. This resulted in a contradiction between persons who had proven themselves academically or theoretically through scores and persons who had previously shown a capacity to undertake the work including those persons who had shown their value in the registration phase. This contradiction, in the absence of nay criteria or weighting system to balance issues such as age, experience, standing in the community, leadership qualities, management ability, and test scores meant that there was frequently controversy over the selection of temporary staff in contested areas. It should be noted that in regard to the selection DROs with low test scores, it is entirely reasonable that ROs would want to continue to work with persons that had proved themselves in the registration process and understood the electoral context*.
 - (c) The late arrival of training manuals in certain areas (notably regions 3, 4, 5, 6 and 10) meant that persons being trained in these areas were disadvantaged when writing tests based on the manual*.
 - (d) Numerous persons who scored well on the test exams did not want to accept responsibility for senior positions on Election Day. Given the relatively low differential between the remuneration of senior and junior Election Day officials, it is unsurprising that many persons did not seek out higher responsibilities*. This

^{*} Swede is an example of a country who would insist on continuity between registration and returning officials.

^{*} This disadvantage also explains the unwillingness of officials to only use the test scores as a decision making tool for selection. The disadvantage was somewhat ameliorated by the decision of GECOM to extend training by a day in affected areas.

^{*} Even in regard to very senior personnel this was the case – two out of the ten registrars chose not to become returning officers.

was another consequence of the use of training and scoring rather than combining the process with self-selection (in the application form) and short listing before training.

(ii) The impact of these unintended consequences was to add further fuel to the already burning fires of controversy surrounding the recruitment and selection of Election Day officials, thus further delegitimise the process and opening up ever more space for political interference.

15.3.10 RECOMMENDATIONS (INCLUDING SPECIFIC SAFEGUARDS, CHECKS AND BALANCES)

The purpose of these recommendations is to ensure procedural fairness and equity and to facilitate the integration of the recruitment process into a holistic human resource system.

- To develop a new, clear, written recruitment policy that is generated after careful consideration of past experience and substantial discussions with political parties and other stakeholders. Issues that the policy must deal forthrightly with include but are not limited to:
 - (a) Valid and consistent criteria that may and should be taken into account during selection processes or steps, and the weighting thereof:
 - (b) The validity of ethnicity as criteria for either selection or the composition of a particular team. Because, rather than despite, its extreme sensitivity and potential to cause great harm both within GECOM and broader society, this issue must be handled directly and systematically. Is, as a result of research and dialogues with stakeholders, ethnic origin is confirmed as valid criteria, and then it should be dealt with systematically within the confines of whatever constitutional and/or legal frameworks that currently exist within Guyana on this issue. Should it be decided that it is not a Valid criteria, then every effort should be made to ensure that the recruitment process is as transparent as possible in order to make it less vulnerable to accusations regarding ethnic bias.
- Based on the development of a recruitment policy, a new recruitment process should be developed. The process should be capable of being decentralized in order that it is run by the proposed permanent regional offices of the GECOM Secretariat. When deciding upon such a process, the following could be considered:
 - (ii) Advertisements for potential applicants for polling day positions, particularly in the hinterland, should use a wider form of media than newspapers including but not limited to radio as well as TV and the posting of notices in remote villages to ensure adequate coverage and an appropriate response.
 - (iii) Advertisements calling for applications should detail the different positions available, short job description and set of responsibilities associated with each position, the qualifications required for each position, expected remuneration

