

# Procurement Framework for Public Services Fulfilment

20 Jun 2019, Dr MCRHRDI, Hyderabad

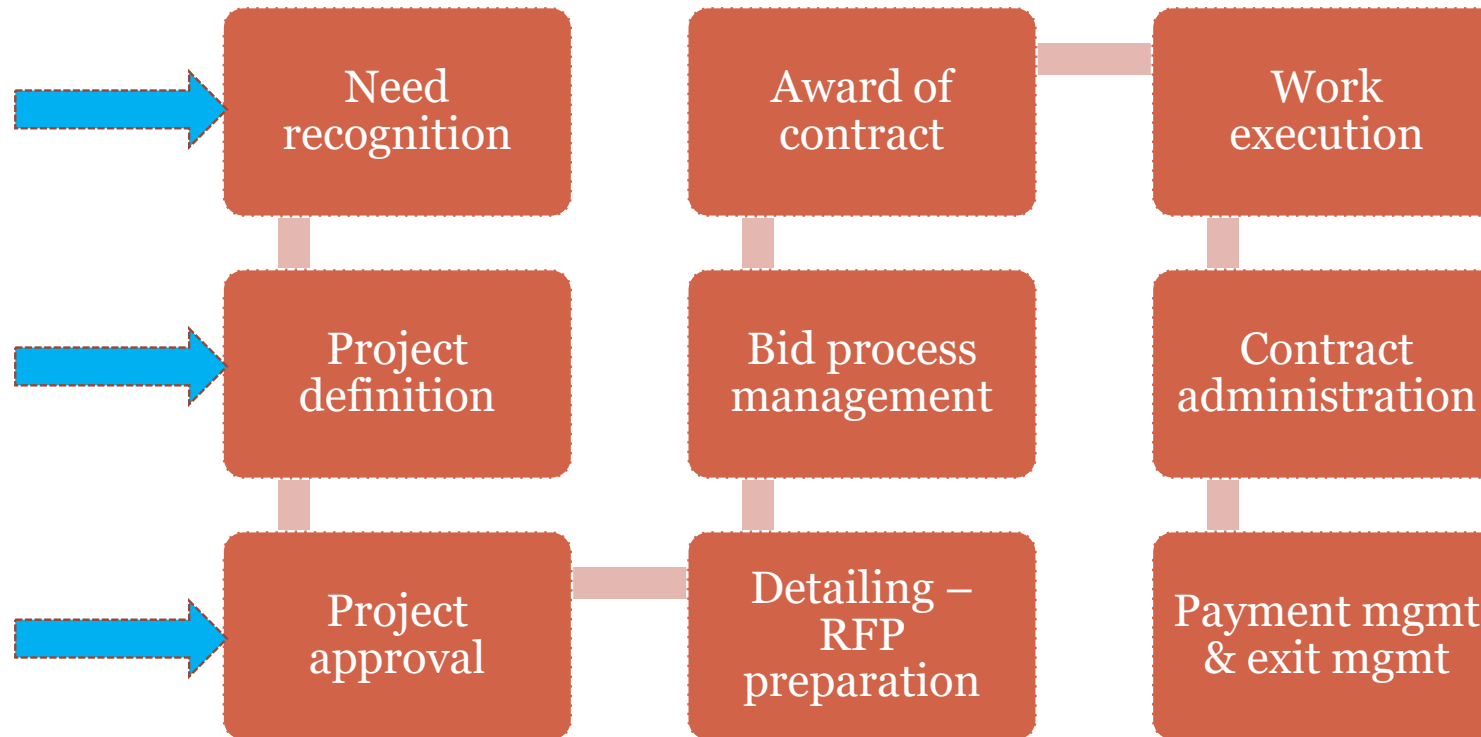
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*\* The content is from NeGD and STeP courses of NISG which is available in public domain provided by MCRHRDI*

# Session Overview

- Understanding of Government mechanism and procurement process
- Terms of contract management
- Understanding of PPP
- All about DPR
- Understanding of EOI
- Understanding of RFP and Service level Management

# Overview of Procurement Life Cycle



# In Armed Forces

Planning of Annual/ 5 year plans for works services

Air HQ's- asks commands to provide their new works proposals

Commands ask various stations under them to prepare the new works list for the next 5 years/10 years

Each station makes their works plan – GE is Involved

Stations send it back to their commands

Commands after internal clearance, will be sent to CE,AF for vetting- CFA approval

They travel up to Air HQ's

Sent to MOD

After approval from MOD , depending the budgets allotted the works happen across the service's

Standard Tender document 2249

Board Of Officers is a must

# Governance Mechanism

- Multiple stakeholders are typically involved in project implementation
- Mechanism required to sort out differences and agree on an approach acceptable to all the parties involved
- Officers keep changing, a mechanism to ensure continuity of the project is required
- Decision making hierarchy
- Sanctioning authority

