

Use of Technology in Tax Administrations 1: Developing an Information Technology Strategic Plan (ITSP)

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This technical note is the first of three addressing information technology themes and issues relevant to tax administrations. This note focuses on the use of technology in tax administrations and how to develop an information technology strategic plan (ITSP) and is intended for developing country tax administrations that are largely manual or have legacy information technology (IT) systems that are outdated. The second note addresses how to select an IT system for core tax administrations functions. And the third note covers implementation of a commercial-off-the-shelf (COTS) system. Ideally, the notes would be read in order but a tax administration that already has an ITSP may choose to go straight to note two to determine the type of system most suited to its circumstances or note three if the preferred system has already been selected. The content of these technical notes reflects the themes and issues the IMF Revenue Administration Divisions are frequently called upon to assist member countries with.

These technical notes are primarily for use by tax administrations that have no technology to manage their core tax processes, or their technology is limited and outdated. The notes may, however, also be of interest to more advanced administrations. These notes focus on core tax functions and do not address other business systems (e.g., payroll, finance, document, and asset management systems). For advanced IT tax administrations, there is a wealth of other information available including the OECD Forum on Tax Administration publication: *Technologies for Better Tax Administration. A Practical Guide for Revenue Bodies*, May, 2016.¹

¹ <http://www.oecd.org/tax/forum-on-tax-administration/publications-and-products/technologies-for-better-tax-administration-9789264256439-en.htm>

TECHNICAL NOTES AND MANUALS

Use of Technology in Tax Administrations 1: Developing an Information Technology Strategic Plan (ITSP)

Margaret Cotton and Gregory Dark²

This technical note and manual (TNM) addresses the following questions:

- What questions need to be asked and what issues should be taken into account when developing an IT strategy?
- What is the link between the IT strategy and the organizational strategy and plan?
- What functionality should the IT strategy aim for?
- What is an Information Technology Strategic Plan (ITSP), why is it important and when should it be developed?
- Who should be involved in developing the strategy and in what roles?
- Should an ITSP address Risk Management issues?

This is the first of three technical notes which address establishing a set of systems to provide core functions to a tax administration.

I. Revenue Administration: Information Technology Strategy

Information Technology is central to the effective administration of taxation systems. Where investment in IT was once seen as a “luxury” by administrations, evolving business practices across the globe now demand an efficient, comprehensive, accurate and interactive capability to deal with administration of the whole revenue system within a country, and, in a rapidly increasing number of cases, across borders as well.

Administrations need to be able to deal with increasing numbers of taxpayers and the increasing amount of information required to manage the complexity of their interactions. They also need better transparency of their operations, greater efficiency, and greater responsiveness to the needs of both taxpayers and the government.

These needs simply cannot be met by traditional manual means—they can only be met by the effective use of IT. Investment in IT capability now forms a significant part of the budget of administrations, and needs to be carefully managed.

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The extent of use of IT within tax administrations varies markedly across the world. This series of notes is focused on the needs of administrations which have very little or rudimentary IT support for their operations (Category 1); or those which have IT systems which have not kept up with their needs (Category 2). Appendix 1 provides a summary of the typical stages a tax administration will go through as it introduces technology into the tax system.

This note describes initial steps which should be taken prior to going to the market for solutions or seeking donor support for IT initiatives.

II. What Questions Should Be Asked and What Issues Should Be Taken into Account When Developing an IT Strategy?

First and most importantly, an administration must be clear on what it expects from implementing technology. A “future state” vision of how the administration sees itself operating at a time towards the end of its planning horizon or even beyond is needed to identify the gap between where they currently sit and where they want to be, and to identify opportunities to meet those requirements.

Once an administration understands what it wants to achieve, the answers to questions such as those below can provide a path to future steps:

- **What does the administration *want* from new technology?** There can be a glittering array of possibilities available for all sorts of automation and data gathering. It is common for administrations to imagine an almost instantaneous complete transformation of their operations incorporating every facet of this array. These myriad choices may be quite different from what the administration actually needs, and it is common for an administration faced with these options to over-specify functions (both in terms of range and complexity), which results in complicated and inefficient outcomes that adversely affect the user experience.
- **What does the tax administration *actually need*?** A more dispassionate assessment should be made of an administration’s actual needs. An administration’s objectives may be as simple as to establish a basic set of systems to perform the core of their responsibilities—registration, processing, payment and accounting along with some associated functions like audit targeting, debt collection, etc. Understanding these basic needs and the environment within which the administration operates helps determine how sophisticated a system is required, something which has a major impact on its cost.

