

# Republic of the Philippines Department of Social Welfare and Development

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Memorandum Circular No. 4
Series of 2005

#### SUBJECT: DSWD INFORMATION SYSTEM STRATEGIC FRAMEWORK

#### I. RATIONALÉ

Beginning the new millennia, the Philippine government pursued the use of information and communication technology (ICT) as a major catalyst towards national development: spurring economic growth and ensuring transparent, efficient, effective governance.

The Electronic Commerce Act provided the policy framework by which the new technology shall be leveraged to attain the declared goal of national development. The adoption of the Government Information Systems Plan (GISP) provided the strategic framework from which all government agencies and instrumentalities shall formulate its strategic Information Systems Plan (ISP). Further, the Information Technology and Electronic Commerce Council (ITECC), now renamed as the Commission on Information and Communication Technology (CICT), was created to ensure that efforts and resources allocated towards ICT are within the ITECC Information Systems Strategic Framework.

Moreover, to ensure that the government efforts in developing and strengthening its computing and telecommunication technology are aligned with international standards, it has adopted the United Nations- American Society of Public Administrators (UN-ASPA) standards in measuring its own strategic accomplishments.

In recognition of and in support to these parameters, the Department of Social Welfare and Development (DSWD) shall continually and consistently align its Information Systems (IS) development efforts with the aim of actively and aggressively contributing to its realization. Thus, the framework for crafting the DSWD's Strategic Information Systems Plan is hereby provided.

#### II. LEGAL FRAMEWORK

- 1. Republic Act No. 8792 (Electronic Commerce Act) An Act Providing for the Recognition and Use of Electronic Commercial and Non-Commercial Transactions and Documents, Penalties for Unlawful Use Thereof and for Other Purposes.
- 2. <u>Republic Act No. 8293 (Intellectual Property Code)</u> An Act Prescribing the Intellectual Property Code and Establishing the Intellectual Property Office, Providing for its Powers and Functions, and for Other Purposes.
- 3. <u>Malacañang Memorandum Circular No. 115</u> Directing All Departments and Agencies and Instrumentalities to Legalize Their Computer Software
- 4. <u>Executive Order 265</u> Approving and Adopting the Government Information Systems Plan (GISP) as Framework and Guide for all Computerization Efforts in Government.
- 5. <u>Administrative Order 332 (RPWeb)</u> Directing all government agencies and instrumentalities including local government units to undertake electronic interconnection through the Internet to be known as the RPWEB.
- National Computer Center (NCC) Memorandum Circular 2003-01 Guidelines on Compliance to the E-Commerce Act (R.A. 8792) and Stage Two and Three of the UN-ASPA Five Stages of E-Government.
- NCC Memorandum Circular 2002-01 Guidelines on Creation of the Agency's Official Website and Compliance to E-Commerce Law and Stage One of the UN-ASPA Stages of E-Government.
- 8. <u>NCC Memorandum Circular 2000-01</u> Prescribing Guidelines for Planning and Managing the Agency's I.T. Infrastructure for Connection to Government Information Infrastructure Through RP-Web.
- 9. <u>Commission on Audit Circular No. 97-003</u> Accounting Guidelines on the Acquisition, Maintenance and Disposition of Information Technology Resources.
- 10. Executive Order No. 15 (Series of 1998) Redirecting the Functions and Operations of the Department of Social Welfare and Development (DSWD).
- 11. Executive Order No. 221 (Series of 2003) Amending Executive Order No. 15 s. 1998, Entitled "Redirecting the Functions and Operations of the Department of Social Welfare and Development".
- 12. <u>DSWD Memorandum Order No. 26 (Series of 2004)</u> Information Technology (IT) Usage and Network Security Policy.

- 13. <u>DSWD Memorandum Order No. 30 (Series of 2003)</u> Constituting the Management Information System Service of DSWD.
- 14. <u>DSWD Memorandum Circular No. 22 (Series of 2003)</u> Implementing Rule on the Rationalization, Acquisition, Use and Maintenance of Information and Communication Technology (ICT) Devices.
- 15. <u>DSWD Administrative Order 192 (Series of 2002)</u> Guidance on the Proper Use and Maintenance of Equipment.
- 16. <u>DSWD Department Order No. 6 (Series of 1998)</u> Management Information System Guidelines.
- 17. <u>DSWD Department Order No. 3 (Series of 1997)</u> Computer Software Standardization and Legalization Guidelines.

