



**MINISTRY OF SCIENCE, ENERGY & TECHNOLOGY
JOB DESCRIPTION AND SPECIFICATION**

JOB TITLE:	Database Administrator
JOB GRADE:	MIS/IT 5
DIVISION:	Corporate Services Division
BRANCH:	Management Information Systems Branch
REPORTS TO:	Director, Management Information Systems
MANAGES:	N/A

This document is validated as an accurate and true description of the job as signified below

Employee

Date

Head of Department/Division

Date

Date received in Human Resource Division
Created/revised

Date

1. JOB PURPOSE

Under the general direction of the Director, Management Information Systems, the Database Administrator is responsible for the performance, integrity, and security of the Ministry of Science, Energy and Technology's databases. The Database Administrator provides technical expertise in the design, implementation, and maintenance of database management systems that support institutional business and applications. Additional responsibilities include reporting, data input and output, technology management, and end-user training and support.

2. KEY OUTPUTS

- Integrity and accuracy of database information maintained
- Daily usage of the database system monitored and database backed-ups
- Database system operating and security standards and procedures and user instructions developed and documented
- Problems with the database system investigated and resolved
- ICT Continuity Plan developed and managed Corporate, Strategic and Operational Plans, Budget for the section prepared
- Annual/Quarterly/Monthly/Periodic Reports prepared
- Technical Advice and interpretation provided
- Individual Work Plan developed

3. KEY RESPONSIBILITY AREAS

Technical/Professional Responsibilities

- Develops and maintains initiatives to manage the accuracy and integrity of database information by:
 - conducting regular audits to verify data quality and data completeness
 - investigating and resolving inconsistencies found in data and reports
 - ensuring regular cleanup of duplicate records, and inconsistent and unwanted data from the databases
 - supervising regular back-ups of the database system;
- Develops and documents operating and security standards and procedures and user instructions for the database system;
- Performs database system updates and upgrades and the implementation of new functionality, including portal services, web delivery of information and third party tools for reporting;
- Designs and creates various queries and reports, from the database system, to meet specified needs;
- Transfers data from databases to other software programmes, or vice versa, for further manipulation, as required;
- Conducts on-going reviews of datasets in other electronic formats to determine the feasibility of integrating them into the database system;
- Evaluates the database system at intervals and recommends improvements where needed;
- Monitors and controls day-to-day usage of the database system. This includes:

- setting and approving user access and permission levels
 - ensuring conformance to established policies and procedures;
- Troubleshoots and resolves problems related to the database system;
- Develops an ICT operational continuity framework in accordance with the strategic direction of the organisation;
- Develops and maintains ICT operational continuity plans;
- Defines and executes change control procedures to ensure that the ICT continuity plan is current;
- Plans and conducts ICT continuity training programmes to meet the needs of the organisation;
- Creates and modifies ICT operational procedures and guidelines (including manuals, checklists, shift planning, handover documentation, escalation procedures, etc.);
- Provides the Ministry's staff with technical assistance and support as regards the database administration;
- Keeps abreast of global trends and developments in Database Management and makes recommendations where the organisation may benefit from the implementation of such technology.

Management/Administrative Responsibilities

- Develops Individual Work Plans based on alignment to the overall plan for the section;
- Participates in meetings, seminars, workshops and conferences as required;
- Prepares reports and programme documents as required.

Human Resources Responsibilities

- Participates in preparation and implementation of presentations on role of Division/Unit for the Orientation/Onboarding programme;
- Contributes and maintains in a harmonious working environment.

Other Responsibilities

- Performs all other related duties and functions as may be required from time to time.

4. PERFORMANCE STANDARDS

- Integrity and accuracy of database information maintained within established guidelines, resources and timeframes;
- Daily usage of the database system monitored, and database back-ups managed in keeping with ICT principles, practices and timeframes;
- Database system operating and security standards and procedures and user instructions developed and documented in accordance with agreed standards and timeframes;
- Problems with the database system investigated and resolved in accordance with agreed standards and timeframes;

- ICT Continuity Plan developed and managed in keeping with best practices and required timeframes;
- Corporate, Strategic and Operational Plans, Budget for the section prepared within established guidelines, resources and timeframes;
- Technical advice and recommendations provided are sound and supported by qualitative/quantitative data;
- Work plans conform to established procedures and implemented accorded to establish rules;
- Reports are evidence-based and submitted in a timely manner;
- Confidentiality, integrity and professionalism displayed in the delivery of duties and interaction with staff.

5. INTERNAL AND EXTERNAL CONTACTS

Internal Contacts (required for the achievement of the position objectives)

Contact (Title)	Purpose of Communication
Principal Director, Corporate Services	Receive guidance
Director, Management Information Systems	Identify emerging issues in Database Management
ICT Division	To request Policy advice and support; Participating in the development and monitoring of the National ICT strategic plan
Executive Management	To receive information Provide expert advice, counsel and recommendations on Database Management decisions and initiatives
General Staff	To receive and provide information

External Contacts (required for the achievement of the position objectives)

Contact (Title)	Purpose of Communication
e-Gov Agency	<ul style="list-style-type: none"> • To collaborate on Database Management issues • To request technical advice and support
Other MDAs	<ul style="list-style-type: none"> • Providing/requesting information on ICT matters
Professional Groups, Universities and other Educational Institutions	<ul style="list-style-type: none"> • Providing/requesting information on ICT matters
ICT Professionals	<ul style="list-style-type: none"> • Providing/requesting information on ICT matters
Local and International ICT	<ul style="list-style-type: none"> • Liaising on ICT services provided to the Ministry

Contact (Title)	Purpose of Communication
Consultants and Institutions	
ICT Hardware/Software and Services Providers	<ul style="list-style-type: none"> • Providing/requesting information on ICT matters

6. AUTHORITY

- Advises the Ministry's Departments/Agencies on Database Management Development Policies and Programmes;
- Recommends Database Management initiatives;

7. REQUIRED COMPETENCIES

Core

- Oral Communication
- Written Communication
- Customer & Quality Focus
- Teamwork & Cooperation
- Integrity
- Compliance
- Interpersonal Skills
- Change Management

Technical

- Sound knowledge of relational database design, optimization, and troubleshooting
- Sound knowledge of Microsoft SQL Server and/or Access database software
- Advanced knowledge of Microsoft Windows and Office products
- Sound knowledge of data extraction, reporting and analysis tools.
- Sound knowledge of database management trends and standards
- Sound knowledge of established database management policies and procedures
- Working knowledge of Internet technologies including HTML, PHP, ASP, etc.
- Sound knowledge of the analysis and documentation of complex business processes
- Sound knowledge of current technological trends with respect to software development
- Working knowledge of relevant computer platforms and solutions
- Demonstrates sound personal and professional integrity, reflecting high ethical and moral values
- Advanced IT skills in relation to Word, PowerPoint, Excel and MS Project or another project tool

8. MINIMUM REQUIRED EDUCATION AND EXPERIENCE

- Bachelor's Degree in Computer Science, ICT and Management Information Systems or a related discipline;
- Three (3) years related experience, with at least three (3) years in a Database Administrator role.

9. SPECIAL CONDITIONS ASSOCIATED WITH THE JOB

- Work will be conducted in an office outfitted with standard office equipment and specialized software. The environment is fast paced with on-going interactions with critical stakeholders and meeting tight deadlines which will result in high degrees of pressure, on occasions. Maybe required to travel island wide in execution of duties.