## An Overview of eGLC-DPR, RFP, SRS CHARRU MALHOTRA Ph.D. (IIT-D), MCA, DCA, MCSD

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# **Complex e-Governance Ecosystem**

- **Information Society Governance**
- **Development Agenda** 
  - **Socio-Cultural Aspects**
- **Economic/ Financial Concerns**
- Legal Aspects
- IT Concerns- Infrastructure, Trends, Standards, Interoperability
- **Training and Capacity Building**

## e-Governance Stakeholders

- 1. Citizens as the 'end-users' of the service
- 2. Citizens as the 'anticipated users' of the service
- **3. Businesses** Investors ( a la' UN Bodies), Franchisee, Entrepreneurs, Suppliers/ Service Providers\*, Partners
- Employees- Bureaucrats /Public administrators/ officials of the deptt delivering services
- 5. <u>G@G</u>: Other government agencies
- 6. Mkt, Civil Society/Non-profit organizations, Media, Activists\*
- **7.** Politicians
- 8. Technocrats : Project Managers, CIOs, CTOs
- 9. Designers and Developers, Support\*
- 10. Academics, Researchers, Innovators, and Evaluators



## If you do not know what you want... You end up getting a lot what you don't !!!!!!

#### **Some Vision Statements**

#### **NeGP Vision**

"Make all Government services accessible to the common man in his locality, through common service delivery outlets and ensure efficiency, transparency & reliability of such services at affordable costs to realize the basic needs of the common man

**3 Vision Areas of Digital India** 

Infrastructure for All; Governance and Services on Demand; Digital Empowerment of the Citizens

## **Well Stated Objectives**

- Interact with stakeholders... not based on board room discussions
- Identify stakeholder needs, not department thoughts
- Mainly to address the current challenges and future needs
  - **Learn** from Best/ Failed practices ( do not reinvent the wheel)...

#### For Department :

- Minimize direct interaction between department & citizens
- Reduce cost of procurement by 50%
- Migrate to 75% online service delivery by 2008
- 0% of transactions at Department counters for payment of taxes, duties etc..

#### **For Citizens:**

- Provide Passport to citizens in 3 business days
- Instantaneous payments of taxes & bills online through kiosks







## e-Governance Project Lifecycle 14 eGLC) Phase 4: Implementation Approach And Sourcing

#### Key Activities/Out Puts/Deliverables





#### How Different is e-Government Lifecycle from SDLC?

#### e-Government Project Lifecycle







#### **Project Implementation Approach - Various Options**





# Request For Proposal

## **Request For Proposal**

A formal invite from an org. to a supplier to submit an offer to provide a solution to a problem or an emerging organization need.

A formal process; based on fair and open competition; a standardized framework for proposal submission and evaluation.

#### **RFP** is Invoked when the org requires :

#### Intangible Services:

specialized skills, training, professional judgment or discretion, a high degree of creativity.

#### **Tangible Services :**

- Specialized H/w & S/w Purchases which require supplier implementation
- Complete Transformative/ Disruptive Turn-Key systems which include both a product and a service

# Problems

Too Many & Too Varied Responses- Difficult to E

- "Deal Stoppers" Terms Contract Provisions st
- No Common Grounds Contract Negotiations St
- Vague Replies / Proposals



- Further Outsourcing The main contractor's role is too limited
  - **No unique Value Proposition Proposals restate RFP**
- Pricing is Not Sufficiently Structured



**Before Starting : Pre-RFP Preparation** 

Identify & Involve key stakeholders to design RFP announce an Eol too for a large project Allocate sufficient staff - Create a PMU / Team/ Focus Person **Allocate sufficient time** to the RFP process

document the overall Goals & Objectives

Communicate to all - the overall goals of the procurement process

# **Defining the Objectives**

- Define basic, top-level objectives of the acquisition.
- Are the anticipated results of a successful solution stated clearly in objective terms?
- This approach provides potential offerors the flexibility to develop cost effective solutions and the opportunity to propose innovative alternatives meeting the stated objectives.

