



ANNUAL REPORT 1995-1996

INFORMATION TECHNOLOGY AND COMPUTING SERVICES
Ministry of Finance

MANAGER ITC SERVICES

TABLE OF CONTENTS

1.EXECUTIVE SUMMARY	4
1.1. SUMMARY OF ACTIVITIES	4
2. VISION AND MISSION STATEMENTS	7
2.1 CORPORATE PLAN	7
2.2 VISSION STATEMENT.....	7
2.3 MISSION STATEMENT.....	7
2.4 GENERAL.....	8
3. SERVICES AND ACTIVITIES	9
3.1. SUMMARY OF SERVICES.....	9
4. STAFF	11
4.1. MOVEMENT OF STAFF	11
5. COMPUTER APPLICATIONS DEVELOPMENT INSTALLATION AND SUPPORT	13
5.1. SUMMARY	13
5.2 ACCRUAL ACCOUNTING.....	14
5.3. TAX INFORMATION SYSTEM (TIS)	14
5.4. BANK CHEQUE RECONCILIATION (TREASURY).....	15
5.5. EXAMINATION RESULTS (MINISTRY OF EDUCATION).....	15
5.6. BIRTHS DEATHS AND MARRIAGES	15
5.7. ELECTORAL ROLL (ELECTIONS OFFICE).....	16
5.8. PAYROLL SYSTEM	16
5.9. COSTOMS.....	16
5.10.OTHER APPLICATIONS	17
General Ledger for Government Accounts	17
Water Rates Billing for PWD	17
Vehicle Licenses for Road Transport	17
Government Supplies Stores System.....	17
Immigration for the Immigration Department	17
Land Lease of Crown Lands for Lands Department.....	17
Visitors /Trade And Other Statistics.....	18
VAT Value Added Tax.....	18
6. OPERATIONS AND SUPPORT	19
6.1. TERMINALS AND PRINTERS	19
6.2. COMPUTER PROCESSING POWER.....	19
6.3. NETWORK	20
6.4. DISKS AND DATABASES.....	21
7. TRAINING AND EDUCATION	22
7.1. PERSONAL COMPUTER TRAINING	22
7.2. STAFF TRAINING.....	23
8. BUDGET	24

8.1. MAJOR ALLOCATIONS	24
9. PERSONAL COMPUTERS (PC)	25
9.1. COMPUTERS IN GOVERNMENT MINISTRIES/DEPARTMENTS	25
10. ITC POLICY COMMITTEE	26
10.1. POLICIES AND STRATEGIES ON COMPUTERS IN GOVERNMENT	26
11. PROBLEM AREAS	27
11.1 STAFF AND BUILDING.....	27
12. CONCLUSION	29
12.1. SUMMARY AND ACKNOWLEDGEMENT.....	29
13. APPENDICES	
APPENDIX A 1 & 2 :	Organisation Chart 1995 & 1996
APPENDIX B 1 & 2 :	Manpower Resources in 3 IT grades(AD05,AD03,AD02)
APPENDIX C 1 & 2 :	List of Personnel Joined/Left ITC Services
APPENDIX D 1 & 2 :	Network Configuration as at Dec 95and Dec 96
APPENDIX E 1 & 2 :	Computer Courses Conducted by ITC in 1995 and 1996
APPENDIX F :	Staff Training Overseas and Locally
APPENDIX G :	Provisional and Actual Expenditure for 95 and 96
APPENDIX H :	VAX Terminals & Printers, PCs & Printers Counts by 1994, 1995, 1996
APPENDIX G :	Glossary of Terms



SUMMARY

1.1 SUMMARY OF ACTIVITIES

1. 1995 and 1996 were particularly difficult years for ITC Services with staff resignations and recruitment difficulties, while the workload continued to increase. Four computer applications whose developments started in 1994, continued to be developed to completion or various stages of progress in 1995 and 1996. Tax Information System for the Inland Revenue Department had to be re-examined for its full requirements. Examination Results for the Ministry of Education went through its final stage of testing. Bank Reconciliation was completed and implemented for live running during the year while the application for Births Deaths and Marriages records for the Registrar General's office continued to be developed throughout the years.
2. Work commitments throughout the year did not allow for the ITC Policy Committee to meet on policies, and instead, its efforts were directed towards the work on Accrual Accounting which had been approved by Parliament for implementation by Government in 1996 and 1997. Much against ITC's recommendation, a small New Zealand company was chosen to install and support an outdated software, based on an obsolete product called 'MUMPS', to be used as the software platform for running Accrual Accounting for the Government.
3. During these two years ITC Services continued to support and maintain major computer applications that were critical to the running of Government. These included the Inland Revenue System for collecting taxes, Customs and Excise for collection of duty, Immigration for visitor's records, six Payrolls for paying Government workers including the FMF and Special Constables, Government General Ledger Accounts and Examination Results for the five Examinations that Education conducts every year. Electoral Rolls were successfully printed from the Electoral System to ensure that the by-election for the Tailevu Fijian and Ba Indian seats during the year 1995 and two further by-elections for Tailevu Fijian in 1996 were successfully carried out.
4. Demands in the use of the main computers at ITC continued to grow. An additional 46 computer terminals and 9 printers were connected to the

