# Document No: CARE:01 Conformity Assessment REquirements (CARE)

For

**Quality Assurance in e-Governance** 

**Version 1.0, June 2010** 

# **CARE** a subset of Quality Assurance Framework

Quality Assurance Framework (QAF00-00) **Quality Assurance Requirement** (Documents) (Definition) Government department process requirements (QAF01-01) User process requirements (QAF01-02) IT solution provider process Process Design & Implementation requirements (QAF01-03) Standards and Architectures (QAF01-04) Recommended practices and guidelines (Implementation Stage) (QAF01-05) **Conformity Assessment Requirements** (Verification) (CARE) (QAF02-01) Product Assurance Conformity Assessment Specifications (QAF02-02) Process Assurance Conformity Assessment Evaluation models(QAF02-03) Assurance of management systems Conformity Assessment Certification Schemes(QAF02-04) **Conformity Assessment** (Evaluation Stage) aadministration(QAF02-05) (Validation) Project evaluation (EAF01) User satisfaction (QAF03-01) **User Satisfaction** (Confirmation Stage)

# **Scope of Conformity Assessment**

#### First-party assessment:

Conformity Assessment activity that is performed by the person or organization that provides the object.

#### Second-party assessment.

Conformity Assessment activity that is performed by a person or organization that has a user interest in the object i.e. where the supplier's client (purchaser) issues an attestation for the product/service he is purchasing.

#### Third-party assessment:

Conformity Assessment activity that is performed by a person or body that is independent of the person, organization that provides the object, and of user interests in that object i.e. attestation, which is given by a body independent of both supplier and the client.

For e-Governance applications, third Party assessment is relevant

## **Purpose**

- The purpose of defining Conformity Assessment Requirements (CARE) is to enforce implementation of standards and best practices in e-Governance solutions throughout the project lifecycle.
- By defining these requirements solution provider (or Implementing Agency) will know well in advance the the requirements against which solution will be assessed and accordingly build up its capabilities for delivering a compliant solution.
- Conformity assessment will provide an indicator of the degree of compliance of the solution to its requirements.

## **Target Audience**

- RFP Writers
- Solution providers/vendors (Public & Private)
- Policy makers and administrators should read the QAF and this document (CARE) for a conceptual view of the framework
- Conformity Assessment Body The 3<sup>rd</sup> party agency assessing and evaluating the e-Governance solutions for conformity with the requirements

## Strategic Objectives of CARE

- To enable an objective and independent evaluation of e-Governance programmes based on standards and global best practices
- Build trust and confidence of the stakeholders by helping them to assess the strengths and weaknesses of e-Governance initiatives
- To reduce risks by providing inputs for early monitoring and timely corrections
- To allow for systematic learning about the key factors for successes and failures of e-Governance initiatives

# **Envisaged Benefits for Policy Makers**

- Enhancing stakeholder confidence in the solution
- Achieving the project vision and objectives
- Addressing stakeholder concerns
- Obtaining supporting evidence in case of disputes with respect to project quality
- Developing strategies for handling complex problems.
- Meeting requirements of government rules, procedures, policies, decisions and processes

## **Envisaged Benefits for Project Managers**

#### **Project Managers**

 For providing inputs for preparing procurement documents (RFP) and contract documents for payment purposes.

#### **Solutions Providers**

- Using it as a common methodology
- Criteria for declaring that the appropriate technologies have been chosen and the solution is designed in a way so as to achieve the desired results.
- Using it as a well-structured approach based on acceptable international standards.
- Working on a level playing field with evaluations, which are accurate, repeatable, reproducible and done by a competent independent third party.

## **Envisaged Benefits for Others**

#### **User Groups**

- Confidence that the solution functions properly and meets the requirements of government rules, regulations, procedures, policies, decisions and processes.
- Ensures legal compliances and protects citizens' rights to privacy, security, data integrity and availability of information
- Solutions are usable, human centric, efficient, reliable and easy to maintain.
- Ensures that the solutions are in line with the citizen's charter and meet the desired service levels.

#### **Funding Agencies**

To procure evidence that a particular phase of the project is completed, has met the project / programme goals that the agency is supporting and payments can be released accordingly

# Conformity Assessment Body -Key characteristics

The agency assessing and evaluating the e-Governance solutions for conformity with the requirements is called the Conformity Assessment Body (CAB).