The tax administration might want to include numerous electronic interface services (e.g., e-filing, e-payments, data sharing and data matching, and taxpayer self-help portals) but the wider business and government environment may not be ready to use these features. Understanding the level of IT skills and infrastructure in the community will help determine how sophisticated the tax administration system should be and the preferred timing and sequencing of the IT strategy. Is the business community already automated? Are government agencies automated? Are their systems up-to-date? Is there wide-ranging and continuous

electricity supply? How broad is internet and mobile phone coverage? What plans do larger businesses and government have to increase use of and exposure to technology?

- **Can the IT system be afforded, and who will pay?** There is no limit as to how much can be spent on technology, but provision of a basic core set of systems along with needed hardware and communications networks will start at more than USD\$10 million, even for a small administration.
- **Who will provide the IT system?** In the past, it was common for tax IT systems to be custom-built, either by in-house experts or by consulting firms. That is no longer the case—there is a number of tax-specific systems available in the marketplace, able to be configured to meet individual administration’s laws and other needs. These are known as Commercial-Off-The-Shelf (COTS) systems. In most cases they can be implemented progressively—a set of core functions can be used as a starting point, and expanded functions added at a later date without substantial modification of the core.
- **How long will procurement and implementation take?** Excluding the procurement process, a target of three years is reasonable. In ideal situations, a two-year timespan can be achieved, but is not typical.
- **If a new system is delivered, can the administration use it effectively?** Technology is not the only issue to be considered. As it is introduced, impacts will be felt by stakeholders—staff, taxpayers, tax professionals, and government. As well, the way the administration conducts its business—its processes, will be profoundly affected.

All these impacts will need to be foreseen and managed as part of the process. A change management strategy should be developed early in the design phase.

- **What else is involved?** New technology has its own set of requirements—it will require a suitable physical environment in which to be installed, it will need support to run it in the day-to-day environment, it will have ongoing maintenance and license costs, it will introduce new security requirements, it will need some sort of IT organization whose job is managing these activities as well as monitoring and planning for future enhancements, etc. All of these requirements need to be identified when developing the IT strategy.

III. What Is the Link Between the IT Strategy and the Organization Strategic Plan?

The organizational strategic plan sets out the outcomes sought by the administration over a fixed period, usually 3-5 years. It describes how these outcomes will be met and can then be used to create subordinate plans. For each of these lower level plans, a clear “line of sight” to particular corporate outcomes or aspirations needs to be established. In this way, a complete set of strategies and plans are evolved to describe the means to be used to achieve corporate outcomes. The IT strategy should have direct links to the strategic plan and will also have links to other operational plans within an

organization, such as the compliance plan or operations plan which will highlight particular IT needs for their purposes. Figure 1 shows the hierarchy of planning documents.

Figure 1. Hierarchy of Planning Documents



IV. What Functionality Should the IT Strategy Aim For?

Many of the answers are dependent on the relative maturity of the systems suite currently in place in the administration. As noted, the “heart” of any administration is a set of core systems which enable the basics of any tax system—an administration needs to know who its clients are, what obligations they have and when they are due, and who owes money to whom. This is enabled by an integrated suite of IT programs which provide support for: Taxpayer Registration, Returns Processing, Taxpayer and Revenue Accounting, and Payment Processing. These programs work together to provide what is commonly termed “the core system.” This core system can then be supported by additional systems (also referred to as sub-systems or modules) which use the information to provide particular outcomes—e.g., electronic filing, case management and workflow for debt collection and audit, and an analytical capability to automatically detect and select audit cases, provide individualized taxpayer service, forecast revenue, etc.³

Once those systems are in place, future enhancements can incrementally build on that base. Unless an administration is ready to use a particular enhancement, it should not be contemplated. For instance, unless processing and analytical capability is present, it would make no sense to introduce mandatory cash register reporting by businesses. Similarly, if internet access is not available across the country, mandating electronic filing would not make sense. Initiatives also need to be assessed on the basis of cost/benefit, where the benefit may be to the taxpayer, the administration, or in the best case, both.