main network, to bring the total number of connected equipment to **531 computer terminals** and **84 printers** around the main centres of Fiji in 1995. **Those totals were increased to 572 and 92 respectively in 1996.** Extensions of the network were established at Savusavu and Rakiraki to connect up the Government Supplies offices that were established in those towns during the years.

1.1.5. Part of the expansion was to cater for the decentralisation of the unestablished payroll system to the user departments and the printing of reports and payslips/pay-envelopes at the PWD offices in the major divisions in the North and West. Treasury also took over the responsibility of printing all the established staff salaries reports and cheques at Treasury, while Inland Revenue took over the printing of their reports and their cheques when the printing of their outputs were decentralised to their respective offices.

1.1.6 1995 and 1996 also saw the continuing expansion in the use of personal computers with word-processors and mostly laser printers for office automation works. Training on Personal Computers (PC) and specific applications continued to be provided by ITC. A total of **62** courses were conducted for **618** participants from different Ministries and Departments, including the Fiji Military Forces and the Navy. A more qualitative form of training was conducted and was targeted at specific groups of workers such as Senior Secretaries to enhance their skills in the use of computers for their particular area of work.

5. Despite best efforts at recruitment, skilled resources continued to be a major problem for the Department. ITC continued to be "used" as a training ground for fresh graduates who leave for better remuneration in the private sector after training. A total of 12 staff employed at the professional level of Senior Systems Analyst (AD02), Systems Analyst (AD03) and Graduate Trainee (AD04) resigned for better remuneration overseas in Australia, while only seven could be recruited to fill the vacancies from the lower level posts.

6. With the difficulties that ITC faced throughout the years, 1995/1996 was a struggle with much of the work achieved through hard work and sacrifices by the loyal staff. Work had to be prioritised with the essential work of collecting revenue, paying workers, Government accounts and Immigration being given very high priority. Of lower priority but nevertheless essential, applications such as Examinations Results for Education, Electrol Roll for Elections, and Supplies system for Government Supplies Department were supported and maintained to ensure continuity of work by those who depend on those systems.

1.1.8. **The Assistance and Aids for our training and support from JICA in particular, for sponsoring 6 of our staff's training this year, and other**

National Governments and Regional Organisations, Ministry of Finance, PSC and other Ministries and Departments are gratefully acknowledged.

1.1.9. Work at ITC would not have been achieved without the dedication of the loyal staff whose contributions I am always grateful for, and all other Ministries and Departments for their understanding and tolerance of our services at the worst of times.



2. VISION AND MISSION STATEMENTS

2.1. CORPORATE PLAN

In 1995, the Public Service Commission began the exercise of getting Departments to draw up Corporate Plans as work plans for the next 5 years. Included as part of the plan were the Visions and Missions of the Departments. This work continued throughout 1996.

2.2. VISION STATEMENT

Service Excellence by Government through the use of Information Technology by 2001

A simple challenge for the department, by setting itself a target for the year **2001**, by which it will have built up the Information Technology infrastructure and capability for the Government to produce the most excellent service to its customers, the general public.

2.3. MISSION STATEMENT

2.3.1. TO PROMOTE AND FACILITATE THE COST-EFFECTIVE USE OF INFORMATION TECHNOLOGY IN GOVERNMENT TO SUPPORT STRATEGIC AND OPERATIONAL NEEDS.

2.3.2. TO PROVIDE HIGH QUALITY INFORMATION TECHNOLOGY SERVICES TO GOVERNMENT MINISTRIES AND DEPARTMENTS ON A COMMERCIAL, NON-EXCLUSIVE AND COST EFFECTIVE BASIS.

2.3.3. TO PROMOTE FIJI GLOBALLY THROUGH THE USE OF INTERNET.

2.4. GENERAL

2.4.1. The Government Centre for Information Technology and Computing (ITC) Services was established in August 1966, to cater for the Government's data processing needs. This role has expanded dramatically over the years to accommodate the new vision and mission statements that can be achieved with the development of new technologies.

