



Department: Public Service and Administration REPUBLIC OF SOUTH AFRICA

# Public Service Corporate Governance of Information and Communication Technology Policy Framework

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#### Preface

The Public Service Act and Regulations places the responsibility for governance and management of electronic government (ICT) in the Public Service with the Minister of Public Service and Administration. The Regulations also require of the Executive Authority to prepare a strategic plan for the department and the Head of Department to be responsible for the information plan as derived from the strategic plan. Based on the information needs of a department, ICT is a fundamental asset of the Public Service.

Information however never received the same level of attention than people, money and organisation. Some of the main problems were performance measurement and accountability due to a lack of involvement and support from top management, performance measurement systems not aligned with the department's strategic priorities and goals and poor communication. Corporate Governance of ICT requires that all important ICT decisions should come from the senior political and managerial leadership and not to be delegated to ICT management. This accountability enables the department to align the delivery of ICT services with the department's strategic goals.

The Corporate Governance of ICT is a continuous function that should be embedded in all operations of a department, from Executive Authority and Executive Management level to the business and ICT service level. In the execution of the Corporate Governance of ICT, the leadership should provide for the necessary strategies, architectures, plans, frameworks, policies, structures, procedures, processes, mechanisms and controls, and ethical culture.

Through practices, principles and implementation approach, the Corporate Governance of ICT Policy Framework seeks to provide the departments with direction to implement Corporate Governance of ICT within their spheres of accountability and responsibility.

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# EXECUTIVE SUMMARY

Government transformation is, at a strategic level, informed by government-wide key priority areas that have been translated into 12 strategic outcomes, guided by the Batho Pele principles of equal access to services, increased productivity and lowering of costs. The purpose of information and communication technology (ICT) is to enable the Public Service in its quest for service delivery. The ICT House of Value<sup>1</sup> depicts the values and key focus areas of ICT service delivery. These strategic outcomes, principles, values and key focus areas inform the acquisition, management and use of ICT.

To determine whether ICT in the Public Service delivers an enabling service, various investigations have been done to establish the shortcomings of ICT service delivery. The first of these was the 1998 Presidential Review Commission (PRC) report, which stated that all-important ICT-decisions should come from the senior political and managerial leadership of the state and not be delegated to the technology specialists, and further that the management of ICT should be on the same level as the management of other resources. It furthermore advocated a common enabling framework of governance.

In 2000, Cabinet approved the creation of the Government Information Technology Officer (GITO) position, with the requirement that the GITO in each department should be responsible for aligning the respective department's ICT strategic plan, its strategic direction and its management plans. Furthermore, the GITO should report to the Head of the Department (HoD) and be part of the Executive Management team.

Since the publication of the PRC report, little has changed with respect to the governance of ICT in the Public Service. This was confirmed by the Auditor General's (AG) information systems review of governance of ICT in government conducted in 2008/09 and again in 2009/10. The AG recommendations included the following:

- (a) A government-wide Governance of ICT Framework should be put in place to implement a national ICT strategy to address ICT risks based on defined processes and standards; and
- (b) The Governance of ICT roles and responsibilities should be defined and implemented to ensure adequate Public Service ICT enablement.

<sup>&</sup>lt;sup>1</sup> e-Government Policy 2002 as amended

The AG further found that the GITOs were not fulfilling their strategic responsibilities, largely due to inadequate accountability structures resulting in the GITO not being represented at a strategic (executive) management level.

In 2010/11, the AG found that little progress had been made as only 21% of departments had implemented adequate governance controls but even these governance controls were unsustainable because they had not been formally rolled out by management and thus were not enforceable.

The view that ICT should be governed and managed at a Political Leadership and Executive Management level is supported by international accepted good practice and standards in the form of **King III Code** of Good Governance, **ISO 38500 Standard** for the Corporate Governance of ICT and **COBIT** a comprehensive Governance ICT Process Framework. It also places accountability for governance of ICT fully in the hands of Political Leadership and Executive Management (equivalent to the Board).

This accountability enables the department to align the delivery of ICT services with the department's strategic goals.

The executive authority and management of departments need to extend corporate governance as a good management practice to ICT (Corporate Governance of ICT). In the execution of the Corporate Governance of ICT, they should provide the necessary strategies, architectures, plans, frameworks, policies, structures, procedures, processes, mechanisms and controls, and ethical culture. To strengthen the Corporate Governance of ICT further, the GITO should be an integral part of the Executive Management of the department.

The Corporate Governance of ICT is a continuous function that should be embedded in all operations of a department, from Executive Authority and Executive Management level to the business and ICT service delivery.

Corporate Governance of ICT is implemented in two different layers:

- (a) Corporate Governance of ICT (this CGICTPF); and
- (b) Governance of ICT (GICTF).

To address the above mentioned, the Department of Public Service and Administration (DPSA) in collaboration with the Government Information Technology Officer Council (GITOC) and the AG, developed the CGICTPF.

The purpose of the CGICTPF project is to institutionalise the Corporate Governance of and Governance of ICT as an integral part of corporate governance within departments. This CGICTPF provides the Political and Executive Leadership with a set of principles and practices that must be complied with, together with an implementation approach to be utilised for Corporate Governance of ICT within departments.

This CGICTPF is applicable all spheres of government, organs of state and public enterprises.

The implementation of this CGICTPF will be supported by implementation guidelines to be issued by the DPSA, which could form the basis for the AG to perform independent audits.

To enable a department to implement this CGICTPF, a three-phase approach will be followed:

- (a) **Phase 1:** Corporate Governance of ICT environment will be established in departments;
- (b) **Phase 2:** Departments will plan and implement business and ICT strategic alignment; and
- (c) **Phase 3:** Departments will enter into an iterative process to achieve continuous improvement of Corporate Governance of and Governance of ICT.

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# **GLOSSARY OF TERMS AND DEFINITIONS**

AG	Auditor-General of South Africa
Business	The business of the department refers to the department's service delivery and internal support activities
СММІ	Capability Maturity Model Integration is a process improvement approach whose goal is to help organisations improve their performance. CMMI can be used to guide process improvement across a project, a division, or an entire organisation
	CMMI is registered in the U.S. Patent and Trademark Office by Carnegie Mellon University
CIO	Chief Information Officer
CGICTPF	Corporate Governance of ICT Policy Framework
COBIT®	Control Objectives for Information Technology
Corporate	Public Service-wide level:
	A group of related departments that enables the Public Service to achieve its strategic mandate
	Department level:
	A group of related components that enables a department to achieve its strategic mandate
	For the purpose of this Framework, Corporate means the same as Enterprise
Corporate Governance	"The set of responsibilities and practices exercised by the board and executive management with the goal of providing strategic direction, ensuring that objectives are achieved, ascertaining that risks are managed appropriately and verifying that the enterprise's resources are used responsibly." (IT Governance Institute: ISACA [CGEIT] Glossary: 5 as amended)
	Procedures and processes according to which an organisation is directed and controlled. (Glossary of Statistical Terms – Organisation of Economic and Co-operation Development <a href="http://www.oecd.org">www.oecd.org</a> )
Corporate Governance of ICT	The system by which the current and future use of ICT is directed and controlled.
	Corporate governance of ICT involves evaluating and directing the use of ICT to support the organisation, and monitoring this use to achieve plans. It includes the strategy and policies for using ICT within an organisation. (ISO/IEC 38500: 2008: 3)
Department	A national department, a national government component, the Office of a Premier, a provincial department or a provincial government component (Public Service Act 103 of 1994, as amended) (PSA) For the purpose of the CGICTPF reference to department includes
	public administration in all spheres of government, organs of state

	and public enterprises as per Section 195 of the Constitution, Act No 108 of 1996, as amended	
DPSA	Department of Public Service and Administration	
Electronic Government	The use of information and communication technologies in the Public Service to improve its internal functioning and to render services to the public	
EXCO	Executive Committee (consists of Executive Management members of a department)	
Executive	In relation to –	
Authority	<ul> <li>(a) the Presidency or a national government component within the President's portfolio, means the President;</li> </ul>	
	<ul> <li>(b) a national department or national government component within a Cabinet portfolio, means the Minister responsible for such portfolio;</li> </ul>	
	<ul> <li>(c) the Office of the Commission, means the Chairperson of the Commission;</li> </ul>	
	<ul> <li>(d) the Office of a Premier or a provincial government component within a Premier's portfolio, means the Premier of that province; and</li> </ul>	
	<ul> <li>(e) a provincial department or a provincial government component within an Executive Council portfolio, means the member of the Executive Council responsible for such portfolio;</li> </ul>	
	(PSA 103 of 1994, as amended)	
	For the purpose of the CGICTPF the Executive Authority as defined in (a) above will refers to the Ministers in the Presidency.	
Executive Management	The Executive Management of the Department and could include the Head of Department, Deputy Directors-General (DDGs) /Executive Management of the Department. This normally constitutes the Executive Committee of the Department and should include the GITO.	
GICT	Governance of ICT	
GITO	Government Information Technology Officer (Cabinet Memorandum 38(a) of 2000)	
GITOC	Government Information Technology Officer's Council (Cabinet Memorandum 38(a) of 2000)	
Governance Champion	The Senior Manager in the department who is responsible to drive Corporate Governance of and Governance of ICT.	
Governance of ICT	The effective and efficient management of IT resources to facilitate the achievement of company strategic objectives. (King III Code: 2009: 52)	
	Is the responsibility of executives and the board of directors, and consists of the leadership, organisational structures and processes that ensure that the enterprise's IT sustains and extends the	