## **Establishing Requirements**

Has the evaluation methodology and evaluation criteria been developed and used to ensure that the objectives and requirements are stated clearly?

## **Proposal Format & Content Requirements**

- General Instructions
  - **Organization and Number of Copies** 
    - Section I: Executive Summary
    - Section II: Technical Response
    - Section III: Cost/Price Proposal
    - Section IV: Contract Documentation
    - Section V: Relevant Past and Present Performance

## **Proposal Evaluation Criteria**

Overall Relative Importance of Evaluation Criteria and

**Assigning Weights** 

- Technical Criteria
- Personnel Qualifications, Project Organization, Experience
  - and Commitment Criteria
- Relevant Past & Present Performance Criteria
- Cost Criteria

## **The Evaluation Process**

Use a building block approach

- **Establish compliance**
- **Score the proposals**
- Develop a short list
- Interview the suppliers
- Evaluate the cost/budget
- Impose Upset Levels

## Use a Two-step Evaluation Process

Technical proposals and cost proposals should be submitted in two separate sealed envelopes

 Evaluate technical proposals first, eliminating any supplier not meeting the mandatory requirements; then evaluate the cost proposals for the remaining suppliers

## **Supplier Complaints & Protests**

Have written policies and procedures

Promote fair and open competition

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Provide and effective dispute resolution mechanism

# Model RFP Template and Guidance Notes for e-Gov

## Mod PRF De Gene consists of 3 sets of documents

### 1. Model RFP template & Guidance notes for Implementing services

http://meity.gov.in/writereaddata/files/implementing-services.pdf

#### 2 Model RFP template & Guidance notes for Consulting Services

http://meity.gov.in/writereaddata/files/consulting-services.pdf

#### 3. Model RFP template and Guidance notes for PPP

http://meity.gov.in/writereaddata/files/public%20-private%20-partnershi ps%20.pdf

# **Contract Management Lifecycle**

- Procurement Stage
- Execution Stage
- Service Delivery Stage
- Closing Stage



Effective contract management must be a **RECURRING PROCESS to** take account of and adapt to changing circumstances and significant events through the project lifecycle.

# **Contract Management Issues**

**Procurement Stage** 

**Execution Stage** 

Resourcing

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- Planning & Development
- Developing Tools
- I Integrate Management aspects in the contract
  - Key Performance Indicators
  - Defining Governance Responsibilities

- Managing Performance
- Managing Relationships
- Managing Changes
- I Managing Contingencies
- Managing Documents and records
- Executing Governance Responsibilities

1 of 2

## **Contract Management Issues**

#### Service Delivery

- Managing Performance
- Imaging Relationship
- I Managing Changes
- Managing Contingencies
- Managing Documents and Records
- Delivering Governance Responsibilities

#### Contract Closure

- Managing Compliance
- Maintaining Relationships
- Documenting Changes
- Regularizing Contingencies
- Saving Documents for Asset Mangement
- Informing the Management of the closure

2 of 2

# **Procurement Process**

- The foundations for effective contract and performance management are typically set during the procurement planning process;
- a sound contractual basis for effective contract management is incorporated in the contract;
- there is adequate knowledge transfer from the procurement team to the contract management team;
  - the contract management strategy for the project is in **place** as soon as practical after the contract is executed.





# Software Requirement Specification (SRS)

## What is Requirements Analysis?

To understand the customer needs and expectations from a proposed system

A well-defined stage in the SDLC

Steps in the Requirements Analysis Process
 I. Fix system boundaries

 and what its scope and limitations will be.

