OUTLINE FOR:
ICT Plan;
ICT Implementation Plan; and
ICT Operational Plan

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1 Purpose of this Document

Informed by the requirements of the Corporate Governance of ICT Assessment Standard this document sets out to provide a high-level process outlines for departmental business and ICT alignment planning. The process as described in this document will result in an ICT Plan, ICT Implementation Plan and ICT Operational Plan. It is in line with the Medium Term Strategic Framework (MTSF), Medium Term Expenditure Framework (MTEF) and current year Annual Performance Plan (APP). It provides an objective cascade that will support departments in the use of ICT to enable its service delivery in a measurable fashion. The process that informs ICT planning is in line with the intent of the National Treasury Strategic Planning Framework (NTSPF) as depicted in the following Figure 1:

Figure 1: NTSPF aligned ICT Planning Process

NB: This document must be read in conjunction with the Government-Wide Enterprise Architecture Framework (GWEA) as well as the Service Delivery Planning and Methodology Framework (SDP&M).

In line with the intent of the CGICT Assessment Standard, the DPSA monitors business and ICT alignment planning via the MPAT system of the Department of Planning Monitoring and Evaluation (DPME).
2 Compliance, Conformance and Performance Measurement

Conformance to these ICT Plan outlines in government will provide the DPSA with a foundation to measure the extent to which departmental business enablement planning and its resultant instruments (ICT Plan, ICT Implementation Plan and ICT Operational Plan) are aligned to the strategic objectives of the department. It will also provide an indication to what extent departments are able to enable their business though the use of ICT.

Successful planning of ICT enablement of the business of a department is however dependent on the issues discussed in the following paragraph.

3 ICT Planning Dependencies

The following dependencies will influence the ability of departments to successfully plan for and implement its strategic business and ICT alignment:

- Level to which executive leadership is involved in departmental use of ICT. In this context executive leadership includes the GITO of the department;
- Measure to which the business owners in a department usurps responsibility for ICT enablement of the business;
- Business ownership of requirements for ICT enablement;
- The strategic and operational culture of the department with regards to the use of ICT to create value in service delivery and the ease with which this can be transformed;
- The measure to which business understands its enabling requirements through ICT means and the GITO’s understanding of the business of the department;
- Capacity and capability of the business of the department to adapt to and own ICT enablement of its service delivery;
- Capacity, capability and adequacy of the ICT unit to articulate the implementation of the business’ enabling requirements; and
- Current ICT systems and infrastructure capacity and capability and the ability to migrate it to address the current and future business enabling requirements.
- The measure to which change management, education/training, institutional/systems and infrastructure development is required will determine the success in business and ICT alignment.

The high-level process to align business and ICT enablement of business is discussed in the following paragraphs.

4 ICT Planning Model

The following Figure 2 articulates the top-down business and ICT alignment methodology that should be followed starting with the objectives
of the departmental strategic plan and mapping to it how ICT is expected to enable current and future business in its service delivery through related objective setting. It furthermore shows the cascade of these goals through the 5-year MTSF conceptual plan to the 3-year plan that depicts project and MTEF budget and the current year plan. It implies that if this process is cyclical, a gradual improvement of ICT enablement of business will be achieved.

Figure 2: Business and ICT objectives alignment planning cascade

5 Develop ICT Plan
5.1 Phase 1: Strategic Articulation

The ICT Planning process starts with the articulating the business objectives of the department determining the ICT objectives required to enable these.

As ICT cannot implement its objectives in isolation of the business requirements and its participation, it is necessary that the strategic objectives and the ICT objectives must be evaluated by the strategic management of a department in order to formulate a statement of strategic intent. This statement of strategic intent must include three specific areas of business service delivery:
5.1.1 The ICT enabling of **frontline service delivery (e-Government)** and accessibility requirements;

5.1.2 **Back-office and supporting** business ICT enabling requirements; and

5.1.3 **Inter-departmental cooperative** requirements.