	organisation's strategy and objectives (ITGI 2005) The system by which the current and future use of IT is directed and controlled.
Governance Principles	The vehicle to translate the desired behaviour into practical guidance for day-to-day management (COBIT 5 Framework Exposure Draft: 29)
GWEA	Government-wide Enterprise Architecture
HoD	Head of Department or Organisational Component as per the PSA
	Information and Communications Technology, also referred to as IT
ISACA®	Information Systems Audit and Control Association
ISO/IEC	International Organisation for Standardisation (ISO) and the International Electrotechnical Commission (IEC)
ISO/IEC 38500	International Standard on Corporate Governance of ICT (ISO/IEC WD 38500: 2008: 1)
ІТ	Information Technology, also referred to as ICT
ITGI™	IT Governance Institute
ITIL	The Information Technology Infrastructure Library is a set of good practices for <u>ICT service management</u> that focuses on aligning ICT services with the needs of business
King III	The King III Report and Code on Governance for South Africa
	SAIGR: Wetgewinghandboek 2010/2011: Volume 3
M&E	Monitoring and Evaluation
MPSA	Minister of Public Service and Administration
MTEF	Medium Term Expenditure Framework
Policy Framework	The Corporate Governance of ICT Policy Framework (CGICTPF)
PSA	Public Service Act 103 of 1994, as amended
PSICTM	Public Service ICT Management Branch of the DPSA
PSR	Public Service Regulations of 2001, as amended
Responsible	Refers to the person who must ensure that activities are completed successfully
Risk Appetite	The amount of residual risk that the Department is willing to accept. (PSRMF 2010:15)
Risk Management	A systematic and formalised process to identify, assess, manage and monitor risks. (PSRMF 2010:16)
SANS 38500	South African National Standard 38500 adopted from ISO/IEC 38500
SITA	State IT Agency

# 1 PURPOSE OF FRAMEWORK

- 1.1 The purpose of this Framework is to institutionalise the Corporate Governance of and Governance of ICT as an integral part of corporate governance within departments in a uniform and coordinated manner.
- 1.2 The Framework provides a set of principles and practices with which all departments must comply.
- 1.3 This Framework has been developed in terms of the following prescripts:
  - (a) Sections 3(1)(g) and 3(2) of the Public Service Act 103 of 1994 (PSA), which empower the Minister for Public Service and Administration (MPSA) to prescribe uniform norms and standards for electronic government, to make regulations, determinations and directives, and to perform any other acts provided in terms of this Act. Section 7(3)(b) of the PSA provides that the HoD is responsible for the efficient management and administration of his or her department
  - (b) Chapter 1, Part III B of the Public Service Regulations of 2001 (PSR), as amended, prescribes that the executive authority is accountable for the department's strategic plan and for the creation of the organisational structure to execute the strategic plan; and
  - (c) Chapter 1, Part III E of the PSR, which stipulates that the HoD is accountable for establishing the relevant information-related plans for the department.

# 2 LEGISLATIVE FRAMEWORK

Departments must be aware of and comply with the legislative landscape applicable to and within their context, including the PSA and PSR.

# 3 SCOPE

3.1 This Policy Framework for the Corporate Governance of ICT is applicable to public administration in every sphere of government, organs of state and public enterprises as defined in Section 195 of the Constitution.

# 4 APPOSITENESS

4.1 This Policy Framework recognises that departments are diverse. It is thus not possible to produce a blueprint of an enabling environment applicable to all

departments. This Policy Framework therefore adopts the approach of elucidating principles and practices to support and sustain effective Corporate Governance of ICT.

4.2 Departments must develop their own system of Corporate Governance of and Governance of ICT by adopting the principles and practices put forward in this Policy Framework and by adapting their governance system to be in line with the departmental context, while keeping the intent of this Policy Framework intact. See Figure 1.

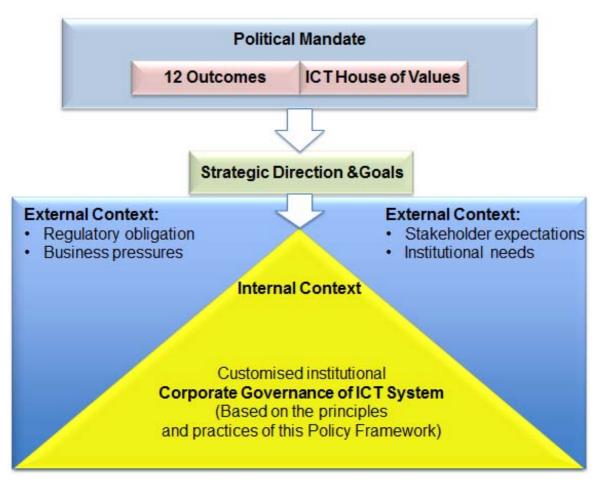


Figure 1: Customised Contextual Governance System

# **SECTION 1: STRATEGIC CONTEXT**

# 5 BACKGROUND

5.1 The 1998 PRC report contains findings and recommendations in relation to the operation, transformation and development of the South African Public Service

and in particular the creation of a new culture of good governance.<sup>2</sup> Chapter 6, states, *inter alia*, the following:

- (a) All ICT decisions of importance should come from Senior Political and Managerial leadership and should not be delegated to technology specialists.
- (b) The management of information should be carried out on the same level as the management of other resources such as people, finance and material in the Public Service.
- 5.2 In 2000, Cabinet (Cabinet Memorandum 38a of 2000) approved that the GITO in each department should be responsible for aligning the respective department's ICT strategy with its strategic direction and management plans. Furthermore, the GITO should report to the HoD and be part of the Executive Management team.
- 5.3 In 2002 and again in November 2010, the GITO Council adopted COBIT as the process framework for the Governance of ICT for implementation in the Public Service.
- 5.4 Since the publication of the PRC report, little has changed with respect to the Governance of ICT in the Public Service. The AG's information systems review of Governance of ICT<sup>3</sup> in government conducted in 2008/09 and again in 2009/10 confirmed this. The AG, made the following recommendations:
  - (a) A government-wide Governance of ICT Policy Framework should be put in place for the implementation of a national ICT strategy to address ICT risks, based on defined processes and standards.
  - (b) Policies, standards and guidelines should be adopted or developed to address process-related risks. These policies, standards and guidelines would have to apply across government departments to allow consistency in the implementation of ICT governance structures.
  - (c) ICT governance roles and responsibilities should be defined.
  - (d) Performance measures should be implemented to ensure adequate service delivery.
- 5.5 The AG further found that the GITOs were not functioning as strategic managers largely due to inadequate accountability structures.
- 5.6 Following the AG recommendations, the DPSA communicated these findings and recommendations to all departments in August 2010, stressing the

<sup>&</sup>lt;sup>2</sup> Report of the Presidential Review Commission as presented to the President of South Africa, 27 February 1998

<sup>&</sup>lt;sup>3</sup> Auditor-General of South Africa: Status of the governance of Information Technology in government, May 2010

importance of the Governance of ICT. Departments were requested to provide the DPSA with recommendations on the improvement of Governance of ICT.

- 5.7 However, in 2010/11, the AG found that little progress had been made with the implementation of the 2008/09 and 2009/10 findings regarding the Governance of ICT.
  - (a) 79% of institutions had no Governance of ICT Policy Framework or did not implement some governance aspects.
  - (b) 21% had implemented adequate but unsustainable governance controls. As they had not been formally rolled out by management, they were not enforceable.
- 5.8 The aforementioned indicates a lack of government-wide and departmental Governance of ICT. The guidance and decisions for the Governance of ICT should come from senior political and managerial leadership and should be viewed at the same level of importance as the other resources.
- 5.9 To address the above mentioned problems, the DPSA in collaboration with the Government Information Technology Officer Council (GITOC) and the AG, developed the CGICTPF.

# 6 INTRODUCTION

- 6.1 Government transformation is, at a strategic level, informed by governmentwide key priority areas translated into 12 strategic outcomes, guided by the Batho Pele principles of equal access to services, increased productivity and lowering of costs. At a departmental level, specific departmental strategic goals are formulated, aligned with the 12 strategic outcomes. These strategic goals are then translated into implementation and execution plans for each department. The Executive Authority of a department is accountable to Cabinet for the realisation of these strategic outcomes.
- 6.2 The purpose of ICT is to serve as an enabler of public service delivery through, *inter alia*, achieving stakeholder value and ICT key focus areas (ICT House of Value<sup>4</sup>) that enable the Public Service to achieve these 12 strategic outcomes.