 II. Identify the Stakeholders- not just who the 'end users'.

#### **III. Requirements elicitation**

Information is gathered from the multiple stakeholders (define a limited set) - CCR

### **Problems faced in Requirements Elicitation**

- Ambiguous understanding of processes
- Inconsistency within a single process by multiple users
  - Insufficient input from stakeholders
- Conflicting stakeholder interests
- Changes in requirements after project has begun

### **Tools used in Requirements Elicitation**

- Interviews and FGD.
- flowcharting of processes-DFDs/Process Charts
- Refer existing documentation like user manuals,
   organizational charts, process models and systems or
   process specifications,
- on-site analysis, interviews with end-users,
- Market research and competitor analysis were.

# IV. Requirements: Analysis, Specification & Mgmt

- Model the requirements
- Structured analysis using techniques as requirements animation, automated reasoning, knowledge-based critiquing
- Document it & Circulate to all stakeholders
- Revalidate/Clean

### **Types of Requirements**

#### **Customer Requirements**

Statements of fact & assumptions – sets of mission objectives, environment, constraints and M& E parameters.

#### **Functional Requirements**

 Help to identify the necessary task, action or activity that must be accomplished.

#### **Performance Requirements**

• The extent to which a mission or function must be executed- quantity, quality, coverage, timeliness or readiness.

#### **Design Requirements**

The "build to," "code to," and "buy to" requirements for products and "how to execute".

### **Derived Requirements**

Requirements that are implied or transformed from
 higher-level requirement. For example, a
 requirement for long range or high speed may result
 in a design requirement for low weight.

## **Software Requirements Specification**

- Organization's understanding (in writing) of a customer's system requirements
- prior to actual design/development.

A well-designed, well-written SRS accomplishes four major goals:

- It provides feedback to the customer.
- It decomposes the problem into component parts.
- It serves as an input to the design specification.
  - It serves as a product validation check.

# Software specification usually contains....



# Why SRS?

# The IEEE 830 standard defines the benefits of a good SRS:

- Establish the basis for agreement between the customers and the suppliers on what the software product is to do.
- Reduce the development effort.
- Provide a basis for estimating costs and schedules.
- Provide a baseline for validation and verification.
- Serve as a basis for enhancement.



## **SRS Includes**

Interfaces

- **Functional Capabilities**
- Performance Levels
- Data Structures/Elements
- Safety
- Reliability
- Security/Privacy
- Quality
- **Constraints and Limitations**

# **Specification Language**

- Language should support desired characteristics of the SRS
- Formal languages are precise and unambiguous but hard
  - Natural languages mostly used, with some structure for the document
- Formal languages used for special features or in highly critical systems

# **Structure of an SRS**

## Introduction

- Purpose , the basic objective of the system
- Scope of what the system is to do , not to do
- Overview
- **Overall description** 
  - Product perspective
  - Product functions
  - User characteristics
  - Assumptions
  - Constraints

# Structure of an SRS...

- Specific requirements
  - External interfaces
  - Functional requirements
  - Performance requirements
  - Design constraints
  - Acceptable criteria
    - desirable to specify this up front.

 This standardization of the SRS was done by IEEE.

## **Requirements Validation**

- Lot of room for misunderstanding
- Errors possible
- Expensive to fix defects later
- Must try to remove most errors in SRS
- Most common errors
  - Omission 30%
  - Inconsistency 10-30%
  - Incorrect fact 10-30%
  - Ambiguity 5 20%



# **Requirements Review**

- SRS reviewed by a group of people
- Group: author, client, user, dev team rep.
- Must include client and a user
- Process standard inspection process
- Effectiveness can catch 40-80% of req. errors

# Summary

- Having a good quality SRS is essential for Q&P
- The req. phase has 3 major sub phases
  - analysis , specification and validation
- Analysis
  - for problem understanding and modeling
  - Methods used: SSAD, OOA, Prototyping
- Key properties of an SRS: correctness, completeness, consistency, trace ablity, unambiguousness

## Summary..

## Specification

 must contain functionality, performance, interfaces and design constraints

Mostly natural languages used

Validation - through reviews