- and the criteria that will be used to select persons for such positions. Applicants should then be asked to respond in respect of a particular position and provide evidence on a prescribed form as to why they would be suitable for such a position.
- (iv) Advertisements for temporary electoral official positions should be made in good time to allow for adequate screening, selection and training as well as extra time for contingency purposes. The timing should be based on a set project plan that works backwards from the election date and ensures adequate space for contingencies.
- (v) Appropriate logistical and administrative resources should be given to regional officers to ensure that appropriate preparation is made to receive, log screen, record, verify and confirm receipt of applications.
- (vi) Applications should be screened and shorltisted by permanent regional staff with political representatives observing the process. In the case of senior positions, such as DROs, it may be appropriate of political party officials. Such a panel could be comprised of a mixture of permanent regional and national officials.
- (vii) Interviews, if conducted should be held according to a standard interview process using a set technique, approach and question schedule to assure consistency across regions. Interview records should be signed off by the panel and political party observers and stored for future reference if required.
- (viii) Screening and short listing should ensure a fair 'reserve' of candidates to ensure that sufficient numbers of appropriate candidates pass the tests (if testing is retained as a merit based approach to scoring) and extra trained persons are available. The correct proportions of applicant to shortlist to training to selection could be based on a pre-arranged formula. The formula should ensure that after training and testing relative merit distinctions can still be made and there would be sufficient numbers of persons trained to deal with drop-outs and persons found to be inappropriate after training and testing.
- (ix) Training and testing of short-listed candidates should be observed by political party representatives and testing should be objective by political party representatives and testing should be objective and include both practical and theoretical aspects.
- (x) A preliminary list of appointments should be made by the same panel which conducted the shotlisting (again with political party observation) and final changes should be made in order to ensure geographical spread, appropriate numbers, and the proper use of valid criteria according to a pre-agreed weighting system.
- (xi) Final selection should take place which includes a reserve list of names of persons who could be substituted into team should there be a need.
- 15.3.10.3 Success or failure of the recruitment process in the next election should be specifically evaluated against the above-mentioned policy objectives.
- Provision for the role of political party representatives in the recruitment process should be communicated in detail and work-shopped with political parties in order

to ensure that they understand what role they will play, at what stages they will play it and the time limits available to play it.

- 15.3.10.5 If tests similar to the ones used during this election are to be used again, though should be given to requiring a minimum mark on each of the different aspect of the tests.
- In order to assist in the selection process and to protect the commission (and all permanent regional staff) against accusations of bias a weighting system should be developed to allow for the effective use of the criteria. If necessary, workshops with regional staff should be held to ensure objective and consistent application of the criteria.
- 15.3.10.7 The CEO and GECOM human resources personnel as well as senior regional officials should lead, and be prepared to take accountability for, the recruitment process.
- More thought needs to be given to better differentiating the remuneration of the different levels of temporary staff in order to attract higher quality candidates and persuade them to accept greater responsibilities and stress.
- 15.3.10.9 Set procedures should be in place to regulate and record, for transparency purposes, all political party objections and their outcomes during those stages of the recruitment process where such involvement is anticipated/enables/regulated/allowed.
- The record keeping process associated with recruitment should be computerized and the database should be capable of incorporating sufficient detail to ensure both institutional memory and an ability to probe for anomalous patters and/or irregularities.
- With respect to the recruitment and selection of permanent staff it will be important to ensure that there is no bias in favour of public service experience and that role descriptions and competency profiling are detailed. Some form of standard assessments may also be considered.

15.3.11 OPERATIONAL PLAN

- Develop a general, decentralized approach to recruitment that is driven by officials, observed by political parties and validated by the Commission;
- 15.3.11.2 Formulate a clear recruitment policy including principles and criteria;
- Develop a recruitment process that is simple, clear and capable of operationalising within the time and logistical constraints that regional offices are likely to face;
- 15.3.11.4 Design systems to facilitate the recruitment process;
- 15.3.11.5 Produce an operational plan to introduce the systems and produce a time plan clearly showing the minimum time (including contingency allocations) to run the recruitment process;

- 15.3.11.6 Procure the necessary resources to facilitate the introduction of the new process with an emphasis on accurate and computerized record keeping;
- 15.3.11.7 Implement the operational plan including the training of officials to run the system

15.4 TRAINIGN AND OTHER HUMAN RESOURCE RELATED ALLEGATIONS

As stated in paragraph 15.2 above, the majority of allegations and concerns regarding training related to its pivotal role within the recruitment and selection of temporary polling day staff. This was also the case in respect of management systems and the deployment of staff. After confirming this with political parties in discussions, the investigation focused on recruitment and did not cover training and other human resource related issues in any detail. In addition, the GECOM training officer was on leave during the time of the investigation and was not available to provide detailed answers to specific queries.