#### III. PHILOSOPHICAL FRAMEWORK

The Department's Vision-

"A society where the poor, vulnerable and disadvantaged individuals, families and communities are empowered for an improved quality of life."

The Department's Mission-

"To provide social protection and promote the rights welfare of the poor, vulnerable and the disadvantaged individual, family and community to contribute to poverty alleviation and empowerment through social welfare and development policies, programs, projects and services implemented with or through LGUs, NGOs, POs, GOs and other members of civil society."

Moreover, it is the Department's overarching aspiration to champion the cause of the disadvantaged and to lead the social welfare and development sector.

These are the strategic foci that the Department has defined for itself.

#### IV. STRATEGIC INFORMATION SYSTEMS PLANNING

#### A. Brief Description.

An Information Systems (IS) plan is a roadmap indicating the direction of systems development in an organization with the primary aim of maximizing its competitive advantage. The IS Plan provides the rationale, the current realities, the management strategies, the implementation plan and the corresponding

investment requirement and operational budget. Specifically, it shows how an organization's goals can be supported by information and communications technology (ICT), and the key decisions that management must make in terms of ICT investments, data administration, training requirements, human resource recruitment, business processes, authority, and organizational structure and the required organizational changes that may be put in place.

Essentially, an IS has three strategic roles in an organization: improving operational efficiency (cutting down costs while improving quality and delivery of goods and services); promoting innovation within the organization (development of new business processes, functional relationships, and goods and services); and, leveraging ICT resources (investments to meet strategic short- to long-term bottom lines).

Therefore, **Strategic Information Systems Planning** (sometimes called "enterprise analysis"), is the formulation of policies, objectives and methods for delivering and allocating IS resources that will improve performance & competitive position. It includes "stage analysis" (analysis of IS needs of an organization based on its growth cycle typical of organizations pursuing IS development), an analysis of a firm's "application portfolio" (IS investment strategy, business functions supported, and the resources allocated), and "environmental analysis" (external business and technology environments and the internal organizational environment, and of the capabilities of the organization's hardware, software & people-ware).

In the Philippine government context, the Information Systems Strategic Plan (ISSP) is the broad strategic declaration of its initiative to rationalize and leverage the application of ICT resources to attain its overarching goal of turning the country into a major ICT hub in the Southeast Asian region. The Department's ISSP is part of several other similar plans of government agencies and instrumentalities which forms the government-to-government (G2G), government-to-citizens (G2C), and government-to-business (G2B) strategic relationship. (Please refer to Annex "A").

#### B. DSWD Information Framework

**Information Theory** (also called "mathematical theory of communication") describes any procedure by which a person may affect the mind of another person. This is the foundation on which the application of computers in human interactions is based. This application is known as Information Systems although the simplification had reduced it to mean "the gizmos and the gadgets", which we refer to as the information and communication technology (ICT), that are ubiquitously identified and associated with it. However, these gizmos and gadgets, or ICT, are **tools** or **assets** that serve as the means by which we, humans, can more efficiently and effectively communicate with one another, or

shall we say, exchange information. Hence, the single most important resource in an IS is the information that is being exchanged among persons or entities. It is worthy to note however that information is different from data: the latter are facts, the former are based on these facts, or on the processed facts.

The DSWD Information Framework (please refer to Annex "B"), illustrates the various data and information that flows and is being exchanged internally within the Department, and externally to the Department's various publics (please refer further to Annex "C"). The purpose of the framework is to identify the data- and information-relationships which is an essential component when developing application systems (or software), as well as in deciding the infrastructure and the pertinent ICT resources that may be required to put it in place.

#### C. Methodology

The DSWD Information Systems Strategic Plan (DISSP) is anchored on its vision and mission statements: hence, the strategic focus must proceed from the overriding concern of providing ICT-enabled access to its products and services. This means working towards ensuring a 24x7, accessible, efficient, effective, responsive and timely product/service delivery, and a means for continuous innovative development of SWD programs, projects and services. Supplemental efforts towards enhancing operational and administrative support is a recognized necessity and will likewise be pursued.

