



STANDARD OPERATING PROCEDURE

CHIEF DIRECTORATE: CORPORATE SERVICES
DIRECTORATE: MANAGEMENT INFORMATION SERVICES (DG/ITO)

SOP Title <Name
the SOP> Software Development

SOP Number:
<Provide the reference
number for the SOP> SOP/01

PURPOSE: <Explain the objective the SOP is intended to achieve>
To outline the Software Development processes (step by step process)

SCOPE: <State the range of activities the SOP applies to as well as any imitations or exceptions>
ICT Systems Software Development for all employees

RESPONSIBILITY: <State the officials, groups, contractors, & subcontractors, responsible for complying with the SOP>
<State the person or group responsible for assuring the appropriate officials are trained on the SOP>
All departmental employees
Office of the Premier
SITA
DPSA

STANDARD OPERATING PROCEDURE: SYSTEM DEVELOPMENT

PROCEDURE: <Explain the procedure in simple steps. Describe what to do, not how to do it> <State who does each step & how it is recorded to be certain whoever is performing the procedure can prove that they have done it. Think about what is needed before the procedure is started so that the person performing the function can do it correctly, the first time>

No.	Task Name	Task Procedure	Responsibility	Time Frame	Supporting Documentation	Service Standard
1.	SYSTEM DEVELOPMENT REQUESTING PROPOSAL AND REPORTING	<ul style="list-style-type: none"> User/employee request approach for the proposed system to be developed. 	User / Employee Assistant Director	1 day	Request Form	
2.	PLANNING AND REQUIREMENTS GATHERING	<ul style="list-style-type: none"> DGITO proposed a meeting to gather the system requirement and categorize the scope of the requested proposal Define objectives: to clearly outline the goals and objectives of the software project. Stakeholder analysis: Identify all stakeholders and gather their requirements. Feasibility Study: Conduct a feasibility study to assess technical, financial, and operational viability. 	User/ Employee Assistant Director	2 months	Business Requirements Document (BRD) Spreadsheet register	

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3.	2. Design	<ul style="list-style-type: none"> • Develop a high-level architecture of the system. • Create detailed design documents, including data models, interface designs, and algorithms. • Review and Approval for the design reviewed and approved by stakeholders. 	Assistant Director User/ Employee	2 months	Research the systems resolution manual	
4.	SYSTEM DEVELOPMENT PHASE	<ul style="list-style-type: none"> • Coding Standards: by establishing coding standards and guidelines. • Version Control: by using version control systems to manage code changes. • Code Reviews: Implementing regular code reviews to ensure quality and adherence to standards. 	Assistant Director	3 months (website) 6 months (application)	Change management plan	

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5.	SYSTEM DEVELOPMENT TESTING PHASE	<ul style="list-style-type: none"> • Unit Testing: by conducting unit tests to verify individual components. • Integration Testing: to test the integration of different modules. • System Testing: Perform system testing to ensure the entire system works as intended. • User Acceptance Testing (UAT): Conducting UAT with stakeholders to validate the software against requirements. • Satisfaction/Approval resolution document and closure for the required system to be published. 	Assistant Director User/ Employee	2 months	Survey/Satisfaction Form	
6.	SYSTEM DEVELOPMENT DEPLOYMENT PHASE	<ul style="list-style-type: none"> • Deployment Plan: Develop a detailed deployment plan, including rollback procedures. • Environment Setup: Prepare the production environment. 	Assistant Director(s) Director SITA	2 months	Deployment report Plan	

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		<ul style="list-style-type: none"> • Deployment: Deploy the software to the production environment. 				
7	SYSTEM DEVELOPMENT MAINTANANCE PHASE	<ul style="list-style-type: none"> • Monitoring: Continuously monitor the software for issues. • Bug Fixes and Updates: Address bugs and release updates as needed. • Documentation: Keep all documentation up to date. 	Assistant Director	Ongoing	Screenshots/Quarterly report	
8	SYSTEM DEVELOPMENT REVIEW AND IMPROVEMENT	<ul style="list-style-type: none"> • Post-Implementation Review: Conduct a review after deployment to identify lessons learned. • Continuous Improvement: Implement improvements based on feedback and performance metrics. 	User/Employee Assistant Director	Ongoing	Screenshots/Quarterly report	

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REVIEW AND REVISION: <State how often the SOP is reviewed & under what circumstances it is to be revised>
 This SOP will be reviewed when there are changes in legislation or the operating environment.

CONTINGENCIES: <State what happens if the SOP cannot be followed & identify who needs to be notified>

Director: Information Management Services (DGITO)

REFERENCES: <List related SOPs, any supporting documentation necessary to understand & correctly follow the procedure, including any applicable regulations & regulatory guidelines>

TYPE OF REFERENCE	REFERENCE
ITIL Version 4	Information Technology Infrastructure Library framework
COBIT	Control Objectives for Information and related technologies
GCIS Guidelines	Government Communication Information System
SDLC	System Development Life Cycle
SITA Business Agreement	Contractual agreement between the department and SITA
SITA SLA	Service Level Agreements that SITA has with the department
Microsoft Services Premier Support	License Agreement with Microsoft to support the provincial departments in maintenance of Microsoft platform infrastructure.
DPSA	Department of Public Service and Administration circulars and directives on ICT

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TYPE OF REFERENCE	REFERENCE	
DOCUMENT	DOCUMENT TITLE	APPLICABILITY
Policy	All ICT policies	Whole department

DEFINITIONS: <Define words and acronyms that people reading the SOP would not generally know and that would require clarification. If a definition is needed and one exists in the regulations, use the regulation definition>

Term / Acronym	Definition
SOP	Standard Operating Procedure
COGTA/ the Department	Department of Cooperative Governance and Traditional Affairs
DGITO	Departmental Government Information Technology Office
ICT	Information Communication Technology
BRD	Business Requirements Document (BRD)
DGITO Helpdesk Officer	A person who provides first level support to all departmental users
MIS	Management Information Services

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Term / Acronym	Definition
System Development Team	A group of people who work together to define, design, test, and implement a software application
System Development	Process of creating, designing, testing, and implementing a new software application or program
Phase	Stage in a series of events
Deployment	Process of making software available for use on a system
Maintenance	The process of changing, modifying, and updating software to keep up with customer needs
Design	The process of conceptualizing how a software system will work before it is implemented or modified
Planning	A forward-looking process that involves analyzing data, creating proposals, and designing concepts to achieve specific objectives

ATTACHMENTS: <Attach any documents used in support of the SOP, e.g. flowcharts & work instructions>

DGITO/MIS Structure

HISTORY OF CHANGE: <State in sufficient detail what changes were made what parts of the SOP were affected & when the changes become effective>

None