15.4.1 **TRAINING**

- 15.4.1.1 Training should be judged on results and any other critique is best made through observation. The results of the training, outside of the concerns raised in respect to its part in the recruitment process, seem good. The conduct of polling day staff on Election Day seems to indicate that a fair amount of learning took place and staff, within the context of new procedures, changing information, unreliable communication, insufficient contingency planning and other difficulties, made a success of the day. The Systems review team was obviously not able to observe training but GECOM and observer reports as well as the reports of specialist training advisors seem to indicate that the quality of the training was generally good and concerns rested mainly with the administration of the training.
- 15.4.1.2 The cascade methodology whereby core trainers train regional and local level trainers, who then train polling day staff in local areas, seems to have been the only methodology capable of training the vast numbers of temporary staff in the unreasonably shot time periods available. The cascade model relies of the selection and training of good trainers, quality assurance techniques to ensure consistency; and sound planning and training management to ensure logistical and administrative procedures are aligned to tight programmes.
- The manuals and the training emphasis (on practical simulations) were well 15.4.1.3 constructed and in the absence of observing their explanations by trainers in the field seem to cover all the necessary topics in sufficient detail.
- 15.4.1.4 The biggest breakdowns seem to have been the result of administrative deficiencies in regard to notification of training time (see recruitment and allegations relating to applications above) and the non-arrival of manuals*. In this

EGECOM official's explained that the unavailability of manuals during initial training sessions in Certain regions were due to tight printing and distribution deadlines being disrupted by BWIA flight interruptions. The reason for certain, rather than all regions not being supplied with manuals was that GECOM followed a strict approach of distributing all materials to the outermost regions first.

regard the various reports observers correlate with the opinions of political parties and region staff – that after a fairly chaotic start, and excepting the shortage of manuals, the training roll-out achieved its purpose.

Once again, no link between training, or the lack thereof, was made to actions by polling day staff that prejudiced a political party or in any other way materially affected the election and or influenced the result.

15.4.2 STAFF DEVELOPMENT LEVELS

- Temporary staff deployment took place through a staffing level formula based on the number of staff required to ensure the proper functioning of a polling station. Since polling stations were sited to ensure that approximately 450 persons voted per polling station, it was logical that staff allocations should be equal per station. No allegations were made to suggest that this allocation system was misused. However, it was noted that in certain, particularly more remote areas, there were problems with staffing complements. However, these problems were the result of insufficient persons being trained, passing the test and/or being appointed and were not the consequence of bad staffing allocation or planning
- However, while the above staffing allocation formulae is fair at the local level it has limitations at a regional level. The population levels vary from region to regions and it seems obvious that the larger regions, particularly region 4, warrant more regional based staff in order to cope with larger layers of management. Serious consideration should be given to the potential to break up larger regions into sub regions and provide for another level of co-ordination and management below the Returning Officer in order to avoid a breakdown between him/herself and all the DROs who report to him/her.

15.4.3 HUMAN RESOURCE SYSTEMS AND MANAGEMENT

Managing a large geographically spread temporary workforce from a central office using legacy systems from the NRC that were largely paper based was always going to be a serious challenge. The late, or by necessity multiple, appointments of key officials in senior positions was a further obstacle to effective management and placed intolerable pressure on already overworked officials*. Bearing in mind the incapacitation of the CEO, Mr. Singh, It is a credit to the dedication of senior officials that the elections ran as well as they did. It is hoped that now that GECOM is a permanent body it will use the time period before the next election to attract, recruit, train and develop senior officials who will be familiar with the electoral systems and procedures. This should be supplemented a thorough review of all systems and the design of new, integrated processes and systems aligned to the task of managing specialist electoral officials and entailing the appropriate balance between paper and digital systems.

^{*} GECOM was without human resource officer for a substantial period as appointments were found to be unsuitable and the Training and voter education Officers were appointed very late while the Communications Officer resigned shortly before the election.