These areas must be **prioritised** which culminates into the business requirement objectives that must be met by ICT. This prioritisation narrows the scope of architecture work in line with the value add capacity of ICT. The repetitive nature of architecture work will ensure that all the objectives are regularly evaluated for inclusion and accounted for. This process is conducted as shown in Figure 3 below:

**Figure 3: Strategic Articulation of Business Requirements to ICT Objectives**

5.2 Phase 2: Prioritisation of Business ICT Enablement Requirements

These high-level objectives have a **specific work impact**, which must be further articulated to determine **realistic and realisable business requirements**, within the enablement capacity of the department, in line with business priorities. During this phase strategic management engages the **high-level business requirements for ICT enablement together with the**
priorities of the business, the capability and capacity (finances, skills and other resources) to determine to what extent the business enablement requirements can be satisfied through ICT. This involves a negotiation process between all role-players and providers of resources to determine which of the business requirements should be realised. These decisions culminate in a prioritised high-level roadmap. This phase of prioritisation further narrows the scope of architecture work to focus efforts on realisable outputs. This process is conducted as follows:

Figure 4: Determining high-level MTSF roadmap for ICT enablement of business

5.3 Phase 3: Translating the High-level MTSF Roadmap into ICT Plan

The decision taken in Phases 1 and 2 culminates into the intent of the ICT Plan (See Annexure A). The ICT Plan should reflect the following:

5.3.1 Statement of strategic intent, which should include frontline service delivery (e-Government), back office supporting and inter-departmental requirements and objectives.

5.3.2 Vision indicating that ICT must enable business in the execution of its mandate, informed by paragraph 5.2.1.

5.3.3 Mission articulates the objectives of the department’s ICT enablement requirements that can be unpacked into ICT business enablement objectives.
5.3.4 Objective mapping between the business and ICT enablement objectives.

5.3.5 Prioritised ICT enablement objectives informing the scope of architecture work and value proposition of ICT enablement of service delivery;

5.3.6 A prioritised high-level MTSF roadmap for ICT enablement of the business further narrowing the scope of architecture work.

5.3.7 Strategic level performance indicators for the ICT enablement objectives and how it will be measured.

5.3.8 Information architecture (GWEA Page 13 B.2.4).

Note: If the SDM&P Framework is used to articulate the business architecture of a department, it excludes the information needs. It is thus necessary to build this (if required) to complement the outcomes of the SDM&P.

5.3.9 Target Information Systems Architecture (TOGAF 9 Page 109 Phase C) which consists of the following:

5.3.9.1 Data Architecture (GWEA Page 14 C.1).

5.3.9.2 Application Architecture (GWEA Page 15 C.2).

5.3.9.3 Technology Architecture (GWEA Page 16 D.1).

5.4 Risk analysis.

5.5 RACI Chart allocating accountability and responsibility and delegations.

6 Develop the ICT Implementation Plan

The ICT Implementation Plan, Annexure B, translates the prioritised high-level MTSF roadmap into a portfolio of projects reflecting annual milestones that spans over the MTEF period and includes the structural, resource (skills and capacity and capability) and budget requirements for the portfolio. This is done as depicted in the following Figure 5:

Figure 5: Developing the ICT Implementation Plan
The ICT Implementation Plan must reflect the following:

6.1 Statement with regards to what must be achieved in the MTEF period informed by the high-level roadmap paragraph 5.1.

6.2 Mapping of the prioritised high-level MTSF roadmap objectives from the ICT Plan.

6.3 Target Information System Architecture.

6.4 Implementation roadmap, per year, that reflects prioritised projects with its annual milestones and related budget (GWEA Page 18 F.1).

6.5 Enabling resource requirements such as funding, structure, capacity and capability reflected per year.

7 Develop the ICT Operational Plan

The ICT Operational Plan, Annexure C, depicts the current year’s implementation (reflected in an Annual Performance Plan) of the ICT Implementation Plan. However before an ICT Operational Plan is developed strategic management must first consider the internal and external environment to ensure that the intended current year implementation and projects are still valid, and are possible/plausible. Figure 6 shows the process to translate the ICT Implementation Plan into a current year ICT Operational Plan.
The ICT Operational Plan shows the current year migration activities towards the **Target Information Systems Architecture** and should include:

7.1 Current year projects.
7.2 Quarterly milestones and targets.
7.3 Performance indicators per project.
7.4 Budget per project.
7.5 Structural and resource requirements.

All business requirements that could not be met in the current year must be rolled back up to the next year or should result in a change in the **Target Information Systems Architecture** and ICT Implementation Plan.

**Conclusion**

The intent of the development process above is to create an environment where annual ICT planning is executed **aligned with the requirements of the business** in a measurable fashion in order to continuously improve the business enablement of the Public Service through ICT.
This will be *monitored and measured internally* in the department and *measured by the DPSA via MPAT.*
ANNEXURE A

OUTLINE FOR: ICT PLAN

1. **Introduction** explaining context and purpose of ICT Plan.

2. **Statement of strategic intent**, which should include *frontline service delivery (e-Government), back office supporting and inter-departmental requirements* and objectives.

3. **Vision** indicating that **ICT must enable** business in the execution of its mandate, informed by paragraph 2 above.