2.4.2. The IT Centre provides the Government with a Computer Service Bureau facility and serves as an Information Technology Centre for most of Government's Information Technology and Computing needs. It provides Consultancy, Application Development, Training and Technical support for both the mainframe, personal computers and data communications. It also serves as a steering body in the formulation of policies on the development of Information Technology and Computers for Government.

2.4.3. Over the years, ITC has upgraded and changed its equipment to keep in line with the latest development in technology in the world market. In 1995 and 1996 it maintained a cluster of computers called VAXES which comprised of eight Central Processing Units (CPU), three workstations and, a network of 572 terminals and 92 printers around the country in Suva, Labasa, Lautoka, Nadi, Nausori, Levuka, Rakiraki and Savusavu.

2.4.4. Increasing awareness in the use of computers throughout the Government, provided the challenge for ITC to keep abreast of the latest development in this field so that Ministries and Departments can use the most up-to-date technology for their works.

2.4.5. With the difficulties throughout the year, 1995 and 1996 were very challenging for most of the staff who remained in the Department, with much achieved only through hard work and sacrifices.



3. SERVICES AND ACTIVITIES

3.1. SUMMARY OF SERVICES

3.1.1 Being the only 'mainframe' computer installation in Government that provides major computing services, the ITC Services' range of activities is always diverse due to the diversity of the Government's responsibilities through Ministries/Departments.

3.1.2. Some of the services and activities for the years were :

- ◆ Development and Installation of Computer Systems for Inland Revenue, Education and Treasury;
- ◆ Evaluation of Software and Hardware for the Accrual Accounting System;
- ◆ Operation of a Computer Service Bureau for the collection of revenue by Customs, Inland Revenue and Value Added Tax (VAT), Accounts by the Government General Ledger system, paying employees through five (5) Payroll systems, monitoring of visitors and travellers through the Immigration system and many other applications that the Government uses for it's services to the public.
- ◆ ITC Project Management and Systems Support Services for the Meteorology Departments in Nadi and Radiology section of the CWM continued.
- ◆ The production of a Strategy Report for the Criminal Justice System after Consultancy and Feasibility studies. The report was presented to the Courts, Police and Director of Public Prosecutions (DPP) Office and a Steering Committee was set up to look into the issues of sharing data and general progress of the project's implementation.
- ◆ Implementation of the ITC Policy and Strategy through the development of IT in Government in the various Ministries

and Departments which undertook computerisation of some form or another.

3.1.3. During the year 1995, ITC Services continued the development of applications on its Open VMS platform using the Oracle database and its CASE tools. The new Tax Information System (TIS) continued with its development using the above methodology.

3.1.4. Treasury's Bank Cheque Reconciliation's system and the Examination Results for the Ministry of Education were completely re-developed and converted to run on Oracle, while the Registrar General's Births, Deaths and Marriages records started with its development and the Electoral Roll systems was planned for conversion along the same line.

3.1.5. Continuing demands on ITC to provide and improve services to our customers, resulted in the expansion of its computer network to Rakiraki where the Government Supplies opened a new branch of their office in that town to serve the rural population in that area.

3.1.6. In 1995 the Payroll system successfully calculated automatic payment for the progressive payment of salaries or "merit" pay for all the Established Civil Servants, Unestablished workers, FMF, and other groups of individuals whose pays are all processed at ITC. This was a major exercise as the salary system does not record any date for confirmation of appointment, which was used for the payment of the progressive pay.

3.1.7. ITC continued with the Windows courses in 1995, but changed its emphasis from a quantitative to a qualitative approach. Thirty courses were conducted for 313 participants from various Ministries and Departments in Government, FMF and the Navy.

3.1.8. A new approach to management by Government was started in 1995 whereby each Ministry and Department was to draw up their Corporate Plan for the next 5 years and this was to be used by the Public Service Commission to monitor and measure each Ministry and Department's performance and effectiveness over those years.



4. STAFF

4.1. MOVEMENT OF STAFF

4.1.1. Skilled human resources continued to be a major problem for the whole of 1995 and 1996. Twelve staff resigned during these years and nearly all of these were from the professional group of workers in the AD05 to AD02 level. Of these, four (4) left the service for the private sector in Fiji while the others resigned to migrate overseas. At the end of the year, there were 32 vacant posts (45%) even after the normal advertisement and recruitment process throughout the year. The major vacancies were from the positions of Senior Systems Analyst/Programmer (AD02), Systems Analyst/Programmer (AD03) and Assistant Programmer (AD05) posts respectively, the level at which ITC Services provides its professional services, to Government. *Appendix B.1&2* show a clear picture of shortage of manpower resources in the above 3 grades (AD02., AD03 & AD05).