A common, and disturbing trend revealed through interviews with senior GECOM officials was the unwillingness to take, or be held accountable for, executive decisions. GECOM, and in particular the Chairperson, was centrally involved in too many processes and decisions to make for effective management. In addition, the system of standing committees in various focuses has the potential to add an unnecessary management layer and delay implementation if the frequency of the meeting and the level of detail discussed are too great. Efficient delegation within the context of well though out corporate governance and accountability framework will allow the Chairperson and other commissioners to focus on policy matters and spend more time leading rather than system of delegating powers and that senior officials understand their roles in as executive in nature. Delegation should be coupled with a performance management system that hold officials accountable and rewards good work.

Regional visits and discussions with RO's and DRO's revealed an over-centralization of decision, process and record-keeping systems*. This combined with unreliable communication systems placed unnecessary pressure on already over-laden regional officials. The move to establish permanent region offices should be complemented with a process that develops authority to regional officials while ensuring the requisite management reporting and performance management systems to hold them accountable.

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^{*} For example, even a simple staff misconduct issue with a temporary employee at a regional level required a decision by the CEO centrally based on written representations.

CHAPTER EIGHT

16. SUMMARY OF FINDING AND RECOMMENDATIONS

Each Chapter of this report contains recommendations. We believe that it is important for the findings and recommendations to be viewed as an interlocking package and considered as a whole since there are interdependencies and linkages between many which, if ignored, will undermine the intention that lies behind them. By way of illustration, the procedural improvements and amendments recommended in the Chapter on the Voter Registration Process have a determinant effect upon such issues as registration efficiencies, data capture and the accuracy of the database itself. It is submitted that their implementation would have substantial benefit and reward fro GECOM, and for the country as a whole.

It is however necessary to examine the concerns raised in the report in terms of nature and extent, cause and effect and whether a contesting party of parties may have been prejudiced or gained electoral advantage, as a result of their acts or omissions. Ultimately, an assessment needs to be made of our findings on the issues and concerns, detailed by the parties and other stakeholders, and whether they had a material effect on the outcome of the election in a particular constituency, district or region, or at a national level.

In addition, one of the primary motivations for GECOM requesting this Audit and Systems Review was to assess its strengths and weakness in terms of the conduct of the 2001 election, in order to improve their performance and raise public confidence in GECOM. Accordingly, the Audit and Systems review Team has spent much of its energy examining operational and procedural systems that underpin the conduct of the election, with specific focus on the areas of voter registration, human resource systems, information technology and database as well as certain specified operation issues.

16.1 THE NATURE AND EXTENT OF THE PROBLEMS/CONCERNS

- 16.1.1 The Audit and Systems Review Team found that there were a number of areas in the electoral process in which errors had been committed by the electoral administration. The bulk of these occurred in the voter registration and data capture areas of the electoral process. The majority of these errors can be put down to the following causes:
- 16.1.1.1 An unrealistic election timetable and lack of time;
- 16.1.1.2 Outdated and bureaucratic processes and procedures;
- An unwieldy and time consuming decision making process in GECOM; thereby causing unnecessary delays;
- 16.1.1.4 Lack of resources and staff capacity;
- 16.1.1.5 In some cases, inappropriate choice of "systems"

- The Audit Team was not able to find any evidence of deliberate manipulation of electoral fraud in relation to any of the errors or activities that were the subject of this audit. Extensive discussions were held with the political parties and stakeholders and numerous allegations were made. However, very little evidence was resented to the Audit team to substantiate the allegations that were made. Notwithstanding this, the Audit team spent considerable time conducting interviews and examining documents at GECOM, as well as running numerous IT and database "test", to investigate these allegations.
- 16.1.3 It is apparent from the numerous tests done on the database that no evidence of corruption of manipulation of the database was found. While there is no doubt that certain errors occurred, the Audit Team were not able to find any evidence of a conspiracy to manipulate election systems or the election result. While it is possible that there may have been individual instances of abuse of the system, as is the case in most elections around the world, there is no evidence to suggest that these abuses would have had any effect whatsoever on the election result.
- In certain instances, it would appear that GECOM and its staff were too accommodating of the demands and sensitivities of the political parties. The recruitment and appointment of staff process is an example of where there was a real need for standard and uniform procedures to be adopted and adhered to. However, because of the political sensitivity and lack of criteria that surrounded the appointment of staff, appointments were delayed beyond a reasonable timeframe. This affected the training and capacity of staff to fulfill their duties, thereby making them more prone to error and incapacity. This, in itself increased the suspicion of stakeholders around this aspect of the electoral process. The inefficiencies that resulted fuelled the fires of distrust and prejudice.
- The impact of the problems that occurred in the administration of the election were such that they immeasurably increased the levels of suspicion of the political parties in relation to the electoral process and also delayed certain critical activities. Certain of these activities were interdependent on one another and a knock-on effect was created. The fact that the electors roll was finalized late meant that polling stations were sited late, which meant that there was little time for information to flow to voters on where to vote, which caused confusion and problems on polling day. Certain problems were alleviated by reasonably flexibility on behalf of GECOM in addressing certain of the problems, such as the substantial delays in the issuing of National Identity cards. The fact that the Commission decided to allow voters to use alternative identification, effectively meant that no one was disenfranchised as a result of the problems and delays in the issuing of the National Identity Card.
- The Audit Team found that while there were real problems in terms of administration in certain areas of the electoral process, none of the problems identified were sufficient in themselves or extensive enough, to seriously detract form the efficacy and validity of the electoral process.