<sup>&</sup>lt;sup>4</sup> Electronic Government a Digital Future February 2001, as amended

- 6.3 In recent years, there has been a growing realisation of the importance of Corporate Governance of ICT, as emphasised by the King III Code5, the PRC6 report and AG findings.
- 6.4 Political and Executive Management leadership of departments need to extend Corporate Governance, as a good management practice, to ICT. This should be done by evaluating the current business strategic goals and future use of ICT, by directing the preparation and implementation of plans to ensure that the use of ICT meets business needs which, when implemented, must be monitored for performance and conformance purposes to ensure that the departmental strategic goals are achieved.
- 6.5 There are international and national mechanisms available that provide guidance and frameworks for the implementation of Governance of ICT, including:
  - (a) King III Code and Report
  - (b) ISO/IEC 38500
  - (c) COBIT
- 6.6 The Executive Leadership and Management should understand the strategic importance of ICT and should assume responsibility for the Corporate Governance of ICT and place the Governance of ICT on the strategic agenda. In order to achieve this, it is necessary for the Public Service and departments to implement a governance system that follows a layered approach, namely:
  - (a) Layer 1: Corporate Governance of ICT Policy Framework (CGICTPF)
  - (b) Layer 2: Governance of ICT Framework (GICTF).

# 7 GOVERNMENT SERVICE DELIVERY ENABLED THROUGH ICT

7.1 In support of the achievement of the 12 strategic outcomes, the Public Service, has adopted certain ICT values and key focus areas to be achieved as contained in the ICT House of Value shown below.

<sup>&</sup>lt;sup>5</sup> The King III Report and Code on Governance for South Africa: Chapter 5: The Governance of Information Technology

<sup>&</sup>lt;sup>6</sup> Presidential Review Commission report 1998

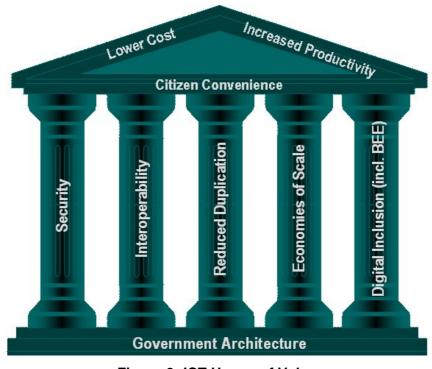


Figure 2: ICT House of Value

7.2 Table 1 below depicts the mapping of the 12 strategic outcomes, the key focus areas of the ICT House of Value and their relationship to each other.

Strategic outcome	Related strategic goals in ICT House of Value		Values
	Primary influencing goals	Secondary influencing goals	
Outcome 1: Basic Education	Government Architecture Interoperability Digital inclusion Economies of scale Reduced duplication	Security	Lower cost Citizen convenience Increased productivity
Outcome 2: A long and healthy life for all South Africans	Government Architecture Security Interoperability Reduced duplication Digital inclusion	Economies of scale	Lower cost Citizen convenience Increased productivity
Outcome 3: All people in SA are and feel safe	Government Architecture Security Digital inclusion	Interoperability Reduced duplication Economies of scale	Lower cost Citizen convenience Increased productivity

Strategic outcome	Related strategic goal	s in ICT House of Value	Values
	Primary influencing goals	Secondary influencing goals	
Outcome 4: Decent employment through inclusive economic growth	Interoperability Digital inclusion Economies of scale Reduced duplication Security	Government Architecture	Lower cost Citizen convenience Increased productivity
Outcome 5: Skills and capable workforce to support an inclusive growth path	Government Architecture Interoperability Digital inclusion	Economies of scale Security Reduced duplication	Lower cost Citizen convenience Increased productivity
Outcome 6: An efficient, competitive and responsive economic infrastructure network	Government Architecture Interoperability Digital inclusion Economies of scale Security Reduced duplication		Lower cost Citizen convenience Increased productivity
Outcome 7: Vibrant, equitable, sustainable rural communities contributing towards food security for all	Government Architecture Digital inclusion Security	Reduced duplication Economies of scale	Lower cost Citizen convenience Increased productivity
Outcome 8: Sustainable human settlement and improved quality household life	Government Architecture Digital inclusion	Interoperability Economies of scale Security Reduced duplication	Lower cost Citizen convenience Increased productivity
Outcome 9: Responsive, accountable, effective and efficient local government system	Government Architecture Interoperability Digital inclusion Economies of scale Security Reduced duplication		Lower cost Citizen convenience Increased productivity
Outcome 10: Protect and enhance our environmental assets and natural resources	Government Architecture Economies of scale Reduced duplication	Interoperability Security Digital inclusion	Lower cost Citizen convenience Increased productivity
Outcome 11: Create a better SA, a better Africa and a better world	Government Architecture Security Digital inclusion	Interoperability Economies of scale Reduced duplication	Lower cost Citizen convenience Increased productivity
Outcome 12: An efficient, effective and development-oriented Public Service and	Government Architecture Interoperability Digital inclusion		Lower cost Citizen convenience Increased productivity

Strategic outcome	Related strategic goals in ICT House of Value		Values
	Primary influencing goals	Secondary influencing goals	
empowered, fair and inclusive citizenship	Economies of scale Security Reduced duplication		

7.3 Strategic Outcome 12, "An efficient, effective and development-oriented Public Service and empowered, fair and inclusive citizenship", is the main driver of ICT business enablement in the Public Service.

# 8 BENEFITS OF CORPORATE GOVERNANCE OF ICT

When the Corporate Governance of ICT is effectively implemented and maintained, the following benefits are realised:

- (a) Public Service positioned to improve delivery on the 12 strategic outcomes;
- (b) Improved achievement of Public Service-wide and departmental strategic goals;
- (c) Improved effective public service delivery through ICT-enabled access to government information and services;
- (d) Improved ICT enablement of business;
- (e) Improved delivery of ICT service quality;
- (f) Improved stakeholder communication;
- (g) Continuous improvement of business and ICT alignment;
- (h) Improved trust between ICT, the business and citizens;
- (i) Lower costs;
- (j) Increased alignment of investment towards strategic goals;
- (k) Improved return on ICT-enabled investment;
- (I) ICT risks managed in line with the priorities and appetite of the Public Service and the department;
- (m) Appropriate security measures to protect the departmental and employee information;
- (n) Improved management of business-related ICT projects;
- (o) Improved management of information as it is managed on the same level as other resources such as people, finance and material in the Public Service;

- (p) ICT pro-actively recognises opportunities and guides departments and the Public Service in timeous adoption of appropriate technology;
- (q) Improved ICT ability to learn and agility to adapt to changing circumstances; and
- (r) ICT executed in line with legislative and regulatory requirements.

# 9 CORPORATE GOVERNANCE OF AND GOVERNANCE OF ICT GOOD PRACTICE AND STANDARDS

- 9.1 In recognition of the importance of the Governance of ICT, a number of internationally recognised frameworks and standards, such as King III Code, ISO/IEC 38500 and COBIT, have been developed to provide context for the institutionalisation of the Corporate Governance of ICT.
  - (a) The **King III Code:** The most commonly accepted Corporate Governance Framework in South Africa is also valid for the Public Service. It was used to inform the Corporate Governance of ICT principles and practices in this document and to establish the relationship between Corporate Governance of and Governance of ICT.
  - (b) **ISO/IEC 38500<sup>7</sup>:** Internationally accepted as the standard for Corporate Governance of ICT; it provides governance principles and a model.
  - (c) COBIT: An internationally accepted process framework for implementing Governance of ICT. COBIT fully supports the principles of the King III Code and the ISO/IEC 38500 standard in the Corporate Governance of ICT.
- 9.2 Figure 3 depicts the different layers of governance and the interrelationship between the different frameworks and standards.

<sup>&</sup>lt;sup>7</sup> Adopted for South Africa as SANS 38500

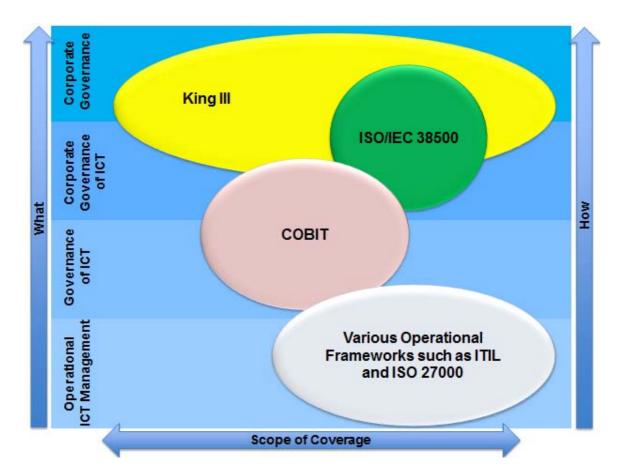


Figure 3: Interrelationship of the different Frameworks and Standards

# 10 LAYERED APPROACH TO CORPORATE GOVERNANCE OF ICT

- 10.1 Corporate Governance of ICT encompasses two levels of decision-making, authority and accountability to satisfy the expectations of all stakeholders:
  - (a) Facilitating the achievement of a department's strategic goals (Corporate Governance of ICT); and
  - (b) The efficient and effective management of ICT service delivery (Governance of ICT).
- 10.2 The implementation of Corporate Governance of ICT in the Public Service thus consists of the following layered approach:
  - (a) This CGICTPF, which addresses the **Corporate Governance of ICT** layer.
  - (b) COBIT, which will be adapted and implemented as the GICTF on the **Governance of ICT** layer.
- 10.3 Figure 4 demonstrates the different governance layers with their related frameworks and standards.

