Central Information Systems Division
ICT Manual

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# Table of Contents

1. **Introduction** ........................................................................................................................................... 2  
   1.1 Structure of CISD ................................................................................................................................. 3 

CISD structure comprises of the Technical cadre and the Administrative Cadre........3

2. **Technical Staff** ......................................................................................................................................... 3  
   2.1 Analyst Cadre........................................................................................................................................ 3  
   2.1.2 Operations Cadre................................................................................................................................. 4  
   2.2 Administrative Cadre ............................................................................................................................... 4

3. **Services provided by CISD** ..................................................................................................................... 4  
   3.1 Administration of the Government Email Services (GES)................................................................. 4  
   3.2 Development and Maintenance of Government Websites ................................................................. 5  
   3.3 Database, System and Network Administrators .................................................................................. 5  
   3.5 Government Payroll System .................................................................................................................. 7  
   3.7 Oracle Technical Support....................................................................................................................... 8  
   3.8 Computer Support and Commissioning ............................................................................................... 8  
   3.9 Data Entry Section ................................................................................................................................. 8  
   3.10 Back up service ................................................................................................................................. 9  
   3.11 Help Desk............................................................................................................................................ 9

4. **Flow of activities for CISD** .................................................................................................................... 9
1. Introduction

The Central Information Systems Division is a division of the Ministry of Technology, Communication and Innovation. It is situated on the 4th floor of Emmanuel Anquetil Building situated at Sir Seewoosagur Ramgoolam Street, Port Louis. The Central Information Systems Division was formerly known as the Data Processing Division.

In 1970, the Data Processing Division (DPD) was created under the aegis of the Ministry of Finance to act as a Centralized Service Bureau for the Civil Service, Parastatal Bodies and Local Authorities. However, to keep pace with the changing trends in the Information Technology arena, the DPD was restructured and eventually renamed the Central Information Systems Division (CISD).

From its creation up to 1993, about 70 application systems have been developed and implemented by the CISD. Gradually, the CISD has decentralized its operations. Application systems, which were in operation for the Government and Parastatal Bodies, are now being run in-house by the respective users. CISD is responsible for providing ICT support services for the smooth running of computerization projects in all Ministries/Departments. The use of Information Technology (IT) in Government introduces an efficient, speedy and transparent process for disseminating information to the public and other departments.

Our portfolio of our activities include:

- Government Payroll
- Administration of over 8500 email accounts
- Maintenance of over 170 websites for Ministries/Departments
- Development and maintenance of small & medium sized applications.
- Database, Systems and Network Administration in IT Units of Ministries/Departments
- Maintenance of the Government IntraNet (GINS) System
- First Level Oracle Technical Support on Oracle based Systems
- Provision of a Central Backup Service
- Provision of Technical ICT Support in Ministries/Departments
- Data Entry Operations
- Commissioning of ICT Equipment

We also operate a Help Desk facility on 2112480 during normal working hours.
1.1 Structure of CISD

CISD structure comprises of the Technical cadre and the Administrative Cadre.

2. Technical Staff

The technical section are divided into two distinct branches. The Analyst Cadre and the Operations Cadre. Technical staff are posted at the CISD headquarters and in different Ministries/Departments to ensure the smooth running of computerised projects.

2.1 Analyst Cadre

Officers of Analyst Cadre (Senior Systems Analyst, Systems Analyst and Senior Assistant Systems Analyst/Assistant Systems Analyst) are under the supervision of the Technical Manager. Depending on where they are posted, Analysts perform the following duties:

- Database Administration
- Systems Administration
- Network Administration
- Application development and maintenance
- Website creation and Administration
- Email Administration
2.1.2 Operations Cadre
Computer Operations Controller, Senior Computer Support Officer, Computer Support Officer, Data Entry Controller, Data Entry Supervisor, Senior Data Entry, Data Entry Officer and Assistant Operations Manager are under the supervision of the Operations Manager.

2.2 Administrative Cadre
The Administrative cadre is composed of the Human Resource Executive, Senior Procurement and Supply Officer, Office Management Executive, Management Support Officers and Manager Financial Operations.

3. Services provided by CISD

This chapter highlights the different types of ICT support services offered by CISD to Ministries/Departments. Request for the services listed below should be made to CISD.

3.1 Administration of the Government Email Services (GES)

The GES project consisted in setting up an infrastructure for providing email services to Government employees, so as to improve communication between Ministries, Government Departments and the public. The email system is web-based and therefore can be accessed from any computer connected to the internet. The objective of the Government Email Services (GES) is to provide e-mail services to senior officers in the Public Service as a means of improving information flows and communication among Ministries and Departments, and with the Public. Presently, there are some 8500 Government email users.

Duties of the Email Administrator
- Creation, deletion and rename of email account
- Reset password
- Troubleshoot email problems
- Query the email database
- Verify logs
- Update the email directory
- Email account management
3.2 Development and Maintenance of Government Websites

Each Ministry/Department is normally provided with the services of a webmaster from CISD for the creation and maintenance of its website. In many instances, the same person acts as the DBA and the webmaster. There is a total of 55 webmasters for over 170 websites in the Public Service.

The duties of the Webmaster include the following:

- Design/update website under the supervision of the designated Chief Information Officer (CIO);
- Bring technical enhancements to websites;
- Ensure that websites adhere to Web Design Standards.
- Liaise with the Government Online Centre (GOC) for any updates/technical problems regarding web hosting and for web hits statistics.