4.1.2. To replenish the lost skills, in 1995, a graduate was recruited in June and an experienced programmer in August in addition to one of our own staff who returned in January from the University of Wollongong with a Bachelor of Applied Science in Information Systems after three years of study on full pay, while in 1996, five graduates were recruited. In comparison to the number lost, the replacements were short both in numbers and skills, making it more and more difficult for ITC to cope with its responsibilities.

The movements of staff throughout the two years are shown in *Appendix C. 1&2*.

4.1.3. Work exigencies in all areas were maintained as best as possible by the existing staff and prioritised so that the major efforts were put into the computer applications that would drastically affect the running of Government if these applications deteriorated in their performances. These were applications such as Customs, Inland Revenue, Payrolls, Immigrations, and Government Accounts. The use of the private sector continued to be done in areas where no resources could be spared from ITC to provide satisfactory services to the users. This was in the

applications for Immigrations and Visitors Statistics, the Government stores system and the Network Management and support.

4.1.4. Fast promotions of some of our locals into senior positions at the end of 1994 only partly succeeded in retaining staff because one of those promoted resigned within the same year to migrate to Australia. Others followed in 1995 and 1996. Bigger salaries and other remuneration in the private sector for IT personnel will continue to be a big factor in IT brain drain from Government and the findings of the Job Evaluation exercise when fully implemented could help in this regard.

4.1.5. From the first of July, 1996, the Job Evaluation was partially implemented for the IT staff at ITC. Those on the professional grades on AD03 to AD01, were reclassified as IT03 to IT01 respectively and had a change in salary according to the Job Evaluation Report. While this was a move in the right direction, it also created dissatisfaction to those who work in the Department as technologists, such as Assistant Programmers, Computer Operators and Supervisors. It also created an anomaly at the top level where the Assistant Managers on IT01 grade had similar range of salary as that of the Manager who was on US04. This totally de-motivated and demoralised those who were affected and drastically affected the Department's work progress. As long as the Public Service Commission continues to drag its feet in this kind of issues, the Department will continue to suffer from staff and work losses through de-motivated staff. By the end of 1996, this issue was still not resolved.



5. COMPUTER APPLICATIONS DEVELOPMENT INSTALLATION AND SUPPORT

5.1. SUMMARY

5.1.1. The strategy adopted in 1994 for computer application development work, in order to achieve the two objectives below continued to be used in 1995 and 1996.

- i) to quickly develop the local skills on a systematic approach to application development;
- ii) to enhance their knowledge and skills in the use of Oracle tools - the new technology platform for future development for Government.

5.1.2. Despite heavy losses in staff throughout the years, ITC managed to accomplish some major developments in the extension of its IT services throughout Government. Throughout 1995 and 1996, ITC was stretched to its limit to meet some of Government's major commitments. It is also sad to note that not everything that the Department tried to do were successful. **In May 1995, much against ITC's recommendation, the Accrual Accounting Project was awarded to a small unknown company in New Zealand called Avanti, whose expertise was questionable, but who was also bringing into the country an outdated technology called MUMPS to run the Government's Accrual Accounting on.**

5.1.3. The Bank Reconciliation system that reconciles cheques paid out by Treasury and Inland Revenue was completed in February 1995, together with the Examination system for the Ministry of Education that was completed in November of the same year.

5.1.4. TIS continued with its development work from 1993, while Water Rates went live in Suva, Lautoka in March, and Labasa in May.

5.1.5. Birth Death and Marriage System for the Registrar General's office continued to be developed in 1995 and finally went live in 1996.

5.1.6. In 1996 ITC started working on the Introduction of Internet to Government Departments and made presentations to Permanent Secretaries for their awareness in October of the same year.

5.1.7. Most of the applications were simply supported and maintained, while others were enhanced to increase their functionality's to the users.

5.2. ACCRUAL ACCOUNTING

5.2.1. Following Cabinet's decision to implement Accrual Accounting in the Fiji government, an Accrual Accounting team was set up by Finance to look into the implementation of such a system. The team included a Consultant from New Zealand Treasury, ITC, together with various government departments including Treasury, The Auditor General's office and PSC. Work included drawing up the RFP and inviting responses from potential suppliers through a Public Tender, evaluations and recommendations.