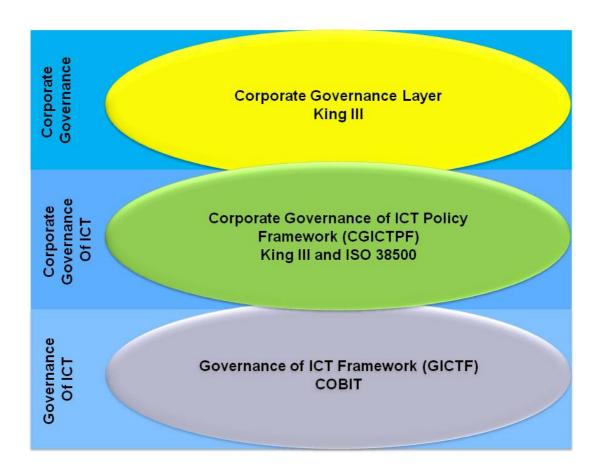


Figure 4: Governance Layers

# 11 CORPORATE GOVERNANCE IN THE PUBLIC SERVICE

- 11.1 The purpose of corporate governance is to create value for the department's stakeholders. It consists of a governance system that affects the way Public Service departments are managed and controlled. It also defines the relationships between stakeholders, the strategic goals of the Public Service and those of departments.
- 11.2 Corporate governance is a vehicle through which value is created within a departmental context. Value creation means realising benefits while optimising resources and risks. This value creation takes place within a governance system that is established by this Policy Framework. A governance system refers to all the means and mechanisms that enable the department's Executive Authority, HoD and Executive Management to have a structured and organised say in the following:
  - (a) Evaluating internal and external context, strategic direction and risk to conceptualise the department's strategic goals and how they will be measured;

- (b) **Directing** the department in the execution of its strategic goals to ensure that value is realised and risk is managed; and
- (c) **Monitoring** the execution of the strategic goals within a department against the measures identified for attaining the strategic goals.
- 11.3 Corporate governance is also concerned with individual accountability and responsibilities within a department. It describes how the department is directed and controlled and in particular is concerned with the following:
  - (a) Organisation the organisational structures and the coordinating mechanisms (such as steering forums) established within the department and in partnership with external bodies;
  - (b) **Management** the individual roles and responsibilities established to manage business change and operational services; and
  - (c) **Policies** the frameworks established for making decisions together with the context and constraints within which decisions are taken.
- 11.4 Figure 5 depicts how the governance system functions. The executive leadership, which is accountable, provides the strategic direction of the department. The strategic direction, together with the external and internal context, determines the strategic goals. Corporate Governance of and the Governance of ICT are executed at Executive Management level through the function of evaluation, direction and monitoring. The management of business execution is done through the organisational structure and utilisation of the relevant resources.

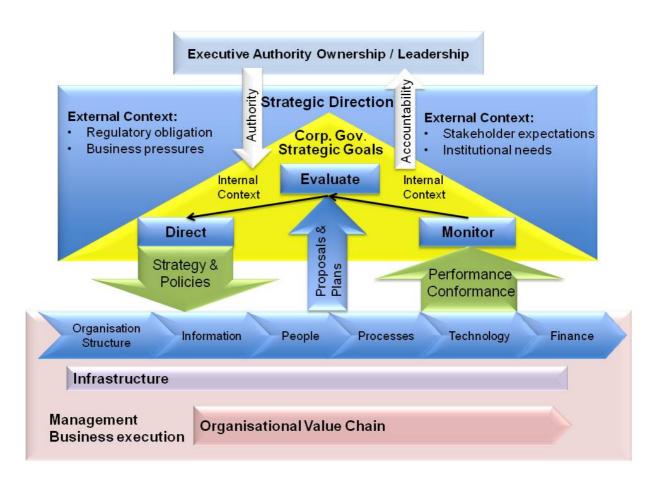


Figure 5: Corporate Governance System

11.5 The Executive Leadership and Management of a department are accountable and responsible for implementing a governance system.

# 12 CORPORATE GOVERNANCE OF ICT IN THE PUBLIC SERVICE

- 12.1 The Corporate Governance of ICT is a subset of Corporate Governance and is an integral part of the governance system. In terms of such a system:
  - (a) the Executive Authority provides the political leadership;
  - (b) the **Head of Department** provides the strategic leadership and is accountable for the implementation of the Corporate Governance of ICT; and
  - (c) **Executive Management** is responsible for ensuring that the Corporate Governance of ICT is implemented and managed.
- 12.2 The Corporate Governance of ICT involves evaluating and directing the achievement of strategic goals and using ICT to enable the departmental business and the monitoring of ICT service delivery to ensure continuous

service improvement. It includes determining strategic goals and plans, and annual performance plans for ICT service delivery.

- 12.3 The HoD and Executive Management are respectively accountable and responsible for implementing the Corporate Governance of ICT in the department. Effective Corporate Governance of ICT is achieved in a department through:
  - (a) Institutionalising a Corporate Governance of ICT Policy Framework that is consistent with the Corporate Governance of the department;
  - (b) Aligning the ICT strategic goals with the departmental strategic goals;
  - (c) Ensuring that optimum business value is realised from ICT-related investment, services and assets;
  - (d) Ensuring that business and ICT-related risks do not exceed the departmental risk appetite and risk tolerance;
  - (e) Ensuring that ICT-related resource needs are met in an optimal manner by providing the organisational structure, capacity and capability;
  - (f) Ensuring that the communication with stakeholders is transparent, relevant and timely; and
  - (g) Ensuring transparency of performance and conformance and driving the achievement of strategic goals through monitoring and evaluation.
- 12.4 The implementation of the Corporate Governance of ICT can be achieved through the following means and mechanisms, and decision making mechanisms:

#### (a) Means and mechanisms:

- (i) Frameworks (e.g. CGICTPF);
- (ii) Principles (as described in this Policy Framework);
- (iii) Governance practices (as described in this Policy Framework)
- (iv) Policies (e.g. Governance of ICT Charter/Policy);
- (v) Sponsorship; and
- (vi) Structures such as ICT Strategic Committee at Executive Management level, ICT Steering Committee at Senior Management level and ICT Architecture and Operational Committee at a technical level.

#### (b) **Decision-making mechanisms**:

- (i) Roles and responsibilities;
- (ii) Processes; and
- (iii) Process practices.

- 12.5 The guidelines for implementing this Policy Framework will provide further detail on these mechanisms.
- 12.6 Depending on the size and complexity of their ICT operations, departments may also elect to adapt and/or adopt related standards and frameworks. The following are recommended as a minimum:
  - (a) Enterprise Architecture (e.g. GWEA/TOGAF);
  - (b) ICT Security (e.g. ISO/IEC 27000 set);
  - (c) Service Management (e.g. ITIL);
  - (d) Interoperability Standards (e.g. MIOS);
  - (e) Portfolio, Programme and Project Management (e.g. PRINCE 2/PMBOK).

# 13 OBJECTIVES OF THE CORPORATE GOVERNANCE OF ICT

In order to give effect to the Corporate Governance of ICT in the Public Service, the following objectives were adopted by the GITOC:

- (a) Identify, establish and prescribe a uniform Governance of ICT Framework (GICTF) and implementation guideline for the Public Service;
- (b) Embed the Corporate Governance of and Governance of ICT as a subset of Corporate Governance;
- (c) Create business value through ICT enablement by ensuring business and ICT strategic alignment;
- (d) Provide relevant ICT resources, organisational structure, capacity and capability to enable ICT service delivery;
- (e) Achieve and monitor ICT service delivery performance and conformance to relevant internal and external policies, frameworks, laws, regulations, standards and practices;
- (f) Implement the governance of ICT in the department, based on the COBIT process framework; and
- (g) Position the GITO function as an integral part of Executive Management.

## 14 THE PRINCIPLES FOR THE CORPORATE GOVERNANCE OF ICT

This CGICTPF is based on principles as explained in the international good practice and standard for ICT governance, namely, King III Code, ISO/IEC 38500 and COBIT (see Annexure A). Table 2 below contains the adopted principles.

#### **Table 2: Corporate Governance of ICT Principles**

#### Principle 1: Political Mandate

The Corporate Governance of ICT must enable the department's political mandate.