- Operate impartially
- Maintain confidentiality
- Have a system to redress complaints and appeals
- Establish a management system
- Have a procedure for disclosure of information
- Act as an independent third party
- Be competent in its operation
- Have processes and a quality system in place so that the results are reliable and reproducible
- Have a technical infrastructure, skill sets, education and training to perform professional work

## Basic Principles of CARE

#### Proportionality:

Optimum assessment to balance between the degree of assurance required and the cost associated with it.

#### Accountability:

Objectivity of the assessment, stress on evaluation by accredited third party which follows the international norms and best practices Assessment body which is recognized certification body and is accountable for its business.

#### Consistency:

Reliability, Reproducibility and repeatability of evaluation results

#### Targeting:

Use of International Open Standard as reference Criteria

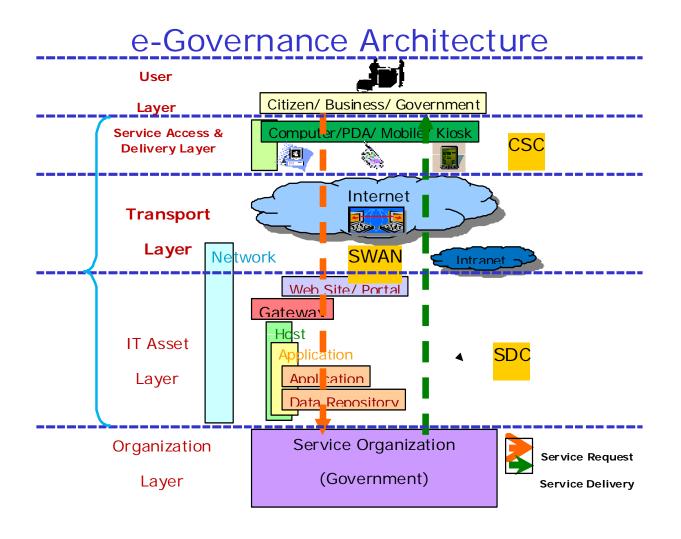
## **Conformity Assessment Model**

Process Design & Implementation

(Processes for government, project, vendor & user)

- Product Assurance
  - (Software Application, Hardware & networking components)
- Process Implementation and Management System Assurance
  - (Risk management, Asset management, Disaster Recovery and Assurance of management systems (ISMS, ITSM, QMS....)
- Measurement of user satisfaction

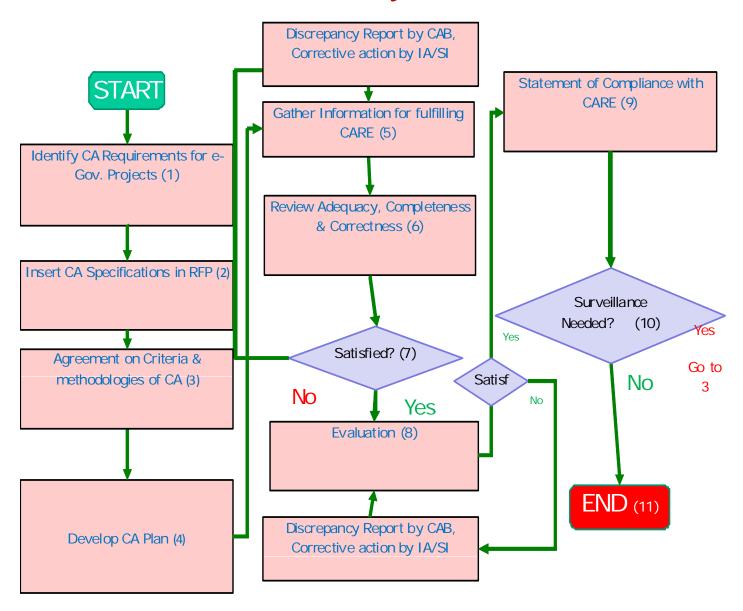
# Product Assurance Requirement for a typical e-Governance Architecture



# Standards & Conformity Assessment

- Standards prescribe technical specifications, set of rules, conditions or requirements play an important role in building the architecture of eGovernance. The essential requirements of interoperability, security, usability and reduction in cost can only achieved through standardization and use of standards
- The conformity assessment becomes a tool to systematically enforce standard implementation in various stages of e-Governance project life cycle