5.2.2. In May 1995, much against ITC's recommendation, the Accrual Accounting Project was awarded to a small unknown company in New Zealand called Avanti, whose expertise was questionable, but who was also bringing into the country an outdated technology called MUMPS to run the Government's Accrual Accounting on.

5.2.3. ITC did it's best to argue against the introduction of the package, based on it's long term cost and it's outdated technology, but was unfortunately not heeded by Finance who made the final decision based on the Accrual accounting office submission supported by other Departments such as PSC.

5.2.4. By the end of 1996, the Accrual Accounting was still being installed and data being fed in for the four pilot departments, and already late on it's schedule for live run.

5.3. TAX INFORMATION SYSTEM (TIS)

5.3.1. TIS continued with it's development throughout the year and by the end of 1996, it was estimated that it would be completed towards the end of 1997. Staff resignation and extensive training for new recruits and IRD staff, resulted in the expected date of completion for the project to be moved forward. This system was expected to process the 1997 returns in 1998.

5.3.2. The old Inland Revenue PAYE system continued to be supported while the new replacement is being developed, and would serve for parallel processing until the switch over to the new system is completed.

5.4. BANK CHEQUE RECONCILIATION (Treasury)

5.4.1. This project was completed, tested, implemented and parallel runs made before it was given to the users. The system allowed for the reconciliation of Government cheques paid out by Treasury for the salaries of civil servants.

5.4.2. The system has been designed to allow for multiple use by other Government Departments and Ministries that also want to do cheques reconciliation. In 1995, Treasury was the only user, while in 1996, the Inland Revenue also started using it to reconcile their cheques they write out to taxpayers.

5.5. EXAMINATION RESULTS (Ministry of Education)

5.5.1. A new Examination system was finally put into production in November of 1995. Processing of the examination Results was much quicker compared to the processing by the old system, even though there was an increase in the number of students who sat for the External Examinations in both 1995 and 1996.

5.5.2. The new system should be more efficient and should provide Education with better statistics on the Examination Results for the four different Examinations.

5.6. BIRTHS DEATHS AND MARRIAGES (BDM)

5.6.1. This system continued to be developed in 1995 and attracted much interest from the various Departments and Ministries who are stakeholders in this application. The system finally went live at the end of 1995 and was launched by the Minister at the beginning of 1996.

5.6.2. Capturing of birth data at the Suva Hospital started on 8th October 1996. The other two hospitals at Lautoka and Labasa followed much later with Lautoka being connected up towards the end of the year and Labasa being planned for 1997.

5.6.3. While we made great progress during these periods, the development was affected by the movement of staff throughout the years.

5.6.4. It is anticipated that this system will generate much more interest throughout the country when it is finished because of it's wide usage of data and it's connections to the VKB.

5.7. ELECTORAL ROLLS (Elections Office)

5.7.1. This system was used in both years to produce the rolls for the re-elections of a Tailevu Fijian and a Ba Indian seat in 1995 and two by-elections for the Tailevu Fijian seat in 1996.

5.7.2. Preliminary study for the redevelopment of this system on the Oracle platform was again looked at in 1995, but due to resource constraints, no major progress was made.

5.8. PAYROLL SYSTEM

5.8.1. Major changes were implemented for the five payrolls that Government is running. To facilitate payroll processing for the un-established workers, the printing of reports and pay-envelopes were decentralised to the major Divisions in the Central, Western and Northern PWD offices, away from the central site at ITC. This resulted in great improvements in turn around and services to our payroll users.

5.8.2. In 1995, ITC made changes also to pay out a 3% COLA for everyone in Government as ruled by the Arbitrator. This included all Established and Unestablished paid workers, FMF, Parliamentarians, Pensioners and other groups whose payrolls are processed at ITC.

5.8.3. In addition to this, the members of Parliament awarded themselves a pay increase in 1996 and this was also paid out through the salary system in December pay 26.

5.8.4. To try and alleviate professional brain drain into the private sector and overseas, the Job Evaluation was partially implemented and paid out in 1996 for Engineers, Medical Doctors, Information Technologists, Police, Nurses, and Prison officers. The teachers' allowances were also paid out in 1996.

5.8.5. Most of these changes were paid out towards the end of the year and put great strain on ITC's resources to ensure their implementations are on time and accurate, as their failures would have given rise to major consequences in the Government's financial commitments for the year and budget for the following year, apart from the problem it might have raised with the Trade Unions.