The Executive Authority must ensure that Corporate Governance of ICT achieves the political mandate of the department.

#### **Principle 2: Strategic Mandate**

The Corporate Governance of ICT must enable the department's strategic mandate.

The HoD must ensure that Corporate Governance of ICT achieves the department's strategic plans.

#### Principle 3: Corporate Governance of ICT

The HoD is responsible for the Corporate Governance of ICT.

The HoD must create an enabling environment in respect of the Corporate Governance of ICT within the applicable legislative and regulatory landscape and information security context.

#### Principle 4: ICT Strategic Alignment

ICT service delivery must be aligned with the strategic goals of the department.

Executive Management must ensure that ICT service delivery is aligned with the departmental strategic goals and that business accounts for current and future capabilities of ICT. It must ensure that ICT is fit for purpose at the correct service levels and quality for both current and future business needs.

#### Principle 5: Significant ICT Expenditure

Executive Management must monitor and evaluate significant ICT expenditure.

Executive Management must monitor and evaluate major ICT expenditure, ensure that ICT expenditure is made for valid business enabling reasons and monitor and manage the benefits, opportunities, costs and risks resulting from this expenditure, while ensuring that information assets are adequately managed.

#### Principle 6: Risk Management and Assurance

Executive Management must ensure that ICT risks are managed and that the ICT function is audited.

Executive Management must ensure that ICT risks are managed within the departmental risk management practice. It must also ensure that the ICT function is audited as part of the departmental audit plan.

#### **Principle 7: Organisational Behaviour**

Executive Management must ensure that ICT service delivery is sensitive to organisational behaviour/culture.

Executive Management must ensure that the use of ICT demonstrates the understanding of and respect for organisational behaviour/culture.

# 15 THE CORPORATE GOVERNANCE OF ICT PRACTICES

The Corporate Governance of ICT practices will be used to cascade the principles for implementation in the department. Table 3 depicts the practices.

Practice	Practice Description	
No.		
1.	The Executive Authority must:	
	<ul> <li>(a) provide political leadership and strategic direction, determine policy and provide oversight;</li> </ul>	
	<ul> <li>(b) ensure that ICT service delivery enables the attainment of the strategic plan;</li> </ul>	
	(c) take an interest in the Corporate Governance of ICT to the extent necessary to ensure that a properly established and functioning Corporate Governance of ICT system is in place in the department to leverage ICT as a business enabler;	
	<ul> <li>(d) assist the HoD to deal with intergovernmental, political and other ICT-related business issues beyond their direct control and influence; and</li> </ul>	
	(e) ensure that the department's organisational structure makes provision for the Corporate Governance of ICT.	
2.	Vertical Sector Mandate	
	The Executive Authority of national departments that have a sector/ functional area specific responsibility or sphere of influence must ensure that the necessary cross sector/functional area Corporate Governance of ICT arrangements are in place.	
3.	The Head of Department must:	
	(a) provide strategic leadership and management;	
	<ul> <li>(b) ensure alignment of the ICT strategic plan with the departmental- and business strategic plans;</li> </ul>	
	<ul> <li>(c) ensure that the Corporate Governance of ICT is placed on the department's strategic agenda;</li> </ul>	
	<ul> <li>(d) ensure that the Corporate Governance of ICT Policy Framework, charter and related policies for the institutionalisation of the Corporate Governance of ICT are developed and implemented by Executive Management;</li> </ul>	
	<ul> <li>(e) determine the delegation of authority, personal responsibility and accountability to the Executive Management with regards to the Corporate Governance of ICT;</li> </ul>	
	<ul> <li>(f) ensure the realisation of department-wide value through ICT service delivery and management of business and ICT-related risks;</li> </ul>	
	(g) ensure that appropriate Corporate Governance of and Governance	

## Table 3: Corporate Governance of ICT Practices

Practice No.	Practice Description
	of ICT capability and capacity are provided and a suitably qualified and experienced Governance Champion is designated, who must function at Executive Management level;
	(h) Ensure that appropriate ICT capacity and capability are provided and a suitably qualified and experienced GITO, who must function at Executive Management level, is appointed; and
	(i) Ensure the monitoring and evaluation of the effectiveness of the Corporate Governance of ICT system.
4.	A <b>Risk and Audit Committee</b> must assist the HoD in carrying out his/her Corporate Governance of ICT accountabilities and responsibilities.
5.	Executive Management must ensure:
	(a) ICT strategic goals are aligned with the department's business strategic goals and support strategic business processes; and
	(b) Business-related ICT strategic goals are cascaded throughout the department for implementation and are reported on.
	(c) Means and Mechanisms:
	<ul> <li>(i) Advice is provided to the HoD regarding all aspects of the Corporate Governance of and Governance of ICT;</li> </ul>
	<ul><li>(ii) The Corporate Governance of and Governance of ICT is implemented and managed;</li></ul>
	<ul> <li>(iii) The necessary strategies, architectures, plans, frameworks, policies, structures (including outsourcing), procedures, processes, mechanisms and controls, and culture regarding all aspects of ICT use (business and ICT) are clearly defined, implemented, enforced and assured through independent audits;</li> </ul>
	<ul> <li>(iv) The responsibility for the implementation of the Corporate Governance of and Governance of ICT is delegated and communicated to the relevant management (senior business and ICT management);</li> </ul>
	<ul> <li>(v) Everyone in the department understands the link between business and ICT strategic goals and accepts their responsibilities with respect to the supply and demand for ICT;</li> </ul>
	<ul> <li>(vi) Significant ICT expenditure is informed by the department's Service Delivery Plan, Enterprise Architecture and ICT Architecture, motivated by business cases, monitored and evaluated;</li> </ul>
	(vii) The planning and execution of ICT adheres to relevant judicial requirements; and
	(viii) ICT-related risks are managed.

Practice No.	Pra	ractice Description		
	(d)	ICT Security:		
		(i) An information security strategy is approved;		
		(ii) Intellectual property in information systems is appropriately protected; and		
		(iii) ICT assets, privacy, security and the personal information of employees are effectively managed.		
	(e)	e) Organisational Behaviour/Culture:		
		The use of ICT demonstrates the understanding of and respect for organisational behaviour/culture, which should include human behaviour.		

# 16 ICT ENABLING STRUCTURES IN THE PUBLIC SERVICE

- 16.1 To give effect to the PRC recommendations to improve the delivery of ICT service in the Public Service, different structures/entities have been established:
  - (a) The GITO<sup>8</sup> function was established in each department to align and execute ICT service delivery with the strategic goals and management plans of the department. The GITO must be represented at the strategic management level (Executive Management).
  - (b) The GITO Council<sup>9</sup> was established as the principal inter-departmental forum to improve ICT practices of departments on such matters as the design, modernisation, use, sharing, and performance of information and ICT resources;
  - (c) The **State IT Agency**<sup>10</sup> (SITA) was created as the Prime Systems Integrator of Transversal Information and Communication Systems for Government; and
  - (d) In the **DPSA**, Public Service ICT Management (PSICTM)<sup>11</sup> is responsible for ensuring that ICT execution enables the Public Service to improve Public Service delivery.
- 16.2 These structures/entities, however, do not negate the accountability and/or responsibility of the **Executive Authority**, the **HoD** and/or **Executive Management** to *direct, evaluate and monitor* ICT service delivery in their departments.

<sup>&</sup>lt;sup>8</sup> Cabinet Memorandum 38(a) of 2000

<sup>&</sup>lt;sup>9</sup> Public Service Act 1994 as amended

<sup>&</sup>lt;sup>10</sup> SITA Act of 1998 as Amended

<sup>&</sup>lt;sup>11</sup> SITA Act of 1998 as Amended

# 17 GOVERNANCE OF ICT OVERSIGHT STRUCTURE IN THE PUBLIC SERVICE

- 17.1 Several investigations found that ICT was not being effectively managed necessitated the development of the CGICTPF.
- 17.2 This CGICTPF creates a Public Service-wide oversight structure to foster an integrated approach to the Corporate Governance of ICT and ensure proper coordination between stakeholders. The oversight structure is as listed below:
  - (a) **The Ministerial Cluster for Governance and Administration** is responsible for fostering an integrated approach to governance and ensuring proper coordination.
  - (b) The Minister for Public Service and Administration is responsible for information and communication technologies in the Public Service. In relation to this Policy Framework, the Minister may establish ICT norms and minimum standards, make regulations, determinations and directives to improve the internal functioning of the Public Service and to render effective services to the public.
  - (c) The Department of Public Service and Administration supports the MPSA in leading Public Service transformation and provides professional advice and support to ensure Public Service excellence and good governance. The department also has a monitoring function to monitor compliance with the Corporate Governance of ICT.
  - (d) The Public Service ICT Management Branch, within the DPSA, is responsible for the development, oversight and compliance monitoring of the Corporate Governance of and Governance of ICT in accordance with the CGICTPF and the GICTF.
  - (e) **The Department of Performance, Monitoring and Evaluation** enables and improves the overall performance of all government spheres, by monitoring and evaluating the performance of government, and assisting government to focus on the prioritised strategic outcomes. This department will monitor and evaluate management performance against this CGICTPF.
  - (f) **The GITO Council** is the principal inter-departmental forum to coordinate, advise and facilitate the adoption and implementation of the Corporate Governance of and Governance of ICT.
  - (g) **The Auditor-General** conducts audits, and reports on its findings regarding the Corporate Governance of and Governance of ICT to the relevant authorities.