- The Audit Team has not been able to find that any real electoral advantage or prejudice was suffered by a particular party, as a result of the errors and administrative problems that occurred in the electoral process. The problems that occurred, while they may have had more effect in Region Four, because of the density of the population in that area, impacted upon the country as a whole. The entire electorate was generally disadvantaged by the problems rather than single political party. In this respect, no evidence was presented by any political party which demonstrated that a particular error or problem affected the result in any constituency, region or even at national level. By way of illustration, the programming errors in the CD Rom that was released to the political parties by GECOM and which contained the voters roll, was de-linked form the database and those programming errors were not replicated on the original database. The so-called "back-link syndrome" that was contained on the CD-Rom, even if it had been replicated on the database, would have affected all political parties.
- 16.1.8 We know from the results of the extensive tests conducted how more than 6000 electors were listed under invalid combinations of divisions and subdivisions on the RVL. Those electors, with or without their ID Cards, would not have found their names on the RVL at their normal divisions or subdivisions. This gave people the impression that they were not on the list. The invalid combination of divisions and subdivisions, as printed on the RVL, was rectified before the OLE was published and every elector was listed under a valid combination of division and subdivision on the OLE. However, the problem with the RVL clearly undermined the public's confidence in the accuracy of all the lists GECOM produced.
- In relation to names of potential voters that were allegedly inserted into the Addendum, but which did not appear on the Addendum when it was published, despite request, specific details were not supplied to the database team. They were therefore unable to investigate this concern although the various systems errors as well as data capture may have caused the alleged problem. This remains an area which may require further investigation and it is recommended that, in the event that specific details can be supplied, this should be the subject of a focused investigation in future.
- The issue of biased or unfair recruitment or recruitment which overly represented one ethnic group was thoroughly investigated. While it was found that at a procedural and process level, there were serious issues which needed to be addressed, at no stage did any political party present evidence that any of the persons appointed, carried out their duties in a manner which was biased and which was prejudicial to them as a party. The one issue which could have affected a particular political party prejudicially, had it not been addressed, was the issuing of the National Identity Card where region Four, because of the density of population was affected most. This was not the case in view of the decision taken by GECOM to allow voters to use alternative identification.

