

Ghana Government eGovernment Interoperability Framework (eGIF)

Monitoring & Evaluation Report

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1. Introduction

Monitoring and evaluation (M&E) of Government projects are increasingly recognised as vital management functions. Policy-makers and project managers can use benchmarks, key performance indicators (KPI), user satisfaction surveys and other monitoring and evaluation (M&E) tools to track the performance of e-Government projects and to determine whether mid-course adjustments are needed. Whilst ensuring that e-Government projects are progressing as expected, it is also necessary to monitor its compliance to the e-Government Interoperability Framework (e-GIF). Insufficient technical resources, limited monitory allocation to M&E work by project coordinators will affects the e-Government projects' compliance to the e-GIF.

M&E is different from assessment, e-GIF assessments are performed to determine a project's compliance to the framework, in terms of the standards, policies and guidelines specified. E-GIF readiness assessments are focused on the extent to which a government Ministry, Department or Agencies (MDA) information and communication technology (ICT) Infrastructure complies to the e-GIF. An e-GIF Assessment will be conducted on the entire organisation to understand the level of compliance that the ICT infrastructure is at any given time.

Designers of e-Government projects, when they are beginning their planning efforts, would benefit from an assessment of the e-GIF readiness of the MDA or the specific intended audience of a project, in order to determine what types of protocols, standards and policies that will be most suitably for the organisation.

In contrast, M&E occurs throughout the implementation of a project, to measure progress, support mid-course corrections and guide resource allocation decisions. e-GIF Monitoring and Evaluation may occur at various levels of an e-government project. At the project level, the project team must continuously monitor the project's compliance to the set of identified standards and policies that relate to the project. Also, an e-GIF monitoring and evaluation team from a central government agency (e.g. GICTeD) will need to monitor the project against any selected set of standards and policies identified from the project initiation stage.



2. The Need for Monitoring and Evaluation

There are many reasons for carrying out an e-GIF M&E and they include:

Compliance to the e-Government Interoperability Framework must be mandatory for all
e-Government projects, hence project managers need to know the extent to which their
projects are meeting the relevant standards and policies in the framework;
M&E will reduce the total cost of ownership. For example, developing a software
program in accordance to the interoperability standards from the start will avoid the use
of middleware for interoperability;
Information generated through M&E provides project staff with a clearer basis for
decision-making;
Future project planning and development is improved when guided by lessons learned
from project experience

2.1 e-GIF Monitoring

Monitoring represents an on-going activity to track the entire organisation's compliance to the e-GIF. It aims at providing regular oversight of the various procurements and implementation of Information Communication and Technology (ICT) solutions in the MDA. Through such routine data gathering, analysis and reporting, the monitoring aims at:

Providing management, staff and the central government office with information on whether progress is being made towards achieving compliance to the e-GIF. In this
regard, monitoring represents a continuous assessment of the ICT Infrastructure in
relation to the given standards and policies.
Providing regular feedback to enhance the ongoing compliance issues and effectiveness
of interventions.
Assuring the central government agency (e.g. GICTeD) of its continuous compliance to
the standards and policies.

Monitoring actions must be undertaken throughout the lifetime of every ICT implementation or project. It should also be undertaken as part of ensuring an organisation's continuous compliance to the e-GIF.



2.2 e-GIF Evaluation

Programme or project evaluation represents a systematic and objective assessment of ongoing or completed projects or programmes in terms of their design, implementation and results. Project level evaluation is not something done at the end of a project. Rather, it should be done throughout a project, so that findings can be acted upon and deficiencies corrected. Most effectively, monitoring and evaluation refers back to goals and metrics laid down at the planning phase. Therefore, it is important to invest time and resources in defining KPIs or other metrics in relation to e-GIF compliance at beginning of the project and to create a plan for the monitoring and evaluation process. Too often, governments do not consider evaluation metrics until after project completion.

Compliance indicators should be defined in the beginning of a project and built into the design and implementation process, so that the relevant data can be collected as a project moves forward.

Understanding the interoperability requirements indicated in the e-GIF documents and taking them into account in the planning and implementation process will contribute to the success of e-Government projects. A failure to capture critical interoperability compliance items to be incorporated into program design will lead to future issues and additional implementation cost to the MDA.