#### (h) Departments:

- (i) create a sustained enabling environment for directing the implementation of the Corporate Governance of and Governance of ICT;
- (ii) ensure that the Corporate Governance of ICT is evaluated and managed in such a way as to achieve continuous improvement of ICT-enabled service delivery; and
- (iii) report on ICT performance, conformance and risk management (monitoring).
- 17.3 Figure 6 depicts the oversight structures relevant for the implementation of the Corporate Governance of ICT in the Public Service.

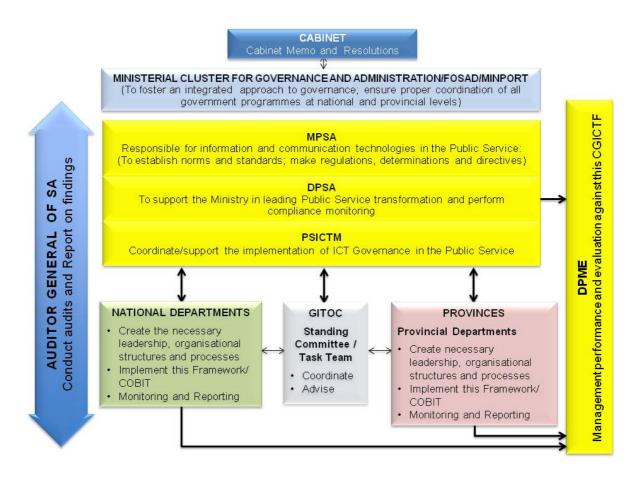


Figure 6: Public Service Corporate Governance of ICT Oversight Structure

# **SECTION 2: TACTICAL CONTEXT**

## **18 INTRODUCTION**

- 18.1 This CGICTPF will direct the implementation of the Governance of ICT, which will be based on COBIT.
- 18.2 COBIT, as a process framework for the Governance of ICT, was adopted by the GITOC.
- 18.3 The implementation of COBIT will establish a common knowledge and reference base for Monitoring and Evaluation (M&E).
- 18.4 The AG has also adopted the use of, *inter alia*, COBIT to independently audit the Governance of ICT in the Public Service.

# 19 COBIT AS THE PROCESS FRAMEWORK FOR THE GOVERNANCE OF ICT

- 19.1 COBIT was developed by ISACA and is a good governance process framework that has been implemented widely throughout the world and in South Africa.
- 19.2 COBIT enables departments to achieve their strategic goals by deriving optimal value from ICT through the realisation of benefits and optimising resources and risk.
- 19.3 COBIT is not a standard it is a process framework within which a department has flexibility regarding implementation, according to its specific environmental context.
- 19.4 As a set of Governance of ICT and management processes, COBIT provides managers, ICT users and auditors with the following:
  - (a) Standard indicators;
  - (b) Processes for implementing the Governance of ICT;
  - (c) Good practice to maximise the corporate value in using ICT.
  - (d) Identification of the accountability and responsibilities of business and ICT process owners;
  - (e) Metrics to measure the achievement of the ICT-related goals; and
  - (f) A model to measure governance of ICT process maturity.

- 19.5 Principle 1 of the five COBIT principles provides an "Integrator Framework" to ensure seamless integration with other relevant standards and frameworks such as ITIL (Service Management), CMMI / ISO/IEC 15504 (Maturity Assessments) and ISO/IEC 2700x (Security).
- 19.6 Principle 4, Governance Enablers, provides for the implementation of a governance and management system for corporate ICT. There are seven categories of enablers:
  - (a) Processes;
  - (b) Principles and policies;
  - (c) Organisational structures;
  - (d) Skills and competences;
  - (e) Culture and behaviour;
  - (f) Service capabilities;
  - (g) Information.

# **SECTION 3: IMPLEMENTATION APPROACH**

# 20 IMPLEMENTATION OF A GOVERNANCE OF ICT SYSTEM

- 20.1 Corporate Governance of ICT incorporates two layers of decision-making, authority and accountability to satisfy the expectations of all stakeholders by:
  - (a) facilitating the achievement of a department's strategic goals (Corporate Governance of ICT layer); and
  - (b) the efficient and effective management of ICT service delivery (Governance of ICT layer).
- 20.2 **Corporate Governance of ICT layer**: Each department has a unique internal and external contextual environment, which means a common but flexible approach to the Corporate Governance of ICT is required. This Policy Framework adopts principles and practices in support of a flexible and sustainable approach to the Corporate Governance of ICT system within a department.
- 20.3 **Governance of ICT layer**: COBIT, as the process framework, will be used to implement the Governance of ICT within the context of this Policy Framework.
- 20.4 To enable a department to implement both this Policy Framework and COBIT, a phased approach will be followed, as shown below and detailed in the paragraphs following.

- (a) **Phase 1:** Establish a Corporate Governance of and Governance of ICT environment;
- (b) Phase 2: Plan and implement business and ICT strategic alignment; and
- (c) **Phase 3:** Continuously improve Corporate Governance of and Governance of ICT.
- 20.5 Phase 1: Establish the Corporate Governance of and Governance of ICT environments: These environments are established through the development and implementation of strategies, architectures, plans, frameworks, policies, structures, procedures, processes, mechanisms and controls, and ethical culture. A minimum enabling environment must be created through the following:

## (a) Corporate Governance of ICT Policy Framework

The principles and practices of this Policy Framework must be complied with but the system of Corporate Governance of ICT should be adapted for the unique enabling environment (external and internal) of each department.

## (b) Governance of ICT framework

The Implementation Guidelines, to be published by the DPSA, will provide guidance on the implementation of COBIT as the process framework for the Governance of ICT in the department.

## (c) Departmental Corporate Governance of ICT Charter

Each department should analyse and articulate its requirements for the Corporate Governance of and Governance of ICT and develop, implement and maintain a related charter. This should enable the creation and maintenance of effective enabling governance structures, processes and practices. It should also clarify the governance of ICT-related roles and responsibilities towards achieving the department's strategic goals. This charter should be approved at a strategic level in the department and should contain the following:

- How the ICT strategic goals and their related service delivery will be aligned with departmental strategic goals, monitored and reported on to the relevant stakeholders;
- (ii) How ICT service delivery will be guided at a strategic level to create business and ICT value;
- (iii) How business and ICT-related risks will be managed;

- (iv) Which structures will be created to effect the Corporate Governance of and Governance of ICT, and the management of ICT functions, the members of these structures and the roles, responsibilities and delegations of each. The proposed structures are as follows:
  - ICT Strategic Committee (Executive Committee, GC and GITO);
  - ICT Steering Committee (Executive Management, GC, Programme Management and GITO);
  - Architecture Committee (Business, GC and ICT);
  - Risk Committee (Business and ICT); and
  - Audit Committee (Business and ICT);
- (v) How the necessary capacity and capability (resources/skills) to deliver an enabling ICT service to the department will be established;
- (vi) The strategic and operational function of the following:

**Governance Champion** – an experienced person knowledgeable in the business of the department, who will be responsible for driving the implementation, change management and maintenance of Corporate Governance of and Governance of ICT in the department. The Governance Champion must:

- be a senior manager at least on the level of a Chief Director who reports to Executive Management. He/she must be an authoritative and articulate person with strong decision-making abilities and the mandate to make decisions and escalate deviances and problems;
- have a clear understanding of the department's core functions;
- be actively involved in the oversight of the formal Corporate Governance System of the department;
- facilitate the alignment process between business and ICT strategy and plans;
- be responsible for developing, implementing, maintaining and communicating the necessary Corporate Governance of ICT policies, structures, processes, procedures, mechanisms, controls/(effective and useful measures), charter and plan;
- oversee that the Governance of ICT system, as a subset of Corporate Governance of ICT, is developed, implemented and maintained; and
- be supported by a cross-functional team, which must include representatives from business and the GITO.

**Enterprise Architect** – a person knowledgeable in the business of the department, who will be responsible for structured planning to articulate the business and related processes of the department in an interrelated and standardised way;

**Government Information Technology Officer** – should perform at Executive Management level, and be responsible for aligning the department's ICT strategic goals with its business strategic goals, considering both business and ICT processes; and

**ICT Manager** – responsible for the operational management of ICT.

- (vii) The Corporate Governance of and Governance of ICT implementation and maintenance plan; and
- (viii) How the governance frameworks will be maintained.