In developing the DISSP, each office/bureau/service/unit (OBSUs) must work independently initially, and then interdependently with one another. From a resource management perspective, prioritization of projects must necessarily be agreed upon by everyone.

Translating the Information and Conceptual Framework discussed above, it is important to stress that in using ICT resources, this should lead to **quick** and **easy** communication and collaboration among individuals and workgroups using electronics (medium) instead of paper, e.g. E-mail, voice mail, groupware, e-meeting, etc. As a guide for planning, consider the following:

- 1) **Effective use of ICT is not merely** computerizing traditional business processes but more so for decision support & innovative processes and products to gain competitive advantages. This is translated as meaning that the use of ICT will more likely change existing organizational relationships as well as business processes and operational procedures;
- 2) Efficient use of ICT is not attainable if the users and/or the system is providing poor response time, has frequent downtimes, incompatible systems, unintegrated data and applications development backlogs. This is translated into ensuring the existence of a ICT-literate technical staff who

shall man the systems terminal and work online to ensure "real-time" response to the public seeking assistance or making queries, power sources and other network requirements, standardization of ICT resources and usage, and application systems development;

Economical application of ICT happens when investments viz-a-viz 3) relate well. This is translated into outcomes adaptive/appropriate technology, judicious use of financial and logistical resources based on functionality, and assistive of performance management evaluations.

It should be noted that a strategic information system must accommodate the people, tasks, technology, culture and structure components and relationships within the Department as a whole, and each of the OBSUs in particular.

#### D. Components

Every component of an information system requires financial resources the amount of which is directly proportional to its complexity and functionality. Other than the initial cost of development, there are resources needed for deployment as well as maintenance.

#### 1) Applications.

The DISSP contains the various information/application systems (software) that has been identified for development. Development, in this sense, refers to developing the system from scratch to securing copies of it either from other government agencies or from commercial establishments.

Nonetheless, it is essential that each of the OBSU must carefully identify the various databases (the pool of data) that will require the development of applications systems and, if there are several in an OBSU, the interrelationship among these databases. Accurately determining or identifying the appropriate application system can only be assured if the data and its database management needs had been explicitly identified.

#### 2) Hardware.

The DISSP contains the various ICT hardwares (i.e. computers, computer peripherals and all telecommunications equipment) necessary to run the application systems. It will also include the acquisition of the necessary systems drivers (the internal operating software of these machines), the licenses of these systems (if needed), and the possible recurring costs due these licenses.

#### 3) Network Infrastructure

The heart of any information system is the ICT infrastructure through which all data and information will traverse to and from. Hardware can exist alone and can still be used. Sharing of information can still be achieved although not as fast and efficient. But the moment it is desired that data and information flow smoothly, when these data are processed alone and in relation with other data, when transmitting these should be fast, reliable and secured, then the imperativeness of carefully studying and then investing in the infrastructure becomes obvious.

Such infrastructure as local area network (LAN), wide area network (WAN), and Internet connectivity make up the ICT infrastructure. Telecommunications facility and its maintenance is a major part of this infrastructure and hence, must be integrated into the total information systems design and architecture.

#### 4) People-ware

Strategic information systems results in changes within the organization, and in most instances, it is the people who will be directly affected, albeit not necessarily adversely. New business processes and/or procedures, new functional relationships and new ways of generating reports require a redefinition of manpower deployment and KAS requirements. Hence, planning for the adoption of information systems requires planning for how human resources will be affected and adjusted.

#### 5) Budget Requirements

All components of the DISSP have cost considerations. The most often miscalculations committed in the installation of information systems is the cost of building up the databases when most data from previous periods are inputted into the system. Likewise, frequently omitted are those recurring costs for software licenses, internet connections, and continuous capacity building for the staff. The cost component is a significant item in the DISSP because only with the identification of such and the comparison with the desired outcome can the DSWD anticipate whether it is undertaking sound resource investments.

#### V. INFORMATION RESOURCE MANAGEMENT

All technology that processes, stores and delivers data and information must be managed as integrated systems of organizational resources. The concept of developing and managing information systems that aims to significantly enhance the leadership role of the Department in SWD service delivery, development of social technology and SWD standards, building capabilities of SWD service

provider, strengthening/building strategic alliances and networks and promoting innovations require a sound information resource management.