³ Typical functions present in a tax administration are listed in Technical Note 2—*Core Information Technology Systems in Tax Administrations*.

To guide how IT is sourced, implemented and used in an administration, common practice is to construct an overarching document called an Information Technology Strategic Plan (ITSP). The answers to the above questions help to frame the document—the aims, objectives and scope of the strategy. The existence of an ITSP is a starting point for IT use in an administration, and is usually a pre-requisite for any donor participation.

It is common at this stage to engage an experienced IT executive to assist in the construction of the more detailed ITSP. From this point on, although the business desire frames the requirements, IT technical capability is an essential part of the equation.

V. What Is an ITSP, Why Is It Important, and When Should It Be Developed?

The ITSP is a document which sets out how IT will be used to achieve corporate outcomes. Although it has a technical name, it is not a technical document—it is intended for use by the organization as a whole and by the external stakeholders. It is not only about technology, it is also about process modernisation and organisational change. An ITSP sets out the IT needs of an administration in “from – to” terms, e.g., from: manually prepared paper returns to electronically prepared and processed returns; from separate systems by tax-type to a single integrated suite of systems; from use of internally-held information to use of third-party information, etc.

It typically covers all facets of how technology is to be used by the administration, including: management and governance arrangements; hardware; software; the technical platform and environment;⁴ cost projections for both capital and expense items; human capital management; vendor/supplier management;⁵ risk management; change management; stakeholder management and communications; information management;⁶ security provision and management; and, any other considerations in the enterprise IT environment⁷ such as distribution of capability, accommodation, etc. The IT strategy might also cover the policies or guiding principles that will guide the tax administration as it makes decisions about its IT program. These principles assist in providing stability, discipline, and consistency for IT decision making and help ensure alignment to business needs and goals. Appendix 2 provides an example of some high level guiding principles.

The level of detail present in an ITSP will vary according to the level of IT sophistication of an administration and the purpose for which it is being used:

- Tax administrations inexperienced in IT are likely to have a very high-level statement of objectives, e.g., to establish a core set of systems to perform the basics tax administration

⁴ The IT resources an organization uses- hardware platform, databases, operating systems, networks, etc.

⁵ Management of external suppliers of IT infrastructure—hardware, software, communications networks, etc.

⁶ The way an organisation obtains, stores, classifies, uses and protects its data/information

⁷ Other matters such as the use of a common government data center, location and strength of particular staffing and skills, etc.

Box 1. Common content of an Information Technology Strategic Plan

Typically, an ITSP includes:

- The aims, objectives, and scope of the strategy—how it relates to Corporate strategies.
- Governance and management arrangements—how the IT organization is internally structured and managed (including how IT operates within the wider organizational environment).
- A description of overall organizational IT needs and dependencies.
- A description of current and future states accompanied by a transition approach (From – To statements).
- A description of the business model to be used to provide IT and why options have been chosen, e.g., due to availability, affordability, retention issues, etc. Options for provision include: In-house; outsourced; or a combined approach according to variables such as those above, or simply because an administration may make a decision *not* to perform IT development work in-house as it is not its core business.
- Resource requirements summary
 - staffing (skills and numbers);
 - budgets both (capital and expense);
 - summary of key projects; and
 - timing (aligned to key reforms, capacity and funding).
- Assessment of internal capabilities and needs.
- External dependencies which affect IT, e.g., overall government rules and strategies, etc.
- Risk Management approach.

functions—registration, processing, and accounting. They may also focus on describing the formation of an IT organization within the administration—governance and management arrangements. They may further explore physical barriers to IT adoption such as connectivity or internet availability, etc. These high-level statements can be used for communication purposes and to obtain funding approvals. A more detailed plan can be developed for procurement purposes and to guide development of the preferred system.

- More advanced administrations will have greater definition of their ambitions and may identify more detailed issues e.g. they may have disparate systems which do not work well together, so the ITSP may be primarily focused on implementing an integrated suite of systems support for its operations or issues such as the introduction of wider self-service options.

A common contents list for an ITSP is in Box 1. A sample template for a simple ITSP is provided in Appendix 3. Anonymized examples of actual ITSP tables of content are provided in Appendix 4.

The strategy may also include descriptions of the type(s) of tools, technologies, equipment, etc., intended to be used by the organization.