## (d) Enabling policies, frameworks and plans

The effective implementation of the Corporate Governance of and Governance of ICT must be supported by enabling frameworks, plans and policies, as listed below, to be approved at Executive Management level:

- (i) Departmental Enterprise Architecture required to articulate stakeholder/ business needs. The DPSA's Service Delivery Planning Framework and Methodology and GWEA should inform the ICT Architecture; however, it does not fall within the scope of this Policy Framework.
- (ii) ICT Architecture used to translate the departmental business strategic plan (5-year) and Enterprise Architecture into an enabling ICT service. This should contain a migration plan from the "current" to a "future" environment. The ICT Architecture is informed by the:
  - Departmental Business Strategic Plan and other long-term plans;
  - · Departmental Enterprise Architecture; and
  - ICT Strategic Plan.
- (iii) Departmental Risk Management Policy must include how business-related ICT risks will be managed and how capacity will be created in the Risk Management Function to address ICT-related risks.
- (iv) Departmental Internal Audit Plan should include ICT audits. It should also indicate how the Internal Audit Function will be capacitated to perform ICT-related audits.

- (v) ICT Management Framework must ensure a consistent management approach for the ICT function in line with the corporate governance requirements and strategic goals. This should include management processes, organisational structures, roles and responsibilities, activities as well as required skills and competencies.
- (vi) ICT Portfolio Management Framework should be embedded in the departmental Portfolio/Programme Management Structures. It must include how the department will create the necessary capacity to manage ICT-related business programmes/projects.
- (vii) Departmental Information Security Strategy must ensure that classified information, intellectual property and personnel information are protected within ICT systems according to its security plan.
- (viii) **Information Security Plan** should be informed by the Information Security Strategy.
- (ix) **ICT Security Policy** should be informed by the Information Security Plan.
- (x) Departmental Business Continuity Plan should be informed by the operational, information and data requirements of the business. The Business Continuity Plan must inform the following:
  - · Business Continuity Strategy;
  - Business Continuity Policy;
  - ICT Continuity Plan.

## 20.6 Phase 2: Business and ICT Strategic Alignment

- (a) It is important that the alignment of business and ICT strategies is done in line with approved South African Government planning frameworks such as the National Treasury "Framework for Strategic Plans and Annual Performance Plans", Service Delivery Framework and Methodology of the DPSA and the Government-wide Enterprise Architecture (GWEA). The architectural planning process articulates the business strategic goals that ICT service delivery must respond to in order to support the business in value creation, benefits realisation, and resource and risk optimisation.
- (b) Figure 7 depicts the cascading of the departmental strategic plan and its related ICT alignment.

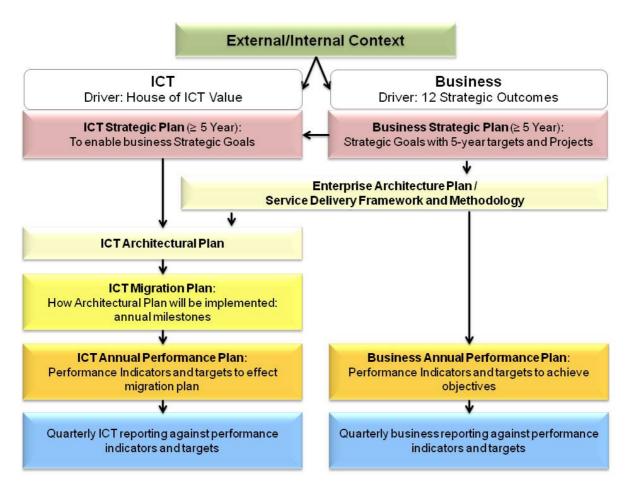


Figure 7: Business and ICT Strategic Alignment

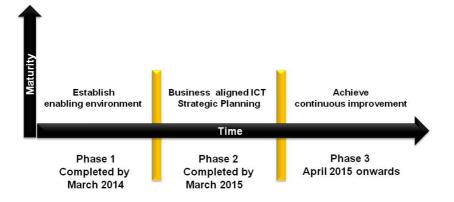
# 20.7 Phase 3: Continuous improvement of Corporate Governance of and Governance of ICT

The successful implementation of a Corporate Governance of ICT system leads to continuous improvement in the creation of business value. ICT service delivery must be assessed to identify gaps between expected and realised service delivery. Assessments must be performed on two levels:

- (a) Corporate Governance of ICT (ICT contribution to realisation of business value); and
- (b) Governance of ICT (continuous improvement of the management of ICT COBIT processes).

#### 20.8 Implementation time lines

The implementation phase will be conducted in phases according to Figure 8. The AG will use these implementation phases as a time-line for auditing purposes.



#### Figure 8: Corporate Governance of ICT Implementation Phases

## 20.9 Implementation deliverables per financial year

- (a) **Phase 1:** to be completed by March 2014
  - Corporate Governance of ICT Policy Framework and Governance of ICT Framework approved and implemented;
  - (ii) Governance of ICT Charter approved and implemented;
  - (iii) The following capabilities created in the department:
    - · Governance Champion designated and responsibilities allocated;
    - · Capacity created to fulfil the role of the Enterprise Architect;
    - A proficient Government Information Technology Officer (GITO) appointed and functioning at strategic level; and
    - A proficient ICT Manager appointed.
  - (iv) Approved and implemented **Risk Management Policy** that includes the management of business-related ICT risks;
  - (v) Approved and implemented Internal Audit Plan that includes ICT audits;
  - (vi) Approved and implemented ICT Management Framework;
  - (vii) Approved and implemented departmental **Portfolio Management Framework** that includes ICT portfolio/programme and project management;
  - (viii) Approved and implemented ICT Security Policy; and
  - (ix) Approved **ICT Continuity Plan** informed by Departmental Business Continuity Plan and Strategy.

- (b) Phase 2: to be completed by March 2015
  - (i) Approved ICT Strategic Plan;
  - (ii) Approved first iteration of the **Enterprise Architecture** informing the ICT Architecture;
  - (iii) Approved **ICT Migration Plan** with annual milestones linked to an enabling budget;
  - (iv) Approved **ICT Procurement Strategy** for adhering to the ICT House of Value, taking into consideration the SITA Regulations of 2005; and
  - (v) Approved **ICT Annual Performance Plan** for 2015 to 2016 with a description of how it will be monitored.
- (c) Phase 3: April 2015 onwards

All aspects of the **Corporate Governance of and Governance of ICT** demonstrate measurable improvement from the initial implementation phase in 2012–14.

20.10 Guidelines for the implementation of CGICTPF and GICTF will be issued by the DPSA in due course.

# REFERENCES

- 1 Butler Group. 2005. *Measuring IT Costs and Value. Maximising the Effectiveness of IT investment* [online]. Technology Management and Strategy Report, September 2005. Butler Direct Limited. Available from: <u>http://www.butlergroup.com</u>
- 2 IT Governance Institute. 2005: *CobiT 4.1* Website: <u>www.isaca.org/Knowledge-</u> <u>Center/cobit/Pages/Downloads.aspx</u>
- 3 IT Governance Institute. 2007: *CobiT 4.1*. 4th Edition. ISBN 1 933284 72 2. Printed in the United States of America.
- 4 IT Governance Institute. 2011: COBIT<sup>®</sup> 5: *The Framework. Exposure Draft.*
- 5 IT Governance Institute. 2011: COBIT<sup>®</sup> 5: *Process Reference Guide. Exposure Draft*
- 6 IT Governance Institute. 2011 CGEIT<sup>®</sup> Glossary
- 7 International Organisation for Standards. 2008. ISO/IEC 38500:2008. *Corporate Governance of Information Technology*. Published 01 June 2008.
- International Organisation for Standards. 2010. ISO/IEC JTC 1/WG 6
   38502:2010 Governance of IT Framework and Model. Working Draft,
   11 November 2010. Available from <a href="http://isotc.org">http://isotc.org</a>
- 9 International Organisation for Standards. 2010. ISO-IEC WD2 TS 38501:2010 Information Technology – Corporate Governance of IT – Enterprise Governance of IT Implementation Guide. Working Draft, 16 November 2010. Available from http://isotc.org
- 10 International Organisation for Standards. 2011. ISO/IEC 38500:2011. *Corporate Governance of information technology*. Working Draft, 15 June 2010. Available from <u>http://isotc.org</u>
- 11 IT Governance Networks Netherlands. 2010. IT Governance implementation. 26 January 2010. Available from: <u>http://www.itgovernance.com/nl/index.php?option=com\_content&view=</u> <u>article&id=71&ltemid=89</u>
- 12 PricewaterhouseCoopers Southern Africa. 2009. *Executive guide to King III Code in national, provincial and local government.* 6 November 2009.
- 13 South Africa. Department of Finance. 1999. *Public Finance Management Act 1 of 1999, as amended.* Pretoria: Government Printing Works. 27 February 1998. National Treasury.