5.9. CUSTOMS

5.9.1. High priority continued to be given to the support of Customs system to maximise accurate collection of revenue. In July to August 1995, customs agent Williams & Gosling was given access to the computer system so that they could enter their own line items into the computer. This was tried to try and facilitate the processing of goods through the Customs Department. The rest of the processing was still being done by Customs. With this change, W&G was able to clear the goods within three hours instead of the usual time that can be as long as forty eight hours. Other customs agents were quickly put on-line into the Customs system after that and this connectivity continued into 1996 thus improving the work at Customs greatly and providing better services to the customers in a win/win situation where both organisations won.

5.9.2. In 1996, with AUSAID funding, a team of consultants conducted a study to try and improve Customs Departments and in particular it's data processing capability in an institutional strengthening exercise. The work continued onto 1997.

5.10. OTHER APPLICATIONS

5.10.1. Other applications that were supported and maintained throughout the years were :-

General Ledger for Government Accounts

This application continued to be supported while the Accrual Accounting package was being implemented as it's replacements. The application uses outdated technology and was difficult to support throughout the year.

Water Rates Billing for PWD

This new system finally went live in 1995 although it was expected to be live in November 1994. With the new system in place, ITC finally closed down the old Water Rates system it was running on the VAX computers and the total support for the water rates system was under the control of Price Waterhouse, the consultant for the system and Computech the supplier of the Water Rates computer system.

Vehicle Licenses for Road Transport

Throughout the years, Department of Road Transport continued to use this system as a backup to their drum records. Although partially used by the customer, ITC continued to support this system since it had useful data that was also used by the Police Department and other users.

Government Supplies Stores System

This system continued to be supported by Digital Equipment Corporation throughout 1995 and 1996 due to the shortage of staff at ITC. With the shortage of IT skills throughout the country, it is most unlikely that ITC would be in a position to take back this support role for some time to come. Government Supplies also expanded its services to Rakiraki in 1996, where ITC was asked to extend the Government computer network to cater for this particular need by the Supplies Department.

Immigration for the Immigration Department

This system was also supported by Digital Equipment Corporation during 1995 and 1996. Towards the end of 1996, with the help of ITC, Immigration acquired some new equipment for reading and printing machine readable passports (MRP). The readers were connected to the computer system at Nadi and Nausori to facilitate the checking of passengers in and out of the two airports. This new development is anticipated to be completed in 1997.

Land Lease of Crown Lands for Lands Department

The system continued to be supported throughout 1995 and 1996. With the planned change over to Oracle by the Lands Department for their Land Information System, this system will be transferred to the Lands Department to integrate with their other systems and also supported by them.

Visitors /Trade And Other Statistics

ITC continued to provide technical support to the Bureau of Statistics (BOS) throughout 1995 and 1996, particularly for their Visitor's Statistics from the Immigration system and also Trade statistics from the Customs database. Other small applications such as the employment survey, also continued to be supported while they set up their own system to do their own IT work in future. One of the first major work to be done totally in-house at BOS was the Census in 1996.

VAT - Value Added Tax.

VAT continued to be enhanced and modified for improvement and supported throughout these years as it is part of a major revenue collector for Government.



6. OPERATIONS AND SUPPORT

6.1. TERMINALS AND PRINTERS

6.1.1. By the end of 1996, a total of 572 computer terminals and 92 printers were connected into the ITC network around the country. This was an increase of 41 terminals and 8 printers from 1995 totals.

6.1.2. This increase was due to the normal growth in workload from user Departments throughout the year. In addition, two new sites were connected in 1996. These were the connection to Savusavu and Rakiraki for the Government Supplies system. Later in the year, the connection to Savusavu was also used by Customs Department when they went to establish an office in that town.

6.1.3. *Appendix D.1&2* show the distribution of terminals and printers by Divisions and Departments.

6.2. COMPUTER PROCESSING POWER

6.2.1. Conversion of Applications to run on the new Alpha systems continued throughout 1995 and 1996. Shortage of resources as a direct result of staff resignations did not allow us to progress very far or very fast with some of the work we planned for 1995 and 1996. This was one of them.

6.2.2. Increase in activities in the computer can be related to the increase in the number of customers whose names were received to be added to the computer so that they can access the computer at ITC. A total of 285 new names were added in 1996 alone.

6.2.3. The work to keep the production system away from the development environment continued throughout 1995 and 1996. Previous work had coupled the two system very closely that it became a major undertaking to separate them completely.

6.2.4. After the trial by W&G in 1995 to give access to customs agents to enter their own data into the customs system, many customs agents

requested for connections into the customs system. Most of the agents at Nadi Airport got direct connections and paid for the cost of extending the fibre optic cable from the Customs Department to their offices nearby. These companies were DHL Couriers, W&G, Air Terminals Services, Chauhan and Co. and Carpenters Shipping.