Moreover, the following services are also provided by CISD:

- Design of new and event based website
- Training of all webmasters
- Provide assistance to all webmasters
- Advise users in Ministries/Departments to enhance existing website

3.3 Database, System and Network Administrators

Ministries/Departments with major computer systems usually require the services of a Database Administrator (DBA) from CISD to ensure smooth running of computerised systems. The DBA who is posted on a full-time or part-time basis, is called upon to work in close collaboration with the designated Chief Information Officer (CIO) of the Ministry/Department. There are some 37 IT Units, where DBAs are posted.

The duties of the DBA, System and Network Administrators include the following:

- Startup / Shutdown of system;
- Create/Backup/Recover database;
- Manage database storage and ensure optimal performance of the database;
• Enroll users;
• Grant database access privileges and ensure security of the system;
• Process requests from users e.g. generation of ad-hoc reports;
• Apply standards and procedures for the proper functioning of the system;
• Provide first level support on the computer system;
• Monitor, troubleshoot & resolve hardware, software and network problems (and liaising with suppliers whenever the need arises).
• Troubleshoot GINS & network problems
• Analyse, Isolate and Troubleshoot network issues
• Monitor networks to ensure security and availability to specific users.

Officers in the Analyst Cadre are required to perform database, Systems and Network Administrators duties. Moreover, CISD staff is also involved in case of re-engineering of an existing computer system as the data from the existing computer system will have to be migrated to the new system. Data migration is an important exercise that requires careful planning and preparation. The involvement of the software developer and CISD is crucial during data migration to ensure consistency between data of the old system and the new system.

3.4 Government IntraNet System

The Government IntraNet System (GINS) has been implemented in 2004 with the intention of providing centralised Internet and access to horizontal systems e.g. Registry System via the Government Online Centre (GOC). The Central Coordination Unit (CCU), a unit of the Central Information Systems Division has been created in 2005. The CCU is actually managing around two hundred and fifty nine (259) Sites.

Duties of CCU staff:
• Configuration of GINS router and related devices to access e-services and GOC
• Provide specialized support on Local Area Networks (LAN).
• Provide WAN IP and Configuration of WAN on GINS routers, network segments, Internet.
• Install and maintain network hardware and software.
• Analyze, Isolate and Troubleshoot network issues.
• Monitor networks to ensure security and availability to specific users.
- Evaluate and modify network related system’s performance
- Perform network address assignment.
- Perform Training on the GINS Infrastructure.
- Provide Consultants and solution providers with inputs related to system to be implemented in the Government.
- Commission telecommunication equipment such as routers, switches, Digital PABX, Servers, Load Balancers, Firewalls and SAN Servers.

### 3.5 Government Payroll System

The Government Payroll System processes the payroll for about 55,000 Government employees. The payroll system will at a later stage integrate in a Human Resources Management Information System (HRMIS) which is targeted to Go Live in 2016.

**Duties of Payroll staff:**
- Updating monthly payroll changes and processing the payroll
- Printing of Payslip and other Payroll documents
- Maintaining the Payroll database
- Processing adhoc Request
- Uploading of data for E-Payslip System

### 3.6 Application Development Unit

To promote computerisation of the Civil Service and to ensure productivity of Public Officers, several IT systems have been designed, developed, implemented and maintained by the Central Information Systems Division since 1971. Systems developed by CISD were previously standalone systems but the systems are currently developed in a LAN and web-based environment. These applications systems have been designed and developed in VB, VB.net, php and Oracle.
Duties of Application developers:
- Analysing the requirements of users
- Designing systems to meet user requirements
- Development and testing of Application Software
- Installation and Implementation at user end
- Maintenance of Systems which have gone Live

3.7 Oracle Technical Support
The Oracle Technical Support Unit is mainly responsible to provide first level support to Ministries and Departments where Oracle solutions have been implemented. There are some 58 Oracle systems in the Public Service.

Main duties of the Oracle Technical Support staff:
- Troubleshoot Oracle problems upon request
- Installation of Oracle products
- Periodical testing of Backups of Oracle based Systems
- Perform analysis and research on Oracle products
- Maintain knowledge based system up to date
- Periodical health check of all Oracle based Systems
- Liaise and coordinate with all DBAs for sound proactive tasks on Database
- Issue guidelines and best practices to all DBAs
- Knowledge transfer and training to all DBAs
- Assist in the implementation of Oracle Security features in existing system

3.8 Computer Support and Commissioning
Computer Support Officers are mainly responsible for the smooth running of computer equipment in Ministries and Departments. CISD provides ICT support services to all Ministries and Departments. Moreover, all IT equipment purchased in the Government are commissioned by the CISD.

3.9 Data Entry Section
The data entry Section perform Data Entry duties in the computerized projects in Ministries and Departments.

3.10 Back up service
The CISD provides an offsite storage for backup tapes for the Civil Service. Ministries and Departments are required to send their backup tapes to the offsite storage centre for safe keeping.

3.11 Help Desk
The CISD operates a help desk facility (Tel: 211-2480) to offer assistance to Ministries/Departments in relation to technical and operational problems regarding usage of computer equipment, standard software, Internet, Government Email Services and E-Payslip. The CISD help desk provides remote assistance (through telephone) for simple problems. In case of complex problems, the CISD staff call at the concerned Ministry/Department. Problems not solved at the level of CISD are referred to suppliers for necessary intervention. Ministries/Departments should always check whether any intervention/repair undertaken is covered under warranty or maintenance agreement prior to processing any payment.

4. Flow of activities for CISD
OUR CONTACT

CISD operates a general help desk

Tel. no. 211-2480 between 8.45 hrs to 16.00 hrs. All correspondence to be addressed to:

The Director
Central Information Systems Division
Ministry of Technology, Communication and Innovation
Level 4, Emmanuel Anquetil Building
Corner Sir S. Ramgoolam & Jules Koenig Streets
Port Louis
Mauritius.

Emails should be addressed to cisd@govmu.org with mention of service request in the subject line.