

April 27, 2015

Memorandum Circular No. 2015-1003
Series of 2015

FOR : ALL HEADS OF THE NATIONAL GOVERNMENT DEPARTMENTS, AGENCIES, BUREAUS, GOVERNMENT-OWNED AND -CONTROLLED CORPORATIONS, GOVERNMENT FINANCIAL INSTITUTIONS, STATE UNIVERSITIES AND COLLEGES, LOCAL GOVERNMENT UNITS, CONSTITUTIONAL BODIES, HOUSE OF REPRESENTATIVES, THE SENATE, AND THE JUDICIARY

SUBJECT : APPROVAL OF THE PHILIPPINE ELECTRONIC GOVERNMENT INTEROPERABILITY FRAMEWORK (PEGIF) PART 2, OTHERWISE KNOWN AS THE INFORMATION INTEROPERABILITY FRAMEWORK (IIF), FOR IMPLEMENTATION BY GOVERNMENT AGENCIES

Section 1. Approval and Adoption of the PeGIF Part 2

Pursuant to Section 23 of the General Provisions of the General Appropriations Act (GAA) for Fiscal Year 2015, on the "Interoperability in Government Information and Communications Technology Systems," "Departments, bureaus, and offices of the national government, including constitutional offices enjoying fiscal autonomy, SUCs, and GOCCs shall adopt a policy of interoperability as to their respective information and communications technology (ICT) systems, programs, activities, data, projects, networks, hardware, software, and any other ICT-related items, in relation to those of other agencies. Interoperability means the ability to exchange and reuse government data and information in a uniform and efficient manner across multiple ICT systems and across agencies."

Furthermore, the provision states that, "Whenever applicable, the foregoing agencies are enjoined to use ICT products and services developed by ICT Office for interoperability purposes under the Government-wide Medium-term Information and Communications Technology Harmonization Initiative."

"Implementation of this provision shall be subject to the Philippine Electronic Government Interoperability Framework (PeGIF) and such other guidelines to be issued by the ICT Office."

As such and following the valid issuance and adoption of PeGIF Part 1 on the Technical Interoperability Framework, the attached PeGIF Part 2, otherwise known as the Information Interoperability Framework (IIF), is hereby approved and adopted for implementation by government agencies to enable the Philippine government to share and reuse information in a uniform and effective manner among its various agencies and instrumentalities as well as between the government and its stakeholders.

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SECTION 2. Governance of the PeGIF

The Information and Communications Technology Office (ICT Office) of the Department of Science and Technology (DOST), through the Deputy Executive Director for eGovernment, shall be responsible for the overall implementation of the PeGIF.

The National ICT Governance Service of the ICT Office, or its successor unit, shall assist the Deputy Executive Director for eGovernment in the PeGIF implementation. The Deputy Executive Director for eGovernment shall also be supported by a multi-stakeholder PeGIF Advisory Committee.

The ICT Office shall develop tools to monitor the PeGIF implementation. The ICT Office, with the assistance of technical experts, shall issue an annual Evaluation Report of the PeGIF implementation. This report shall serve as input to the updating of the PeGIF.

SECTION 3. DIRECTIVE TO THE ICT OFFICE RECORDS OFFICE

The ICT Office records officer is hereby ordered to furnish three (3) certified true copies of this Memorandum Circular to the University of the Philippines Law Center.

SECTION 4. Effectivity

This Memorandum Circular shall take effect immediately.

Recommending Approval:

DENIS F. VILLORENTE
Deputy Executive Director for eGovernment

Approved By:

USEC. LOUIS NAPOLEON C. CASAMBRE
Executive Director



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Information Interoperability Framework PeGIF Part 2

This Information Interoperability Framework is meant to enable the Philippines government to share and reuse information in a uniform and effective manner among its various agencies and instrumentalities and between government and its stakeholders. It is the second part of the Philippine eGovernment Interoperability Framework (PeGIF).

The PeGIF defines the common language, principles, and standards that national government agencies should use in order to facilitate the exchange of data and of information for good governance. PeGIF Part 1 provided the overall principles of the PeGIF and defined the key standards to enable technical interoperability. This PeGIF Part 2 is on information interoperability.

II. DEFINITION OF TERMS

Dictionary – A book or electronic resource that lists the words of a language (typically in alphabetical order) and gives their meaning, or gives the equivalent words in a different language.

Information – Data that has been given value through analysis, interpretation, or compilation in any meaningful form.

Information Assets – A definable piece of information, stored in any manner, which is recognized as “valuable” to the organization, not easily replaceable without cost, skill, time, and resources, and form part of the organization’s corporate identity. (ISO 27001)

Information Interoperability – The ability to transfer and use information in a uniform and effective manner across multiple organizations and information technology systems. This aspect of interoperability ensures that organizations share a common understanding and meaning for information that is shared across different IT systems.