6.3. NETWORK

6.3.1. While most of the Government's activities are computerised through ITC, the connectivity and access to the ITC computers have been limited to the major centres of Suva, Lautoka, Nadi, Labasa, Nausori and Levuka. In 1995, the Government Supplies Department requested for the extension of their services to Rakiraki and Savusavu. Work on these connections were done by 1996 and in November of the same year, Customs had also joined the network and had set up an office at Savusavu also.

6.3.2. To increase efficiency and economy of costs, the Northern Division was changed to use X25 connection from 1995. Dependency on a single supplier, Fiji Post and Telecommunications Ltd., extended the length of time for completing this project into the two years and by the end of 1996, it was still not completed, and no indication of when it was likely to be finished.

6.3.3. In 1995, ITC started looking at the provision of Internet services to Government to facilitate information flow within and outside of Government. Internet development throughout the world had become a strategic tool for economic development in many countries. For the Fiji Government, this would be a major development towards economic growth as it has been effectively used by many overseas countries for this purpose. This project continued throughout 1996 and by the end of the year, the service was available to ITC, the Prime Minister's office and a few other sites that were being used to test out the services. To bring greater awareness to the Chief Executives of Government, a presentation was given to Permanent Secretaries during their monthly meeting in October. This not only created the awareness, but it also generated much greater interest in the project.

6.3.4. Throughout 1995 and 1996, ITC continued to subcontract the support, maintenance and management of its extensive network to the private sector which was awarded to Information Technology Services (ITS), from 1st February, 1994.

6.4. DISKS AND DATABASES

6.4.1 At the end of 1996, ITC had a total disk space of 68,350,252,032 bytes (characters) or 68.35 Gigabytes. The databases for all the applications added up to 12.09 Gigabytes. The biggest database was for Customs at 3.7 Gigabytes followed by Immigration data at 2.33 Gigabytes.

6.4.2. Any changes to the data and computer files are backed up to magnetic tapes every night, while a total backup of all databases are done in the weekend to ensure the security of all data for recovery purposes.



7. TRAINING AND EDUCATION

7.1. PERSONAL COMPUTER TRAINING

7.1.1. Training in the use of Personal Computers and specific applications continued to be provided by the Department throughout 1995 and 1996, as they were still the most popular courses in the civil service. With the return of the Training Officer in 1995, after three years of Study in Australia and attaining a Bachelor's degree, a more qualitative approach to the courses was conducted in 1995.

7.1.2. Thirty (30) courses were conducted for 313 personnel in Government and the Military in 1995. Statistics showed that the highest number of officers who attended the courses were the Typists, followed by Secretaries and then Clerks and Military officers. This was a direct reflection on the approach to the use of computers by Government. It is used mostly by typists and secretaries for word-processing. In 1996, the training programmes were badly affected by the resignation early in the year of the senior trainer, who left to join the Reserve Bank of Fiji. ITC was left with one trainer, (from four in 1995), to continue the training efforts. Thirty two (32) courses were conducted for 305 officers in Government and the Military.

7.1.3. Nine different modules of courses were conducted throughout the year. All the courses were based on the Windows operating system and tailored on the Government's standard word-processing and spread-sheet packages.

7.1.4. *Appendix E.1&2* shows the 1995/1996 courses in their greater details.

7.2. STAFF TRAINING

7.2.1. ITC continued to take advantage of overseas sponsored courses to upgrade the skills of staff throughout 1995 and 1996. Most of the training were sponsored by JICA and were conducted in Okinawa, Japan, while one of the staff attended a Systems Analysis Development Methodology in Sri Lanka.

7.2.2. Overseas training was supplemented by local courses conducted by GTC and those run in-house by ITC staff who sometimes dealt with special topics they have learned from a course or during the normal execution of their work.

7.2.3 At the end of 1996, the Assistant Manager (Operations) Akuila Yabaki was awarded a scholarship to do a one year study in the UK for a Masters degree in Intergrated Management System. Also in the same year, one other staff was awarded a scholarship to attend a three year programme at Monash University for a Bachelors degree in Information Systems.

7.2.8. Details of all training are in *Appendix F*.



8. BUDGET

8.1. MAJOR ALLOCATIONS

8.1.1. Staff losses and inability to fill vacancies throughout the two years was the major cause of under-spending within most of the budget allocation as major projects were either not done or made very little progress.