Inventories and descriptions of software, hardware, communications standards, etc., are commonly found in a separate document or in an appendix to the document rather than the document itself.

If the ITSP identifies a need for a significant change to existing operations, e.g., replacement or establishment of the core processing system(s)⁸, the document will also further describe the initiative, and separately address issues relating to it including a transition approach and plan.

According to the level of maturity of IT within an administration, different facets of the strategy will require more or less examination. For instance, inexperienced administrations may need to focus on the availability of skilled IT staff in their country, and whether it is possible to create an IT organization within the administration due to issues such as pay disparities between the public and private sectors. This discussion could then be further expanded to sourcing strategies—in these countries there may be little option but to outsource IT development and maintenance.

More advanced administrations may want to focus more on IT sourcing strategies, how to move their systems to the next level, or whether to build or buy an integrated system.

Just as the organizational strategy informs the ITSP, lower level *operational* plans are then prepared from the information the ITSP contains. These plans can include detailed plans for individual programs or projects identified in the ITSP.

The contents of the ITSP are therefore framed in a way which is relevant to the particular issues an administration faces, rather than being a “one size fits all” document. It will be used not only as a reference point for operational plans, etc., but as the centerpiece for raising funds for its implementation (through a capital investment plan where present). It provides the *rationale* for any proposed investment.

The ITSP is intended to be a public document. All stakeholders should have ready access to the ITSP and it should be “pitched” accordingly. It is common practice to promote a summary-style document as the first level of interaction, from which the detailed document can be accessed if desired. The summary ITSP may be used for communications seeking funding and general stakeholder engagement.⁹ The more detailed ITSP is used for procurement and to guide development of the preferred system.

The ITSP is not a static document. It looks forward for a period of three to five years, but is refreshed annually in line with the organizational strategy, so an administration always has a three to five year horizon for decision-making. This annual refresh ensures continual alignment with the business strategy, business environment, and technology trends. It also takes into account unforeseen changes (e.g., government policies, delays in IT implementation), and new IT developments. For major projects such as replacement of core systems, an even longer planning horizon may be needed.

⁸ See Technical Note 2 - *Core Information Technology Systems in Tax Administrations* for a full description of core systems.

⁹ An example of such a high-level summary can be found at: https://www.ato.gov.au/uploadedFiles/Content/CR/downloads/js32370%20IT%20strategy%20summary_w.pdf

VI. Who Should Be Involved in Developing the Strategy and in What Roles?

Creating an IT strategy requires strong leadership; where existing, the Chief Information Officer (CIO)¹⁰ and Chief Technology Officer (CTO)¹¹ (alternatively the IT Director) need to work closely with the administration executive bodies, information managers, business owners, budget and legal sections as well as with other user groups such as staff associations within the organization. Infrastructure providers¹² also need to be part of the consultation process to ensure that technical proposals can actually be met. Closely associated external organizations such as the Ministry of Finance or Treasury will need to be included in consultations as will the wider network of agencies/information exchangers.¹³ Participation of external bodies such as accounting professionals, chambers of commerce, as well as taxpayer groups can also lead to a greater understanding of future needs requiring IT solutions or support and the impacts of proposed automation solutions on their own internal systems—e.g., e-filing systems, information exchange, and payroll tax.

VII. Should an ITSP Address Risk Management Issues?

It is important that an ITSP addresses risks to the organization relating to technology. These can include threats to physical infrastructure, to business continuity, to data holdings, etc. and could be summarized as pertaining to: availability, integrity, and confidentiality. Issues such as security, disaster recovery, backup, and restore policies can all be covered by instituting a risk management policy, and regime such as that described in the International Organization for Standardization (ISO)27000 series. Essentially, the process follows these five steps:

1. identify risks;
2. assess risks;
3. mitigate risks;
4. develop response plans; and
5. review risk management procedures.

Due to its extremely confidential nature, detailed identification, assessment, and treatment program of risks should be compiled in a document separate from the ITSP.

¹⁰ The person with overall responsibility for IT within the organization may be referred to as “IT Director” or similar.

¹¹ The person responsible for understanding and proposing new technological capabilities may be the same person as the CIO.

¹² Suppliers of hardware, software, communications networks and their attendant experts

¹³ Entities which commonly supply or exchange information with the tax administration such as other government agencies, but also banks, employers, stock exchanges etc.