- In view of the above, the Audit team was unable to find that the issue and concerns raised by the political parties and other stakeholders in relation to the 2001 electoral process, prejudiced or advantaged any particular political party or parties. Consequently, the Audit Team is able to declare that the issues and concerns detailed in this report would not have been effected the resulted of the election.
- The Audit team did however find that there were a number of areas that needed urgent and serious attention within GECOM and with PES. These are dealt with in detail in each of the sections of the report and include the following critical areas:
- A review of electoral legislation with a view to harmonizing the various pieces of electoral legislation and modernizing them. This should include the necessary amendments to accommodate the process and procedural deficiencies detailed in the recommendations.
- The procedures of the Commission in relation to the voter registration process should be urgently reviewed and amended as detailed in this report. This would include attention being given to the rationalization of forms and documentation required for registration, as well as the forms being suitability adapted for accurate and efficient data capture. The linkages between the various databases of the Commission should be made to increase efficiencies and avoid errors.
- 16.1.12.3 The registration of voters and updating of the voters roll should take place on an annual and continual basis.
- 16.1.12.4 In relation to information technology, the recommendations are summarized as follows:
 - (i) it is important that ISD should be strengthened and should have a greater influence on decision making;
 - (ii) GECOM should rely on well trained nation staff who should be further capacitated where necessary;
 - (iii) the database should be upgraded to SQL 2000 for the built-in security features and extended functionality;
 - (iv) security system policies as detailed in Chapter Five should be given urgent attention and should relate to system documentation password policies, audit trails, network access, change control procedures and network changes. Additional measures in relation to the normalization of the database, particularly with reference to the issue of addresses and "photograph flag" are also dealt with in detail;
 - (v) recommendations in relation to the merging of similar applications, making applications data driven as well as reviewing and improving the SQL and data validation logic in the application are made;
 - (vi) An on-line verification process is recommended and certain specific recommendations in relation to the development of application are listed;
 - (vii) The Audit Team also found that not using double entry was a weak point in GECOM's database applications. This allowed and will allow human error during data entry to pass undetected. Another factor is the lack of a list of valid streets or addresses for each division/subdivision in the

database. This means that when an address is entered under a division/subdivision, there is no way of validating that the address actually exists in that division or subdivision. Maintaining a list of valid streets or addresses for the purpose of validating an elector's address is a costly and purpose of validating an elector's address is a costly and complicated task, which will have a huge impact on the database, the voters registration process and the electoral area demarcation process. Thorough analysis must be carried out before embracing this option.

- (viii) Like many electoral system, not all the electors or changes to the electors' detail can be printed on the final list in time. Therefore, it is important that those electors are not disenfranchised. On way of solving the problem is to allow those electors to cast a provisional vote. The vote should be placed in an unmarked envelope. The unmarked envelope should then be put into another envelope with the voter's declaration, including the voter's signature, name, address and division/subdivision details. The voter should sign the declaration on the outside envelope. The provisional votes should be admitted for counting if the Returning Officer is satisfied that the person's details are correct and he/she is entitled to vote. The drawback of the provisional vote is that the declaration of the results will be delayed significantly in the event that the winning party cannot be determined from the counting of the ordinary votes. If provisional votes are to be introduced, legislation will need to be changed.
- The Audit Team has no doubt that if the above recommendations, as well as the more detailed recommendations in Chapter Five, are implemented; many of the errors and problems that occurred in the March 2001 Elections will be addressed and alleviated.
- The recommendations in Chapter Five in relation to the software and database of the Commission are numerous and should be given urgent attention under the supervision of an appropriately staffed technical oversight committee and international technical committee.
- The sitting of polling stations was also detailed as an issue which required attention. It is recommended that small polling stations should be merged an differencessary, the law needs to be amended to allow for this. In addition, information directing voters to their polling stations with a polling center should be further developed and the utilization of additional media should be considered to ensure there is proper public awareness and voter education in these important areas.
- The procedures in relation to the counting of votes and compilation of results require review. In particular, the process and procedures around the announcing of "preliminary results" should be reviewed and made clear to the public. Specific guidelines are detailed to address the concerns around "preliminary results".
- 16.1.12.9 It needs to be stressed that whatever systems and procedures may exist in the administration and GECOM, ultimately they will be reliant on the staff of the Election Administration. Proper recruitment, appointment, training, evaluation and capacitating of staff are critical and should be regarded as one of the highest

priorities of the Commission. This is dealt with in detail in the report and a composite package of recommendations are made which will have a material effect on the professionalism of the administration as well as the capacity for delivery in the regions.