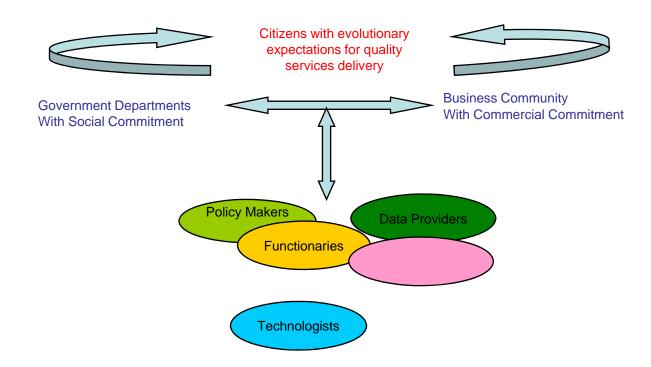
# **Conformity Assessment Activities**



#### Conformity Assessment - PPP

CARE helps in alignment of business interests of partners in Public Private Partnership in building such as:

- Transparent partner motivations, expectations and benefits
- Willingness to embrace change and remain flexible
- Clear plan with goals, objectives and accountability



## **Quality Gates**

Key issues for the management for which e-government solution is being built

- What are the strategic business objectives of the organization?
- What information is needed to support the business?
- What applications are needed to provide information?
- What technology is needed to support the applications?

#### These can be addressed by following:

- Quality management system is implemented in the organization and is effective to support the strategic business objectives.
- Information is available in a confidential and integrated manner to the user (assurance of confidentiality, integrity and availability).
- Applications are capable (in terms of functionality, security, usability, performance, reliability, etc.) to provide the information.
- Technology is capable (in terms of capacity, availability of service, service continuity, management of relationships and management of service levels).

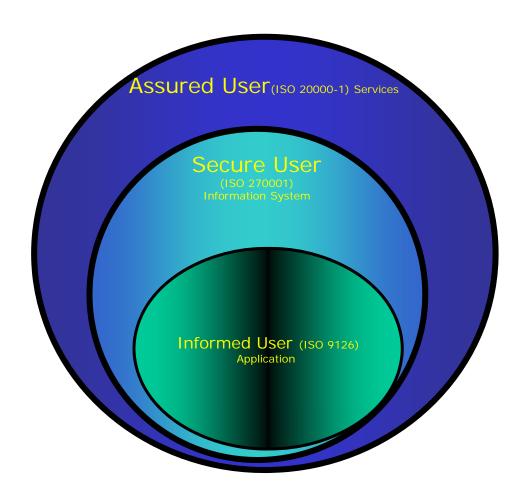
## Types of Quality Gates

- Essential where conformity can be assessed objectively and certification can be granted.
   These are mandatory
- **Desirable** have a high degree of prescription in their normative requirements and conformity can be assessed on the principles used in the standard rather than the requirements given in the standard. These are recommended, depending upon the risk level

## **Essential Quality Gates**

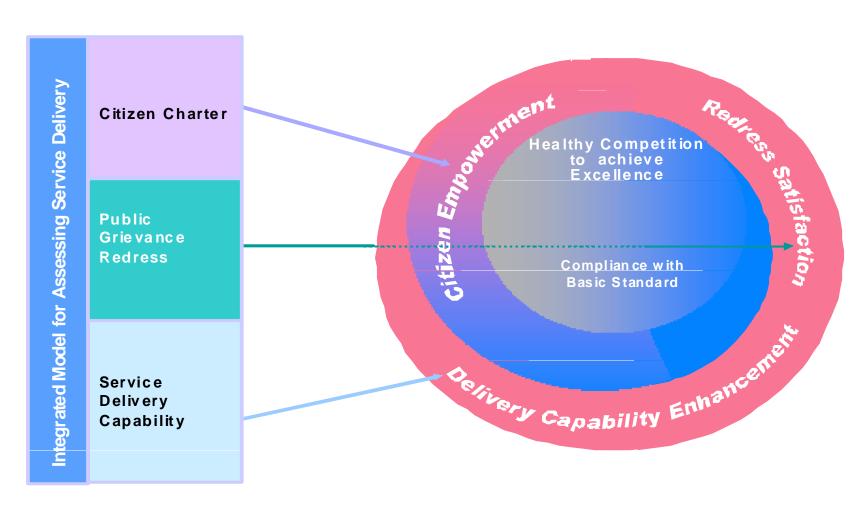
- QG 1 Quality Management System in Government Organization (means of demonstration is compliance of the organization's quality management system with IS 15700)
- QG-2 -Software Application Quality (means of demonstration is compliance of software with ISO 9126)
- QG- 3Information Security Management System (means of demonstration is compliance of information system and the organization with ISO 270001)
- QG- 4IT Service Management system (means of demonstration is compliance of information technology service management system with ISO 20000-1)