Appendix I.

STAGES IN A TYPICAL TAX ADMINISTRATION TECHNOLOGY REFORM PROGRAM

Information technology is driving taxpayers to change their business models, their approach to paying tax, and their relationship with the tax office. IT is also enabling tax administrations to modernize the ways they administer the tax system and their interactions with taxpayers. From traditional face-to-face and paper-based interactions, tax administrations are increasingly moving to more digital interaction with taxpayers through the *online tax administration* and *virtual offices*, e.g., using e-registration, e-filing, e-payment, e-invoicing, e-accounting, self-help portals, etc.

In embracing new IT, tax administrations should keep in mind their primary purpose of improving taxpayer compliance and adopt new technologies in a systematic manner that supports their business direction and compliance initiatives. The aim is to create a robust compliance program that helps maximize taxpayers' compliance and minimizes the costs of compliance whilst being effectively supported by appropriate technology.

Several stages (and sub-stages) in a typical tax administration technology reform program can be identified:

- **Informational:** discrete one-way interaction to enable self-assessment compliance and greater transparency.
 - *Education:* provide all tax-related information—laws, regulations, ruling, forms, guides, annual reports, etc.
 - *Traceability:* allow taxpayers to follow the status of interactions with tax administrations—e.g., refund claims and audits.
- **Transactional:** two-way interactions for taxpayers to meet their obligations and the tax administration to perform core processes; some are discrete, others in real-time.
 - *Submission of information:* e.g., e-registration, e-filing, e-third-party information, e-accounting, etc.
 - *Interaction with third parties:* e-payment, e-procurement, etc.
 - *Services to compliance:* third-party information disclosure, crosschecks, pre-populated tax returns, etc.
- **Interoperability:** IT interfaces between the tax administration, taxpayers, and other entities, enabling interactive real-time data gathering, taxpayers' compliance, and RDs' core operations.
 - *Tax determination from accounting systems:* a step beyond pre-populated tax returns that may allow optional tax returns—common data definitions and rules across entities are needed.
 - *E-tax audit and e-crosscheck:* automating enforcement processes to make them more transparent.
 - *E-invoicing:* aligning tax and commercial transaction platforms, including sales/purchases activity.
 - *Single window across government entities:* streamlining the relationship with citizens.

Successfully proceeding through these stages relies upon the tax administration's capacity to manage taxpayers' compliance and harness the enabling technology.

Appendix II.

EXAMPLE IT GUIDING PRINCIPLES

- The business requirements drive IT and are key to the future of the IT environment.
- Each business process is owned by the business and must be reviewed for appropriateness and performance before considering IT enablement or further automation.
- All projects involving IT resources are prioritized and coordinated via an IT governance process.
- The total cost of an IT solution, both implementation and ongoing support needs, is understood before a final decision is made.
- The risk of adopting new technology is balanced against the potential benefits of the new innovative technology
- IT decisions provide maximum benefit to the revenue system as a whole.
- IT investments are recognized as corporate assets and are managed and maintained accordingly.
- Appropriate system security is in place so that information and systems are protected from unauthorized use and disclosure.
- Information is recognized as an asset and must be managed accordingly.
- As much as possible there should be "one version of the truth," e.g., collect data once but access it many times and through multiple avenues.
- IT systems are designed and implemented allowing for possible reuse by other business processes.
- The number of different technologies and products providing the same or similar service is minimized.
- Appropriate responsiveness to end users is anticipated and maintained.
- Every IT solution has disaster recovery addressed as part of the implementation plan.
- Hardware and operating systems operate in an environment where the software is only one version behind the latest released one.
- Commercially developed package software should be purchased whenever possible, rather than building specific software products just for the tax administration.

Appendix III.

SAMPLE INFORMATION TECHNOLOGY STRATEGIC PLAN TEMPLATE

Aims and objectives

- Describe the aims and objectives of the IT strategy.
- Describe how the IT strategy relates to the corporate strategies.

Scope

- Describe the scope of the IT Strategy—what it will cover and will not cover.

Governance and management arrangements

- Describe how the IT organization is internally structured and managed (including how IT operates within the wider organizational environment).
- Describe the governance framework and process for IT issues.

Organizational IT needs and dependencies

- Describe what the tax administration needs from its IT systems.
- Describe what is needed for the IT strategy to be successful.