Information Interoperability Assets – Includes 1) dictionaries, 2) thesauruses, 3) nomenclatures, 4) taxonomies, 5) mapping rules, 6) ontologies, and 7) service descriptions.

Metadata - Refers to data about data. It includes information describing aspects of actual data items, such as name, format, content, and the control of, or over, data.

Ontology – A formal, explicit specification of a shared [conceptualization](#). It provides a common vocabulary to denote the types, properties and interrelationships of concepts in a [domain](#).

Schema – The structure of database that defines the objects in the database. It can contain formulas representing integrity constraints specifically for an application and the constraints specifically for a type of database, all expressed in the same database language. (Wikipedia)



Taxonomy – They are things of interest arranged in a hierarchical structure, typically in a supertype or subtype relationship.

Thesaurus – Book or electronic resource that lists words in groups of synonyms and related concepts.

Open Access Records – Public records in existence for at least 30 years or have been transferred under the custody of the National Archives of the Philippines, and are classified as open access records and to which public access have not been prohibited.

Restricted Access Records – Records that have been restricted because of a legal impediment or public records issued a standard requiring the withholding of public access.

III. OBJECTIVES OF THE IIF

The IIF aims to contribute to increasing efficiency, improving decision-making, and reducing costs in government. Specifically, the IIF seeks to:

- Enable collaboration across public service through the sharing of information
- Ensure information flows easily to support decision-making and the design of public services
- Integrate information from different sources
- Protect privacy, confidentiality, and intellectual property of citizens

IV. UNDERLYING PRINCIPLES OF THE IIF

This document is aligned with the principles of openness, collaboration, preference for open standards, promoting trust and security, inclusiveness, and alignment to existing global standards articulated in PeGIF Part 1.

Additionally, the following principles are adopted:

Information is a strategic asset. Information leads to good policies and help make responsive, reliable and efficient public services. Conversely, poor management of information can also lead to lack of transparency, accountability and legitimacy.

Government is a steward of public sector information assets. The real owners of information are the providers of information – citizens, businesses and civil society organizations. The government's role is to ensure its safe keeping and appropriate use. In the context of information, stewardship means data-quality management, data security, auditable compliance with privacy and disclosure guidelines, information life-cycle management (ILM), and business-continuity planning and disaster recovery.

Effective collaboration processes among stakeholders. The focus of Information Interoperability is on the process, not on technological questions or standards. An effective

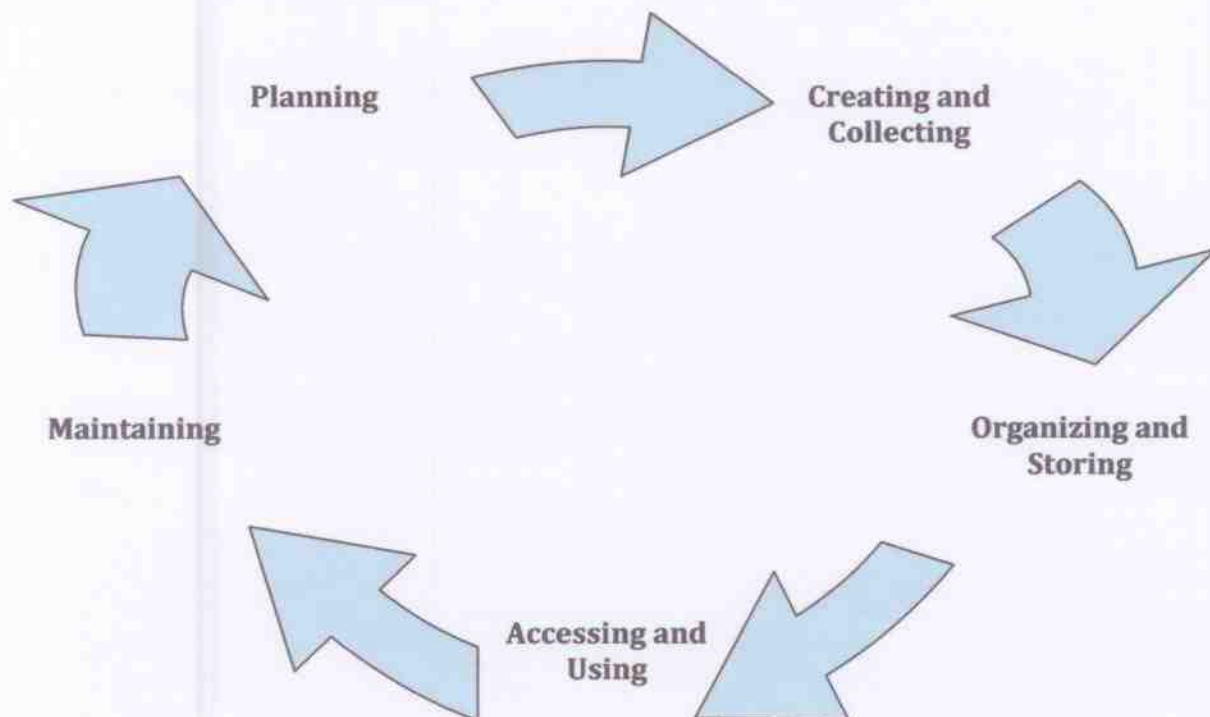
process means stakeholders engagement in the transparent, open and regular updating of information interoperability assets and tools.