This information resource management must focus on the following critical management concerns:

- A. **Strategic Management** All ICT resources indicated in the DISSP must be managed to contribute to DSWD's strategic objectives and competitive advantages, and not simply aim for operational efficiency or decision support;
- B. **Resource Management** All data and information, hardware and software, telecommunications networks, and information systems personnel are vital organizational resources;
- C. Functional Management- All ICT and information systems can be managed by functional organizational structures and managerial techniques commonly used through-out other business units;
- D. **Technology Management** All technologies that process, store, and communicate data and information through out the organization should be managed as integrated systems of organizational resources;
- E. **Distributed Management** Managing the use of ICT and information systems resources in every OBSUs or workgroups is a key responsibility of all DSWD officials and personnel regardless of their function or level.

Only when there is **extensive** and **meaningful involvement** of managers and end-users in the planning, development and operation of the DISSP can it hope to succeed.

#### VI. ORGANIZATIONAL STRUCTURE

The major challenge of developing an organization's Information Systems through ICT is in having one that promotes strategic improvements in how an organization support its people, tasks, technology, culture and structure. Basic to the DISSP is the multi-stakeholder process of crafting the plan and clarifying the roles of every one. Moreover, formulating the policies and operational guidelines to ensure the translation of the Plan into meaningful activities require the institutionalization of mechanisms, processes and structures.

The creation of the Management Information Systems Service (MISS) in the Department's Re-engineering and Streamlining Plan (RSP) is a step towards this direction. However, unlike the other support systems within the agency, the MISS is a client-sensitive, time-sensitive, and cost-sensitive organizational unit that requires as a business model a sustained multi-stakeholder relationship with the rest of the agency. Hence, the necessity for an inter-OBSU body that will

discuss, dialogue and endorse IS and ICT policies to top management. Without re-inventing the wheel, the Management Committee (ManCom) should be tasked to function as the Department's MIS Steering Committee and make MIS concerns part of its regular agenda.

At the operational level, a similar inter-OBSU structure needs to be established and institutionalized. The establishment of an ICT Technical Working Group composed of all division chiefs-level and senior technical staff from each of all the OBSU's is imperative. This should be replicable at the Field Office level.

#### VII. EFFECTIVITY

This Memorandum Circular shall take effect immediately.

Issued this 3/6 day of February 2005.

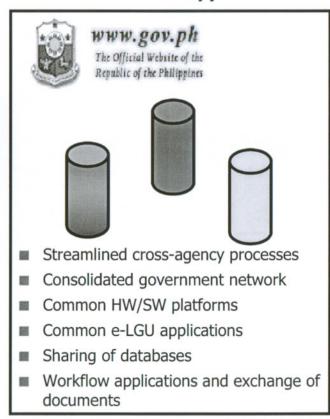
CORAZON JULIANO-SOLIMAN

Secretary 5

Department of Social Welfare and Development

# Unleashing the ICT Services Potential: The ITECC Strategic Roadmap

### **Govt-to-Govt Applications**



Planned automation always forces the streamlining of existing manual processes.

# **Govt-to-Business Applications**



# Govt-to-Citizen Applications



KEY RESULT AREA	STRATEGIC	TACTICAL	MANAGEMENT CONTROL	DATA MANAGEMENT
SOCIAL DEVELOP	MENT FUND MANAGEMENT			
Fund Accessing	Long-Term Resource     Generation Plan     SWD Plan     DSWD Priority Thrusts &     Directions     Indicative Resource     Generation Agenda     Medium Term Public     Investment Plan	AHON Bayan Programme     Resource Agenda     SEA Revolving & Settlement     Fund (SEA-RSF)     Externally Generated     Resources     Donors Forum     Continuous Development of     New Resource     Generation Technology	Status Monitoring Of Accessed Project (Target Vs Actual)     Inventory of Projects	Resource Generated/ Accessed     Donors/ Partners/ Sources     Information     Accessed (Funded) Projects
Fund Utilization and Recovery	SWD Plan	Implementation Plan	Status Of Fund Utilization	Fund Disbursements
<b>OPERATIONAL SU</b> Budget	JPPORT: Finance  • DSWD Work & Financial Plan • Capital Structure	Agency Budget Matrix     Special Allotment release	Status of Allotments, Obligations & Balances	* Allotment And Obligations Slip
		Order • Working Financial Plan	Registry of Allotments & Obligations     Capital OutlayMaintenance     & Other Operating     Expenses     Personal Services     Financial Expenses	