Current and future states

- Describe the current state of IT in the tax administration—staff, hardware, software, policies, management and governance, and risks. (From here)
- Describe the desired future state of IT in the tax administration—staff, hardware, and software. (To here)

Business model

- Describe the business model used for IT (in-house, outsourced, or a combined approach).
- Explain why this option was chosen (e.g., due to availability, affordability, staff remuneration retention issues, etc.).

Resource requirements summary

- Describe:
 - Staffing (skills and numbers).
 - Budgets both (capital and expense).
 - Summary of key projects.
 - Timeframes (aligned to key reforms, capacity, and funding).

Internal capabilities and needs

- Describe existing internal capability.
- Describe capability needed in the new IT environment.

External dependencies which affect IT

- Describe external factors which will affect the IT implementation, e.g., overall government rules and strategies, country infrastructure, community and business IT capacity, etc.

Risk management approach

- Describe the risks which might affect successful implementation of the IT reforms.
- Describe the measures that will be taken to address the risks.

Appendix IV.

IT STRATEGY ANONYMIZED EXAMPLE I

1. TERMS AND ABBREVIATIONS

2 INTRODUCTION AND BACKGROUND

- 2.1 IT VISION, OBJECTIVES
- 2.2 CURRENT ORGANIZATIONAL STRUCTURE
- 2.3 IT GOVERNANCE
- 2.4 EXTERNAL DEPENDENCIES – (GOVERNMENT RULES AND STRATEGIES, LIMITATIONS)

3 CURRENT STATE OF AFFAIRS

- 3.1 GENERAL OUTLINE
- 3.2 CURRENT ORGANIZATIONAL STRUCTURE
- 3.3 BUSINESS PROCESSES
- 3.4 CURRENT IT SYSTEM

4 REQUIREMENTS FOR THE NEW SYSTEM

- 4.1 ENVISAGED FUTURE BUSINESS PROCESS STRUCTURE
 - 4.1.1 *Taxpayer Operations - Core Business*
 - 4.1.2 *Strategic Management Functions*
 - 4.1.3 *Organization Related Business Processes*
 - 4.1.4 *Administrative Support*
- 4.2 TAXES TO BE COMPUTERIZED
- 4.3 GENERAL REQUIREMENTS
 - 4.3.1 *Summary of General Requirements*
- 4.4 SYSTEM ARCHITECTURE AND DESIGN APPROACH
 - 4.4.1 *Summary of Requirements Related to the System Architecture and Design*
 - 4.4.2 *Analysis of Existing IT Components*
 - 4.4.3 *Integration Approach*
- 4.5 FUNCTIONAL MODEL
- 4.6 FUNCTIONAL REQUIREMENTS
 - 4.6.1 *Summary of Functional Requirements Related to the Taxpayer Registration*
 - 4.6.2 *Summary of Functional Requirements Related to the Assessment and Payments*
 - 4.6.3 *Summary of Functional Requirements Related to the Compliance Monitoring and Enforcement*
 - 4.6.4 *Summary of Functional Requirements Related to Collection and Debt Management*
 - 4.6.5 *Summary of Functional Requirements Related to Objections and Appeals*
 - 4.6.6 *Summary of Functional Requirements Related to Taxpayer Services*
 - 4.6.7 *Security and Data Privacy Requirements*
- 4.7 IT OPERATIONAL REQUIREMENTS
- 4.8 MISCELLANEOUS REQUIREMENTS

5 IMPLEMENTATION CONSIDERATIONS

- 5.1 OUTLINE
- 5.2 CAPABILITY

6 INDICATIVE DELIVERY PLAN AND PRELIMINARY SCHEDULE

- 6.1 DURATION
- 6.2 OVERVIEW

ITSP ANONYMIZED EXAMPLE II

EXECUTIVE SUMMARY

1 INTRODUCTION AND METHODOLOGY

2 THE EXISTING IT PORTFOLIO

3 THE FUTURE IT PORTFOLIO

5 THE “MAKE versus BUY” DECISION

- 5.1 Custom development (external or internal) solutions
- 5.2 ITAS (Integrated Tax Administration System) solutions
- 5.3 ITAS vs Custom Build Comparison