# Impact of Essential Quality Gates

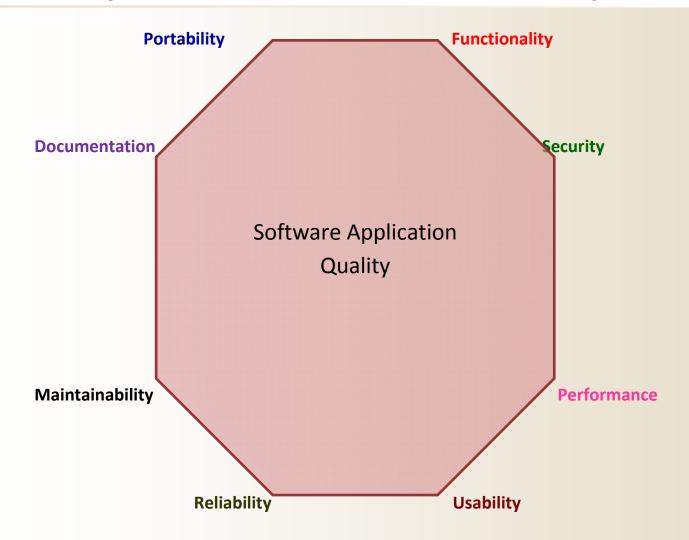


#### **Essential Quality Gate 1**

IS 15700- Model for QMS in Public Service Organization

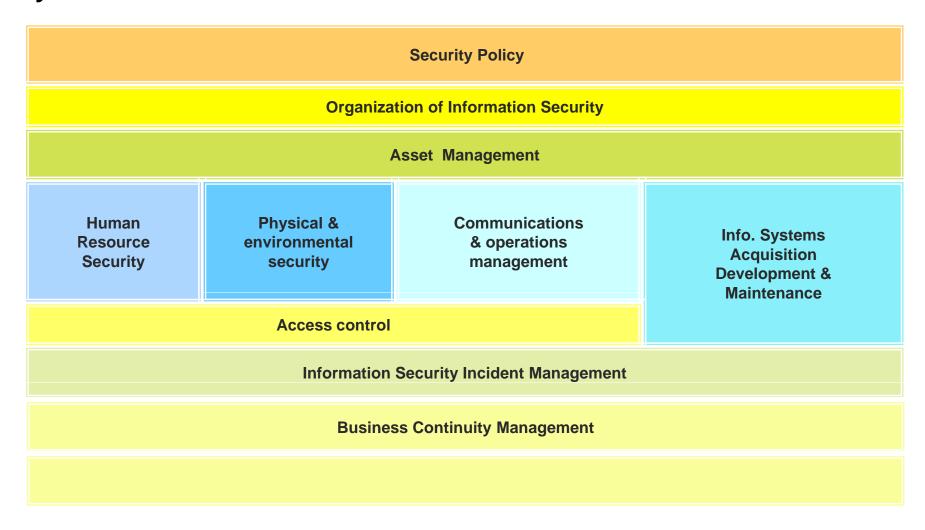


#### Essential Quality Gate – 2: Application Quality IS:ISO 9126

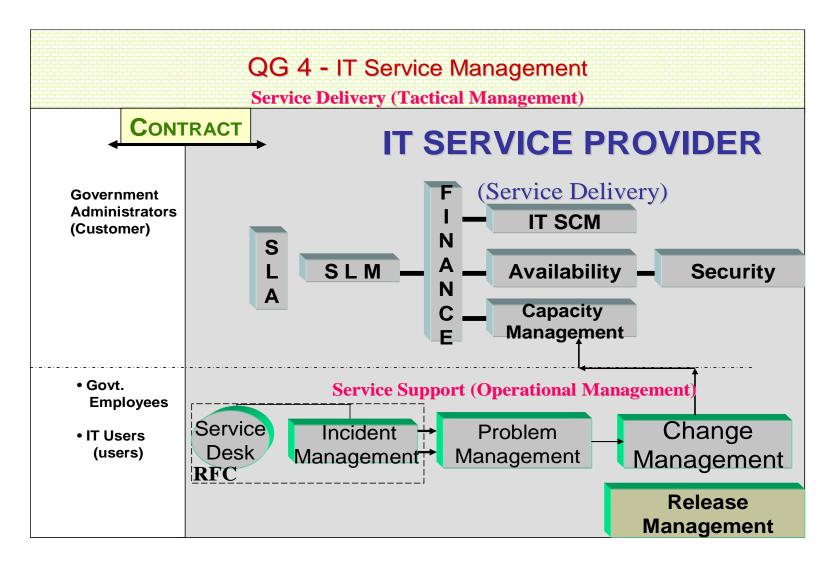


# Essential Quality Gate – 3

 QG- 3-IS: ISO27001 model for information Security Management System



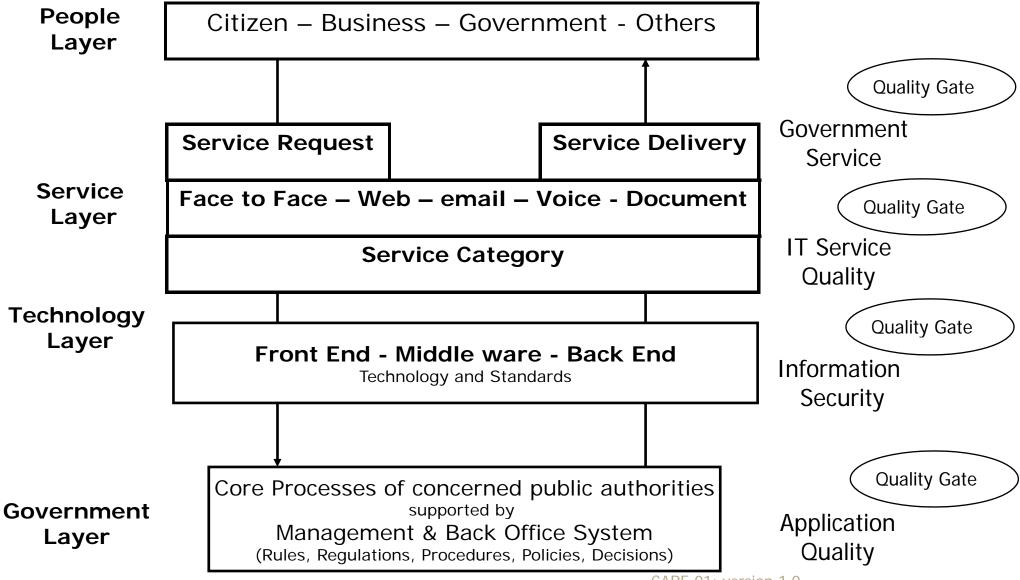
#### Essential Quality Gate - 4



## **Desirable Quality Gates**

- Government Process Re –engineering (QG 5)
- Technical Standards and Architectures (QG 6)
- Acquisition and outsourcing (QG 7)
- Request for proposal and Service Level Agreement (QG 8)
- Documentation (QG 9)
- Risk Management (QG 10)
- Asset Management (QG 11)
- Business Continuity Planning (QG 12)
- Disaster Recovery Management (QG 13)
- Digital Preservation & Information Archiving (QG 14)

# Quality Architecture of e-Governance Gates for Conformity Assessment



# Quality Gates Requirements & Conformity Assessment Guidelines

- Each quality gate has a specific purpose, standard(s) associated, and also Conformity Assessment Requirements & Guidelines
- The purpose, broad description and associated standard(s) are tabulated in the CARE document, and Conformity Assessment Requirements & Guidelines for each quality Gate are under preparation

For detailing refer Section 3.3 of CARE document

# Suggestive Templates for Conformity Assessment Requirements to be used in RFP

The suggestive templates (Annexure – I) and Example (Annexure – II) are included in the CARE Document

#### **Thanks**

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