8.1.2. While budget continued to be healthy as a recognition of the importance of IT by Finance, delivery of project output was not as expected because of the fluid movements of staff in and out of ITC. Although in comparison to other countries, the spending on IT in general is much lower than is the normal allocation of the total Government allocation of 2.5%.

8.1.3. The actual spending against budget for the two years is in *Appendix G*.



9. PERSONAL COMPUTERS (PCs)

9.1. COMPUTERS IN GOVERNMENT MINISTRIES/DEPARTMENTS

9.1.1. The number of personal computers and printers in Government continued to increase in 1995 and 1996, as Ministries and Departments continued the trend to use computers not only for office automation work, such as word processing and spreadsheet, but also for major databases and local area network, as started in 1994. Laser printers were much more preferred to dot-matrix together with ink-jet types for coloured printers..

9.1.2. By the end of 1995, there were close to 800 personal computers and close to 500 printers in use by Government Departments and Ministries. Unfortunately the annual survey to produce the figures for 1996 could not be done due to the shortage of staff. **It would not be unreasonable to surmise that over 1000 personal computers and 600 printers would be in use by Government at the end of 1996.**

9.1.3. **Appendix H** shows the growth and distribution of VAX terminals, personal computers and printers in Government during 1994/1995/1996.



10. IT POLICY COMMITTEE

10.1. POLICIES AND STRATEGIES ON COMPUTERS IN GOVERNMENT

10.1.1. This committee could not meet at all in the last two years due to the work pressures of other committee members and so the policy development work continued along those done in previous years. Most of the members were utilised in the Accrual Accounting project during it's early stages of evaluation and implementation.

10.1.2. It was hoped that this Committee would be revived when members could find time to meet since it's role is of immense value to the development of IT in Government.



11. PROBLEM AREAS

11.1 STAFF AND BUILDING

11.1.1. While the year had been without major disaster, 1995 and 1996 was not without their shares of problems.

11.1.2. As in previous years, ITC as an organisation, has come to be accepted as a training ground for anyone who wants to make a career in Information Technology. This is reflected by the fact that most, if not all of the IT Departments in Fiji, are staffed by Ex-ITC officers. While this has been good for the overall image of Government in terms of training, it has not reflected well on the Department's work performance.

11.1.3. Experienced and skilled staff were lost into both the private sector and overseas countries in 1995 and 1996. To try and alleviate the problem, PSC partially implemented the Job Evaluation from July 1996 for those posts where the major losses were occurring the most. Unfortunately this came too late as most staff had left or were in the process of leaving. ITC continued to lose it's skilled staff, to the detriment of the Department's performance.

11.1.4. With the Government's business being highly dependent on the Department, the security of the whole area has been identified as being of very high risks. The compound is a public access and anyone who wishes to sabotage Government through the Department, can do so with minimum effort. In 1996, the department managed to put up a fence by viring funds from other votes and this has improved the security to some extent and caused some deterrents, but it is definitely not a long term solution.

11.1.6. As pointed out in our earlier reports, there is also considerable risk of fire because of the age of the electrical wiring in the building itself. The roof leaks and the wooden structures in most parts of the building have rotted to the core.

11.1.7. The basement where the electrical supply is located is prone to flooding because it is below sea level. Until ITC is relocated into a more secure area, the Government runs a grave risk of a major catastrophe should ITC suffer a major disaster.



12. CONCLUSION

12.1. SUMMARY AND ACKNOWLEDGEMENT

12.1.1. Year 1995 and 1996, have been rewarding years for ITC with much achieved through intensive efforts and hard work by so few. Difficulties faced throughout these years had to be taken up as extra challenges to be overcome, and the main goal of providing efficient and effective services to our user Departments continued to be the Department's primary objective. This was achieved most of the time, with great satisfaction and pride.

12.1.2. ITC's success is attributed to it's staff, whose dedication and sacrifices enabled the Department to keep up the high standard of achievement throughout the year. I would therefore like to express to them my sincere thanks and gratitude for their contributions, loyal support and hard work, to ensure that our services to others continue to be effective.

12.1.3. It is also with gratitude that I acknowledge with thanks my appreciation to the Australian Government, the Japanese Government through JICA and APO for their support and funding of our training, for the development of our local staff to enhance their knowledge and skills in the field of Information Technology.

12.1.4. Our sincere thanks are also conveyed to all Ministries and Departments, particularly our major customers at Inland Revenue, Customs, Immigration and Treasury for their tolerances of our services throughout these two years particularly at the worst of our performances; the Ministry of Finance is gratefully acknowledged for the funding and their continuous support throughout the year, to enable us to serve everyone better.

DRAFT



APPENDICES