6 IT ORGANIZATION OF TAX ADMINISTRATION

- 6.1 Proposed Organizational Structure
- 6.2 Impact on Outsourcing
- 6.3 IT Training Needs
- 6.4 Change Management

7 IT INFRASTRUCTURE

- 7.1 Glossary
- 7.2 Introduction
- 7.3 Physical Server Hardware Infrastructure
- 7.4 Storage Solutions
 - 7.4.1 *System Support Solutions*
 - 7.4.2 *Backup and Recovery*
 - 7.4.3 *Archiving Data*
 - 7.4.4 *Disaster Recovery*
- 7.5 Network hardware requirements
- 7.6 Security and Audit

8 ANNEX: PROPOSAL FOR TAX ADMINISTRATION IT MANAGEMENT POLICY

- 8.1 Objective
- 8.2 Handling of Technology
- 8.3 Policy Use
- 8.4 Annual Policy Audit
- 8.5 Annual Process Audit
- 8.6 Compliance with The Policy
- 8.7 Deviations
- 8.8 Modernization Office
- 8.9 General Principles for Information Technology Management
- 8.10 Processes
 - 8.10.1 *Architecture Process (AP)*
 - 8.10.2 *Change Management (CM)*
 - 8.10.3 *Business Continuity/Disaster Recovery (BC/DR)*
 - 8.10.4 *Contracting and Outsourcing (CO)*
 - 8.10.5 *Use of the Internet and E-Mail (UOI)*
 - 8.10.6 *Problem Management (PM)*
 - 8.10.7 *Project Management (PM)*
 - 8.10.8 *Resource Management (RM)*
 - 8.10.9 *Software Management (SM)*

MORE DETAILED ITSP EXAMPLE III

EXECUTIVE SUMMARY

1 INTRODUCTION

2 IT STRATEGY 20XX-20XX

- 2.1 The IT Vision
- 2.2 Key Objectives of the 20XX IT Strategy
- 2.3 Principles
- 2.4 SWOT (Strengths Weaknesses Opportunities Threats) Analysis
- 2.5 Time Frame
- 2.6 Total Cost

3 CORPORATE PLATFORMS AND SYSTEMS ENVIRONMENT

4 INFORMATION ARCHITECTURE

- 4.1 Integration of Information Systems

5 APPLICATION ARCHITECTURE

- 5.1 Human Resources
- 5.2 Business Applications (Existing and/or ones to be developed)
- 5.3 Intranet and Internet Services

6 TECHNICAL ARCHITECTURE

- 6.1 Computer Hardware Platforms
- 6.2 Database Management Systems
- 6.3 Technical Infrastructure (LAN/WAN)
- 6.4 Data Communication Infrastructure and Services
- 6.5 Information and Communication Systems Security
- 6.6 Content and Software Management
- 6.7 Third Party Services
- 6.8 Establishment of a ICT Unit
- 6.9 End User Computing
- 6.10 Capacity Management

7 LONG TERM STRATEGIES

8 REVENUE SYSTEMS

- 8.1 Taxpayer Identification Number (TIN) System
- 8.2 Domestic Revenue
- 8.3 Customs Administration System Link
- 8.4 The VAT Information Processing System

9 SUPPORT SYSTEMS

- 9.1 Internet, Intranet, Corporate Portal and E-mail Services
- 9.2 Data Warehouse
- 9.3 Desktop Office Productivity Systems

10 DATA COMMUNICATIONS

- 10.1 Status of Communication Infrastructure
- 10.2 Planned Telecommunication Infrastructure
- 10.3 Data Communication Network

11 BUSINESS CONTINUITY AND SUPPORT

- 11.1 Strengthening the IT Unit
- 11.2 Disaster Recovery System
- 11.3 Technical and User Training
- 11.4 Help Desk
- 11.5 IT Security Infrastructure
- 11.6 Network Infrastructure Management System
- 11.7 Case Inventory Management Information System
- 11.8 Establishment of an IT Center
- 11.9 Maintenance of IT Systemt

12 ORGANIZATION STRUCTURE AND STAFFING

12.1 Organization Structure

12.2 Staffing Levels

13 IMPLEMENTATION

13.1 Achieving the IT Vision

13.2 Methodology for Executing the Plan

13.3 Prioritization

14 IMPLEMENTATION TIME FRAME

15 COSTING

16 REVIEW OF THE IT STRATEGY

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