4. **Mission** articulates the **objectives of the department’s ICT enablement** requirements that can be unpacked into **ICT business enablement objectives**.

5. **Strategic objective mapping** between the business and ICT enablement objectives.

6. Prioritised **ICT enablement objectives** informing the scope of architecture work and value proposition of ICT enablement of service delivery depicted in a **high-level MTSF Roadmap**;

7. A prioritised high-level MTSF roadmap for ICT enablement of the business **further narrowing the scope of architecture work**.

8. Strategic level **performance indicators** for the ICT enablement objectives.

9. Description of the **target state** of ICT enablement of the business.

10. Target **Information Architecture** (GWEA Page 13 B.2.4) reflecting:

10.1 A representation of key business information, its characteristics, behavior relationships, and cardinality;

10.2 A description of static information and relationships between information;

10.3 The information exchanged within and between activities; and

10.4 The information exchange requirements. Information exchange requirements express the relationships and focus on characteristics of the information exchange, such as performance and security with specific reference to who exchanges what information with whom, why the information is necessary, and in what manner.

**Note**: If the SDM&P Framework is used to articulate the business architecture of a department, it excludes the information needs. It is thus necessary to build this (if required) to compliment the outcomes of the SDM&P.

It addresses the data and application systems domains and it focuses on identifying and defining the applications and data considerations that support an departments business architecture focusing on information, knowledge, application services, etc.

11.1 **Data Architecture** (GWEA Page 14 C.1).

Is a subset of the *Information Systems Architecture* and defines the major types and sources of data necessary to support the business, the relevant data entities, the logical design of data, its interrelationships, dependencies and how it will be managed.

11.2 **Application Architecture** (GWEA Page 15 C.2).

Is a subset of the *Information Systems Architecture* and identifies the application system necessary to process the data and support the business by define what kinds of application systems are relevant, what those applications need to do in order to manage data and to present information to the human and computer actors. It represents logical groups of capabilities that manage the data in the *Data Architecture* and support the business functions in the department’s applications. The *Application Architecture’s* capabilities are defined without reference to particular technologies.

11.3 **Technology Architecture** (GWEA Page 16 D.1).

Is a subset of the *Information Systems Architecture* and maps application components defined in the *Application Architecture* into a set of technology components, which represent software and hardware components. It has strong links to implementation and migration planning depicting the technology portfolio, detailing the *MTSF Roadmap* towards the *Target Architecture*.

12 **RACI chart** reflecting responsibility, accountability, who should be consulted and who should be informed.

**NB:** This document must be read with the GWEA AND SDM&P Frameworks.
1 **Statement of intent** with regards to what must be achieved in the MTEF period.

2 **Mapping of the prioritised high-level MTSF Roadmap** objectives from the ICT Plan; see paragraph 5.1 of covering document.

3 **Target Information Systems Architecture Implementation Roadmap** (GWEA Page 18 F.1).

This is a result of the outputs of **Annexure A paragraph 10**. As indicated in the covering document the ICT Implementation Plan reflects the MTEF period depicting the three-year migration planning towards implementing its **Target Architecture**. It includes milestones and deliverables for each year of the three-year period reflecting the required budget, resources, skills and structure required for implementation. The following diagram shows the cascade from the prioritised MTSF Roadmap informing the ICT Plan breaking it down into MTEF implementation roadmap per year that reflects prioritised projects with its annual milestones and related budget; this is depicted in the following Figure 1:

**Figure 1: High-level process to cascade departmental ICT Plan into Target Information Systems Architecture for the ICT Implementation Plan.**
NB: This document must be read with the GWEA Framework.
OUTLINE FOR: ICT OPERATIONAL PLAN

1  **Current year projects.**

Once the process in the covering document Paragraph 7 is completed, the ICT Operational Plan is created and it reflects the current year implementation of the migration towards the **Target Information Systems Architecture** captured in an Annual Performance Plan (APP). This plan excludes operational and infrastructure improvement projects. This is done to:

- Ensure that the ICT Operational Plan is coordinated within the various management practices of the department;
- Prioritise all projects within the business value and business and ICT capability of the department through conducting a cost/business value analysis; and
- Providing the necessary resources to enable the realization of the **Target Information Systems Architecture**.

The cascade that informs the ICT Implementation Plan as depicted in Figure 1 below:

**Figure 1: MTSF Roadmap Cascade to Current Year Implementation**

2  **Performance indicators** per project.
3 Quarterly *milestones and targets*.

4 *Budget* per project.

5 *Structural* and *resources* allocated to each project.

**NB:** This document must be read with the GWEA Framework.