KEY RESULT AREA	STRATEGIC	TACTICAL	MANAGEMENT CONTROL	DATA MANAGEMENT
Cash	◆ Financial Plan	Projected Cash Flow     Fund Sourcing	Cash Flow Monitoring:	Cash Voucher Data     Payroll Data     Check Issuance & Payment     Cash Receipts & Deposits
Accounting	Financial Plan     Capital Structure	Financial Statements	General Accounting     Fixed Asset Accounting     Financial Analysis     Variance Analysis	Chart Of Accounts     Journal Entry Voucher     Billing     Collections/ Deposits/     Remittances     Payments (Payroll, Actual Expenses)     Payables     Other Disbursements fixed Assets     Acquisition Costs     Depreciation Rates     Revaluation Factor

KEY RESULT AREA	STRATEGIC	TACTICAL	MANAGEMENT CONTROL	DATA MANAGEMENT
Personnel	HR Plan/ Forecast     Organizational Plan     Compensation & Benefits     Plan	Restructuring & Stream- Lining Plan     Incentives & Benefits     Programs     Performance Contract	Org. Structure & Staffing Grade & Salary Structure Absence Control Position Vacancies Performance Appraisal Overtime Limit	Employee Profile     Skills & Training Data     Service Records     Applicants / Qualified Candidates     Vacancies     Vacation/Sick Leave Credits     Leave Records     Tardiness/Overtime     Payroll     Performance Rating
Career Development	Organizational Plan     Career Dev't Plan	* Employee Dev. Plan	Employee Dev. Profile (Plan Vs. Actual)	Training & Scholarship Program, Requirements & Other Information     Participants/ Grantees
OPERATIONAL SU	JPPORT: Procurement & Asse	ts Management		
Requisition & Procurement	Long-Term Procurement     Plan     ICT Investment Plan	Annual Procurement Plan	* PR/PO Monitoring	Purchase Requisition     Purchase Order     Accredited Suppliers Information     Bidding Documents     Bid Proposals
Warehousing	Long-Term Procurement     Plan	Minimum Stock Level	Materials Inspection     Inventory Control     Physical Inventory	Delivery/Receipts     Issuance     Supply Inventory Data     Supply Inventory Levels
Property Management	Long-Term Procurement     Plan	Acquisition & Disposal Plan	Property Control     Physical Inventory     Inspection	Memorandum Receipt     Transfer     Disposal     Maintenance Schedule

KEY RESULT AREA	STRATEGIC	TACTICAL	MANAGEMENT CONTROL	DATA MANAGEMENT
OPERATIONAL SU	JPPORT: Other Management S	Support		
Records Management	Records Policies     Index Classification Guide	Document Retention &     Disposal Guidelines     Standard Operating     Procedures	Standard Operating Procedures (Document Receipt, Classification & Indexing)  Microfilming Standards Record Holding Control  Document Tracking	Index & Location     Documents & Codes     Disposable Records     Document Flow
Building Administration	Building Maintenance Plan     Building Code	Work & Financial plan     Repair & Maintenance Plan     Building Safety and     Security Plan	Contracts Management     Implementation Reports	Schedules     Expenditures     Documents & Reports
Vehicles Management	Acquisition, Repair &     Maintenance Policies     Usage policies	Repair & Maintenance     Program	Feedback Reports     Accomplishment Report     Status Of Vehicle	Repair History     Vehicle Registration     Maintenance Schedule     Fuel Consumptions     Vehicle/Driver Assignments
Legal Services	Legislations     Decrees & Directives	Policies, Rules &     Regulations     Laws	Contract Preparation & Review     Litigation	Legal Documentation     Contracts     Court Cases, Decisions, Lawyers     Pleadings, Memoranda, Evidence

Foreign Governments NGA's G2G CLG Client G2C 973 Business SUBZIII.S PHOM

International Organization

#### Annex D

#### **Definition of Terms**

**E-Commerce** - This refers to a wide range of on-line business activities involving products and services. It also pertains to any form of business transaction in which the parties interact electronically rather than by physical exchange or direct physical contact.