3. Types of Evaluation

There are many different ways of doing an evaluation. The recommended ways of e-GIF evaluation should include but not limited to the following:

- Self-Evaluation (Internal): This involves an organisation or project holding up a mirror to itself and assessing how it is complying with the standards and policies in the framework. It takes a very self-reflective and honest organisation to do this effectively, but it must be done to ensure consistency and overall compliance achievement from the central government agency.
- □ External Evaluation: This is an evaluation done by a set of e-GIF evaluators from the central government agency or its authorised partners to ensure a project or programme or an organisation's compliance to the e-GIF.

3.1 Advantages & Disadvantages of External & Internal Evaluation

	Advantages	Disadvantages		
Self-Evaluation (Internal)	The evaluators are very familiar with the work, the organisational culture and the aims and objectives.	The evaluation team may have a vested interest in reaching positive conclusions about the work or organisation. For this reason, other stakeholders, such as donors, may		
	An internal evaluation is very clearly a management tool, a	prefer an external evaluation.		
	way of self-correcting, and much less threatening than an external evaluation. This may make it	The team may not be specifically skilled or trained in evaluation.		
	easier for those involved to accept findings of non compliance to the e-GIF.	The evaluation will take up a considerable amount of organisational time		
	An internal evaluation will cost less than an external evaluation.			
External Evaluation	The evaluation is likely to be more objective as the evaluators			



will have some distance from the	understand the culture or even what
work.	the work is trying to achieve.
The evaluators should have a	Those directly involved may feel
range of evaluation skills and	threatened by outsiders and be less
experience.	likely to talk openly and cooperate
	in the process.
Sometimes people are more	
willing to speak to outsiders than	An external evaluator may
to insiders.	misunderstand what you want from
	the evaluation and not give you
Using an outside evaluator	what you need.
gives greater credibility to	
findings, particularly positive	
findings.	

3.2 External e-GIF Evaluators

This is setup by central government unit (e.g. GICTeD) to oversee the implementation of e-GIF throughout government to undertake evaluation of new projects.

4.e-GIF Metrics for Evaluation

From an eGIF standpoint the metrics for evaluation must be fully and clearly defined to remove any ambiguity and ensure the M&E process is effective. The MDAs must define the purpose (how the metric will be used to support decision making), governance level (strategic, functional, operational), metric formula (e.g. Number of non-compliance cases identified), definition of elements, unit, reporting timeframe, data source and collection method, intended analysis, and interpretation rules.

The table below is an example of how metrics could be defined.

Metric	Cost of not complying with eGIF				
Purpose	Understand impact of non eGIF compliance on the MDA and				
	identifying and developing the right solutions for compliance				
Governance level	Strategic				
Metric formula	Number of non-compliance cases over a period by agreed cost				
Definition of	Cases = eGIF Standards and Policies				
elements	Cost = opportunity cost				
Unit	Non compliance case				
Timeframe	Yearly				
Data Source	Integrated Metrics & Reporting Repository defined by central				
	government authority				
Analysis	Use M&E process to identify cases and understand causes,				



				-		Enterprise mon cause.	Architecture
Interpretation rules	s React to special cause. Plan to improve common cause.						

The following metrics are provided as a guide for MDAs in the metric definition process. They are mainly related to development process for eGIF compliance.

- 1. The expected and actual \$ savings for eGIF compliance and continuous improvement by MDA;
- 2. Expected and actual \$ cost and \$ benefits of major ICT projects that comply with eGIF;
- 3. Number and percentage retired applications by MDA due to non-compliance;
- 4. Systems being modernised by status and \$ cost savings exception report of variance against plan;
- 5. \$ cost and \$ savings from continuous improvement projects;
- 6. Number and percentage staff trained in new technologies (e.g. XML) and process;
- 7. System or application size, complexity, language, platform function;
- 8. Number of change requests for non-compliant technologies or applications;
- 9. Number of change requests;
- 10. Customer satisfaction metric, by MDA;
- 11. Systems development productivity by eGIF compliance project;
- 12. Project risk: cost transforming ICT for eGIF compliance;
- 13. Opportunity risk: cost of not transforming ICT;
- 14. Penalty/incentive rates for eGIF compliance;
- 15. Cost of poor quality (actual and % rework, penalties) by work type;
- 16. Time to complete eGIF change requests;
- 17. Development projects missed milestones: number of day late; cost impact on services;
- 18. Severity levels of defects.

Where the MDA has already defined metrics using a balanced scorecard framework; the metrics could be made part of the metric definition process for eGIF compliance.