V. Managing Information

Managing information refers to ensuring confidentiality and proper disclosure of information, ensuring integrity of information shared by the government, and ensuring availability of information when the need arises.

The government adopts the information life-cycle approach as part of its information management protocols.

This approach is composed of the following five stages: 1) planning, 2) creating and collecting, 3) organizing and storing, 4) accessing and using, and 5) maintaining.



1) Planning. Planning includes the identification of the information requirements relevant to any work activity.

2) Creating and collecting. Information is created, collected, captured or accessed in a variety of ways from a variety of sources in the service of public need. Prior to creating new information holdings, agencies should undertake a review to determine if the information required can be sourced from an existing collection.

3) Organizing and storing. Once created or collected, information should be organized and stored to enable consistent treatment and to enable easy location, access, or retrieval to support business processes. Migration of data to digital format should be consistent with PeGIF standards and other government standards. There should also be a metadata for these databases.

4) Accessing and using. Information may be accessed and used in a variety of ways. These may involve using information in its original state, manipulating it in some way, including integrating information from a number of sources, and reusing information. Conditions relating to access and use should ensure that information use is appropriate, carried out responsibly and is consistent with the source. Also, access should only be granted to those who have an appropriate business requirement for the information, taking into account legal, policy and administrative obligations.

5) Maintaining. The information lifecycle includes the effective maintenance of information, and in some circumstances, its disposal (consistent with existing rules). With this in mind, agencies should:

- work with users when considering terminating, disposing of, or making content changes to collections; and
- conduct audits and reviews of security, quality, accessibility and compliance with access and use conditions.

VI. Foundations of Interoperability

The following information management activities provide the foundation for information interoperability and will serve to support a culture of reusing existing information within government.

1. Conduct an inventory of existing information assets.

In order to identify an information asset, asking the following questions can be helpful:

- What is the value of the asset to the organization?
- Are there legal or financial repercussions if the asset cannot be produced upon request?
- Is there a risk associated with the information?

Answering these questions will allow the classifying of these information assets.

2. Generate information to support decision making.

Accurate, timely and relevant information should be available to share with others who have an appropriate or legitimate "business" requirement. This principle is based on the need to continually work toward optimized agency and whole-of-government service delivery and organizational capability, supported by evidence-based decisions.

3. Collect quality information.



The collection of information should aim to be accurate, relevant, timely, reliable and cost-effective. Duplication and rework for staff should be minimized.

4. Standardize information management practices.

Information management practices should be standardized across government to share and improve processes for accessing information. Information should be managed according to lifecycle management protocols and be transferable across organizations, subject to the requirements of privacy, confidentiality, intellectual property and associated security standards.

Government records in existence for 30 years should be archived. The controlling government office categorizes these archived documents as Open Access or Restricted Access.

5. Reuse information from single authoritative source.

Information should be collected in a consistent manner and represent a single authoritative government perspective. The principle of reuse, where information is created once and is available to be used for different purposes with confidence, is fundamental.

6. Promote trust and confidence, rights and responsibilities.

The ethical use of information is paramount. Information management practices should be transparent, respect rights and enforce responsibilities. Access to and use of information should promote trust and confidence through adherence to privacy, confidentiality, and intellectual property and security requirements.

7. Achieve a net social benefit.

Information is collected, collated, used and reused, managed and protected by government to serve the public good.

VII. ACHIEVING INFORMATION INTEROPERABILITY

Information interoperability is achieved reliably through the use of controlled terminologies, and controlled mapping-tables and mapping-rules for any transformation.

The exchange of information will also be realized through the following:

1. Understanding the policy and legal framework governing the exchange of information

Agencies need to fully understand the legal, policy and administrative requirements and restrictions in their environment as a first step in ICT enabled information sharing activities. Without a good understanding of legal and policy requirements, agencies are likely to adopt a risk-averse approach and avoid information sharing.

2. Forming partnerships that work in a spirit of collaboration and enhanced public service