**E-Government** — the use of Information and Communications Technologies (ICT) to improve the efficiency, effectiveness, transparency, and accountability of government.

**Frontline ICT Applications for e-Government –** act as interface between the Government and Citizens or Businesses. Frontline ICT applications interact or transact with the Citizen via electronic media.

Frontline ICT applications may also be categorized as either Government-to-Citizen (G2C), or Government-to-Business (G2B).

**G2C** – G2C services aim to provide one-stop on-line access to information and services to individuals. Citizens should be able to find what they need quickly and easily, and access information in minutes or seconds, instead of days or hours.

**G2B** – G2B services aim to reduce burdens on business by providing one-stop access to information to facilitate business development. It also eliminates the need to report the same data multiple times to multiple agencies and streamline reporting requirements by creating more efficient ways for business to interact with government.

**Information Technology (IT)** - the broad subject concerned with all aspects of managing and processing information, especially within a large organization or company. Because computers are central to information management, computer departments within companies and universities are often called *IT departments*. Some companies refer to this department as *IS (Information Services)* or *MIS (Management Information Services)*.

**Internal ICT Applications for e-Government** — are solutions for streamlining inhouse processes. Processes such as data encoding, file retrieval, document processing, data transfer, and other administrative tasks that exist in a government agency.

Internal ICT applications for e-Government may further be categorized as Government-to-Employee (G2E), or Government-to-Government (G2G).

**G2E** – G2E services encompasses G2C services, as well as those specialized services that cover only government employees, such as the provision of human

resource training and development that improve efficiency and increase employee productivity. These services may also include personnel and accounts-related services within government departments.

**G2G** – G2G services aims to enable all levels of government to more easily work together to better serve the needs of citizens and businesses.

**Strategic** – Implies that the focus is on improving and sustaining the performance of the organic, and describes what management sees for the distant future. Analysis is on organization performance objectives, critical success factors, problems, opportunities and threats, with information systems seen as an enabling mechanism, not the primary focus.

**Tactical** - Concerned with the middle level of planning and delivery. Tactical concerns are around how to achieve an objective (as developed in the strategy) and providing a framework for the operational delivery.

	Comments on the Draft ISSP Framework	
Chapter/Section	Remarks	
III	Replace "and its Mission is" to "The Department's Vision -"	
IV - D	thorough definition of the proponent and/or beneficiaries' of our programs as our primary data requirement. This way the definition of data would be more focused.	Users of the data generated by the applications are generally the concerned OBSU's themselves. Thus it is stated that the OBSU'S must carefully identify the data needs of the application.
Annex B	Define Strategic and Tactical  Add System in title to read as "DSWD Information System Framework"	Definition shall be added in Annex D  This framework illustrates the flow of data and information within the department. It is not a framework of the department's information systems which are technically ICT based hence the title should remain as such.
KRA of Standards Development & Complian Monitoring	Ce Under Strategic - the sentence should read "SWD Standards Development and Compliance Monitoring Plan	
	Under Tactical - rephrase 1st sentence to "Guidelines and Policies in the Implementation of SWD Standards"	Edited
	Under Data Management - to also include information on Duty-free Endorsement, Subsidized Power Rate Program (SPRP) Endorsement and Accreditation of Social Workers and Marriage Counselors	
Tactical column for Social Marketing	Add Social Marketing	Added
Annex C	For better appreciation and understanding of the schematic diagram of the DSWD Information Network,	Annex C is interrelated with Annex A which describes the interaction of DSWD with government, business and citizens. These interactions are also defined in Annex D.
Others	textual that one can easily be lost in the volume of information being presented. It should still be	We have done our level-best to present the document in a layperson's view but we cannot completely paraphrase it using non-technical terms as we do not want to create confusion regarding the theories and concepts presented. However, we shall further enhance the Definition of Terms to provide a clearer understanding of all technical terms used.

It is also beneficial to see the specific expectation	ns Annex B (Information Framework) specifies the
from the OBSUs in relation to this framewo	rk, expected outputs from the OBSU's. FO's shall have
especially the field offices. What will be the	FO significant participation because they are thought to
participation in this?	be the forefront in data generation and can provide
	needed feedback on existing Information Systems
	since they have firsthand experience in DSWD's
	service provision
It requires major editing.	We shall consider the corrections you have indicated
	on the document itself.