- A further issue which deserves serious consideration is the composition of GECOM. While there are advantages to having a Commission composed of political party representatives, there are also disadvantages, particularly in terms of decision making and the public perception of the Commission. Consideration should be given to the establishment of a Commission composed of independent and respected individuals who do not owe political party allegiance. The trend, internationally, is for the establishment of independent electoral commissions composed of respected and independent individuals. In this respect, there are a number of international model which could be examined and which may proved valuable in the context of the socio-political situation in which Guyana finds itself.
- The debate around issues of centralization and the decentralization of functions and administrations is one which needs to be deepened. It is recommended that the regions be further empowered and capacitated in terms of authority resources and administration to enable them to fulfill their electoral functions more professionally. Issues of policy, process and procedures should be centrally regulated, while implementation and delivery should be decentralized to the regions.

17. CONCLUSION

- 17.1 It is important to bear the context of the election in mind when considering the findings and recommendations detailed above. In essence, the election was conducted in an atmosphere of tension and extreme distrust between the political parties, and at times, between the political parties and the staff of the PES. In addition, the amount of time given to GECOM and the administration in which to conduct the election was insufficient for the sensitive and complex tasks that it had to undertake. This time constraint was compounded by a number of extra tasks that were undertaken in the run up to the election, and which were originally not planned for. While the motivation for undertaking these additional endeavours was to ascertain the accuracy of critical components of the electoral machinery and systems, in fact these tasks proved of little substantive value, although they did contribute to the credibility at the process.
- 17.2 Notwithstanding the above, GECOM and the electoral administration delivered an electoral process that was reasonable under the circumstances and which has withstood the test of international scrutiny. This audit has however highlighted critical areas of the electoral process which need urgent attention. These areas are at the level of "systems" and involve process and procedure at an administrative level. They should be supported by the appropriate legislative harmonization and amendments as well as by the allocation of the necessary resources, both financial and material, to ensure their delivery to an electorate that should expect nothing less.
- 17.3 An electoral process should be efficient, free and fair. In a situation where there is distrust and tension in the society, it is imperative that the lection be technically efficient and its fairness' beyond doubt.
- 17.4 It is the view of the Audit Team that GECOM should be commended for having had the integrity and vision to request a comprehensive audit of certain of its most important areas of activity. In doing so, GECOM and the administration have opened their affairs and administration to international scrutiny which, in itself, is a clear signal of their commitment to further improve the electoral process in Guyana.
- 17.5 The Audit Team held extensive meetings with the Political parties and was impressed by their commitment to assist the Audit Team, as well as by their commitment to constructively engage in the process of identifying the strengths and weaknesses of the electoral process in Guyana.

17.6 It is imperative that the commitment, detailed above, by GECOM, the electoral administration and the political to improve the electoral process in Guyana should be taken extremely seriously. Accordingly, it is imperative that the recommendations detailed in this report should be given the necessary attention and should be implemented without delay. The recommendations detailed in each Chapter are capable of being immediately addressed given the necessary allocation of resources. A key component of the implementation process will be the political commitment and support that will need to be shown by the Government of Guyana and by the political parties in ensuring that the recommendations are given concrete form. As stated in the section on "Risk Assessment", elections are high stakes events ad therefore deserve to be accorded the highest priority.

18. ACKNOWLEDGEMENTS

Despite the severe time constraints in which the mission was conducted, the task of the Audit and Systems review Team was made easier by the openness and cooperation that was shown to the Team by the Chairman of the Elections Commission, Major General (retired) Joe Singh and his fellow Commissioners. The staff of the Secretariat, in particular Mr. Gocool Boodoo and Mr. Calvin Benn made themselves available and also assisted in placing documentation and staff before us. I would also like to thank Mrs. Beverely Critchlow who played an invaluable role in terms of liaison and assistance.

The British High Commissioner, Mr. Edward Glover and the Resident representative of the UNDP, Mr. Richard Olver also played a critical role in facilitating the work of the Team. In particular, the efficiency and assistance shown by Mike James of the UNDP who was responsible for logistics, was substantial and much appreciated. The tireless work of Mrs. Jeane Skeete at an administrative level was a valuable contribution to this report. Finally, the political parties, and other stakeholders with whom we met, showed maturity in relation to the nature and extent of the Audit and Systems Review and, at all time, cooperated with us and provided invaluable assistance in terms of the issues raised by them as well as the meetings in which they freely gave of their time. We are grateful to them and the other stakeholders with whom we met.

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