- 14 South Africa. Department of Finance. 2010a. *Public Sector Risk Management Framework*. Published 01 April 2010. National Treasury.
- 15 South Africa. Department of Finance. 2010b. *Framework for Strategic plans and Annual Performance Plan.* August 2010. National Treasury.
- 16 South Africa. Department of Public Service and Administration. 1994. *Public Service Act 103 of 1994, as amended*. Pretoria: Government Printing Works.
- 17 South Africa. Department of Public Service and Administration. 2001. *Electronic Government Regulations as amended*. 5 January 2001. Pretoria: Department of Public Service and Administration.
- 18 South Africa. Department of Public Service and Administration. 2002a. G018(a)-02. Strategic Planning Workshop of the Government Information Technology Officers Council. Report. Kopanong Conference Centre. 20–22 February 2002. Pretoria: Department of Public Service and Administration.
- South Africa. Department of Public Service and Administration. 2002b.
   G033/02. *IT Plan Guidelines*. Version 1. 8 May 2002. Pretoria: Department of Public Service and Administration.
- South Africa. Department of Public Service and Administration. 2002c.
   G038/02. *Minutes of the GITO Council meeting*. 23 July 2002. Pretoria:
   Department of Public Service and Administration.
- 21 South Africa. Department of Public Service and Administration. 2002d. G051(b)/02. GITO Council Report on the Policy, Audit and Gateway Workgroups. 3 September 2002. Pretoria: Department of Public Service and Administration.
- South Africa. Department of Public Service and Administration. 2002e.
   G051(c)/02. Control Objectives for Information Technology (COBIT) Workshop.
   Report. 24 July 2002. Pretoria: Department of Public Service and
   Administration.
- 23 South Africa. Department of Public Service and Administration. 2005. Draft South African e-Government Strategy. February 2005. Pretoria: Department of Public Service and Administration.
- 24 South Africa. Department of Public Service and Administration. 2010a. *Status of the governance of information technology in government*. Letter from the Department of Public Service and Administration to the Heads of Departments in the Public Service. 16 August 2010.

- 25 South Africa. Department of Public Service and Administration. 2010b. *Service Delivery Planning Framework and Methodology.* Draft. October 2010.
- 26 South Africa. Department of Public Service and Administration. 2010c. *GITO Council Annual General Meeting Report*. November 2010.
- South Africa. Department of Public Service and Administration. 2011a.
   *Government CIO Summit. Towards a Government-wide ICT Strategy.* Presentation. 31 March to 3 April 2011.
- South Africa. Department of Public Service and Administration. 2011b.
   *Government CIO Summit Report. Towards a Government-wide ICT Strategy.* Workshop III: ICT Governance and Leadership. Draft Report 1.0. 2 April 2011.
- 29 South Africa. Department of Public Service and Administration. 2012. *Principles* of *Public Administration and Financial Management Delegations. Outcome 12: Delegations and Decision Rights.* Draft. February 2012.
- 30 South Africa: Government Information Technology Officer's Council. 2009. Government-Wide Enterprise Architecture Framework.
- 31 South Africa: Government Information Technology Officer's Council. 2010. Government-Wide Enterprise Architecture Framework. Implementation Guide.
- 32 South Africa: Department: National Treasury. 2010. Framework for Strategic Plans and Annual Performance Plans.
- 33 South Africa. Office of the President. 1996. *Constitution of the Republic of South Africa. Act No 108 of 1996, as amended*. Pretoria: Government Printing Works.
- South Africa. Office of the President. 1998. Chapter 6: Information Management, Systems and Technology. In: Report of the Presidential Review Commission: Developing a culture of good governance (PRC Report).
   27 February 1998. Pretoria: Office of the President.
- South Africa. Office of the President. 2005. Intergovernmental Relations
   Framework Act No. 13 of 2005. Cape Town: Government Printing Works.
   15 August 2005. Office of the President.
- 36 South Africa. Office of the President 2007. *Policy Framework for the Government-wide Monitoring and Evaluation System*. November 2007: Office of the President.
- 37 South Africa. Office of the President. 2010. *Guide to the Outcomes Approach. Version: 27 May 2010.* Office of the President.

- 38 South Africa. Provincial Government of the Western Cape. Department of the Premier. 2010. *PGWC IT Governance Related Standards*. 23 November 2010.
- South Africa. Provincial Government of the Western Cape. Department of the Premier. 2010. *Information Technology Governance Framework*. Version 1.0.
   29 December 2010.
- 40 South Africa. Provincial Government of the Western Cape. Department of the Premier. 2011. *PGWC Charter for the Corporate Governance of IT*. Draft Version 4. 25 August 2011.
- 41 The Auditor-General of South Africa. 2008: Information Systems Audit: Governance of Information Technology in Government at the Department of Public Service and Administration. Management Report on an Information Systems Audit of the Governance of Information Technology in the Public Sector, unpublished.
- 42 The Auditor-General of South Africa. 2010. *Status of the governance of information technology in government*. Letter from the Auditor-General to the Department of Public Service and Administration regarding the information systems review of the governance of information technology in government, unpublished.
- 43 The Open Group. 2009. The Open Group Architecture Framework (TOGAF) V.9

# ANNEXURE A: Full description of Public Service ICT Governance Principles as per ISO/IEC 38500 and KING III

ISO/IEC 38500 Principles	Related King III Code principle
Principle 1: All within the organisation have to understand and accept the responsibility in respect of both supply of, and demand for IT	<ul> <li>Principle 1 – Board Responsibility: The board should be responsible for information technology (IT) governance</li> <li>The board should assume the responsibility for the governance of IT and place it on the board agenda.</li> <li>The board should ensure that an IT charter and policies are established and implemented.</li> <li>The board should ensure promotion of an ethical IT governance culture and awareness and of a common IT language.</li> <li>The board should ensure that an IT internal control framework is adopted and implemented.</li> <li>The board should receive independent assurance on the effectiveness of the IT internal controls.</li> <li>Principle 3 – IT Governance Framework: The board should delegate to management the responsibility for the implementation of an IT governance Framework</li> <li>Management should be responsible for the implementation to assist with its governance of IT.</li> <li>The CEO should appoint an IT steering committee or similar function to assist with its governance of IT.</li> <li>The CEO should be a suitably qualified and experienced person who should have access and interact regularly on strategic IT matters with the board and/or appropriate board committee and Executive Management</li> </ul>
<b>Principle 2:</b> The organisation's business strategy takes into account the current and future capabilities of IT	<ul> <li>Management.</li> <li>Principle 2 – Performance and Sustainability: IT should be aligned with the performance and sustainability objectives of the company</li> <li>The board should ensure that the IT strategy is integrated with the company's strategic and business processes.</li> <li>The board should ensure that there is a process in place to identify and exploit opportunities to improve the performance and sustainability of the company through the use of IT.</li> </ul>

ISO/IEC 38500 Principles	Related King III Code principle
<b>Principle 3:</b> All IT acquisitions are made for valid reasons on the basis of the appropriate and on-going analysis with clear and transparent decision making	<ul> <li>Principle 4 – IT Investments: The board should monitor and evaluate significant IT investment and expenditure</li> <li>The board should oversee the value delivery of IT and monitor the return on investment from significant IT projects.</li> <li>The board should ensure that intellectual property contained in information systems is protected.</li> <li>The board should obtain independent assurance on the IT governance and controls supporting outsourced IT services.</li> </ul>
<b>Principle 4:</b> IT is fit for purpose in supporting the organisation, providing the services, levels of service and service quality required to meet current and future business requirements	Same as Principle 2 above
<b>Principle 5:</b> Compliance should form an integral part of the risk management process. The risk of non-compliance should be identified, assessed and responded to in the risk management process.	<ul> <li>Principle 5 – Risk Management: IT should form an integral part of the company's risk management</li> <li>Management should regularly demonstrate to the board that the company has adequate business resilience arrangements in place for disaster recovery.</li> <li>The board should ensure that the company complies with IT laws and that IT related rules, codes and standards are considered.</li> </ul>
<b>Principle 6:</b> IT Policies, practices and decisions demonstrate respect for Human Behaviour, including the current and evolving needs of all the "people in the process"	
	<ul> <li>Principle 6 – Information Security: The board should ensure that information assets are managed effectively</li> <li>The board should ensure that there are systems in place for the management of information which should include information security, IT and information privacy.</li> <li>The board should ensure that all personal information is treated by the company as an important business asset and is identified.</li> <li>The board should ensure that an Information Security Management System is developed and implemented.</li> <li>The board should approve the information security strategy and delegate and empower management to implement the strategy.</li> </ul>

ISO/IEC 38500 Principles	Related King III Code principle
	<b>Principle 7 – Governance Structures</b> : A risk committee and audit committee should assist the board in carrying out its IT responsibilities
	The risk committee should ensure that IT risks are adequately addressed.
	<ul> <li>The risk committee should obtain appropriate assurance that controls are in place and effective in addressing IT risks.</li> </ul>
	• The audit committee should consider IT as it relates to financial reporting and the going concern of the company.
	The audit committee should consider the use of technology to improve audit coverage and efficiency.