# Governance Control Mechanism

- **Apex Committee / Steering Committee / Empowered Committee**
  - A body empowered to take all strategic decisions pertaining to the project
  - Typically has Principal Secretary and Secretary level officers as members
  - Constituted by obtaining approval of a senior administration officer or by legislation or by legislative amendment
  - Convened frequently till vendor finalization and in early days of Go-live

# Governance Mechanism

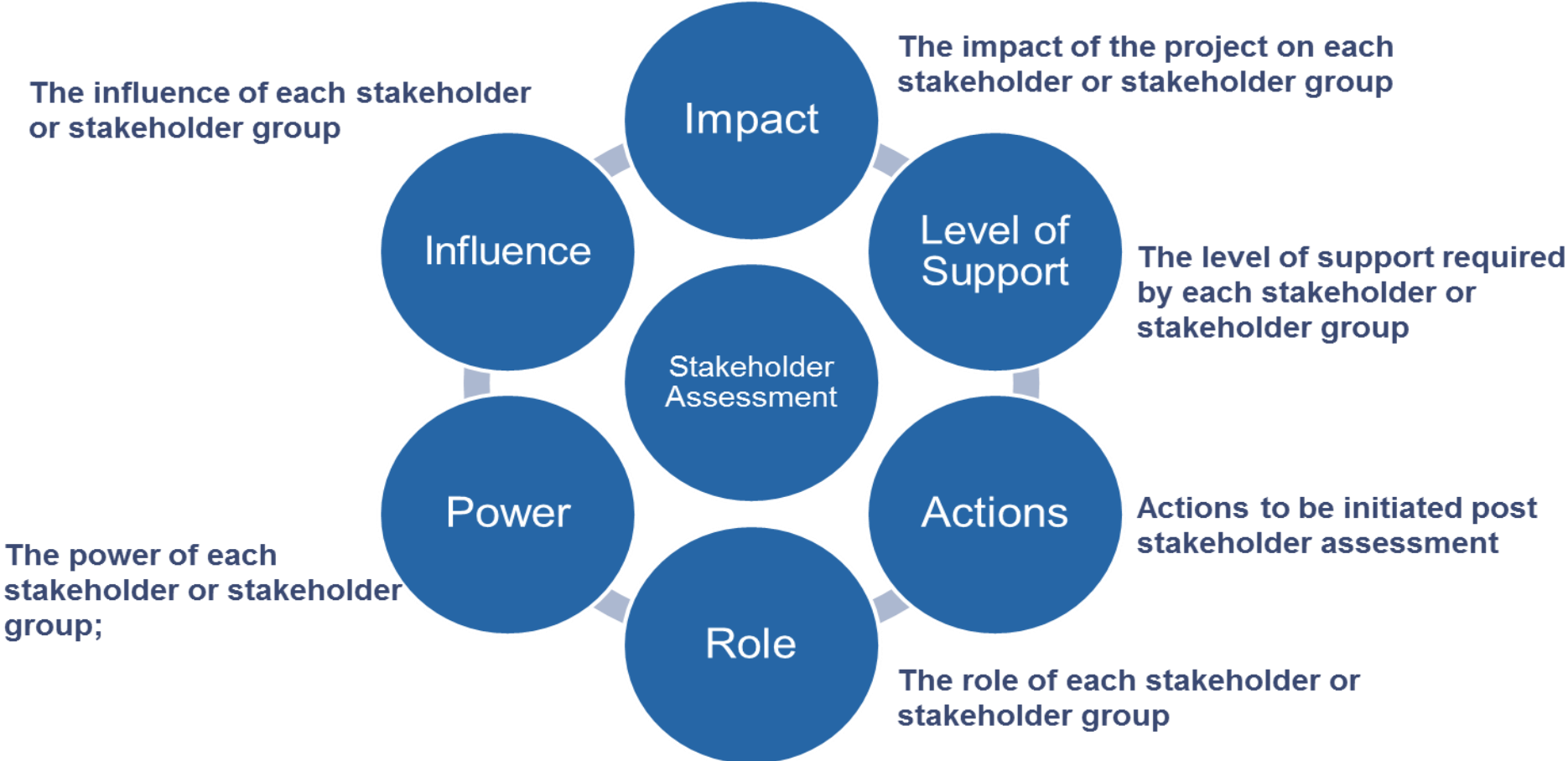
- **Project Implementation Committee**
  - Reviews details and provides tactical decisions
  - Has Director level officers and other senior government officers authorized to take decisions on day to day activities
- **Implementation cell (PMU)**
  - Monitors and manages vendor activities on a day to day basis
  - Housed under the agency designated to manage the project
  - Staff size is increased as the project grows
  - Resources herein are typically on contract and the team is managed by a Government officer

# Stakeholder Engagement

- Keep the stakeholders informed about key decisions taken in the project
- Develop and implement stakeholder engagement strategies
- Involve them as a party in decision making
- Such involvement will minimize their resistance down the line during project implementation
- Explain the agenda points to key stakeholders well in advance of critical project meetings
- Change management

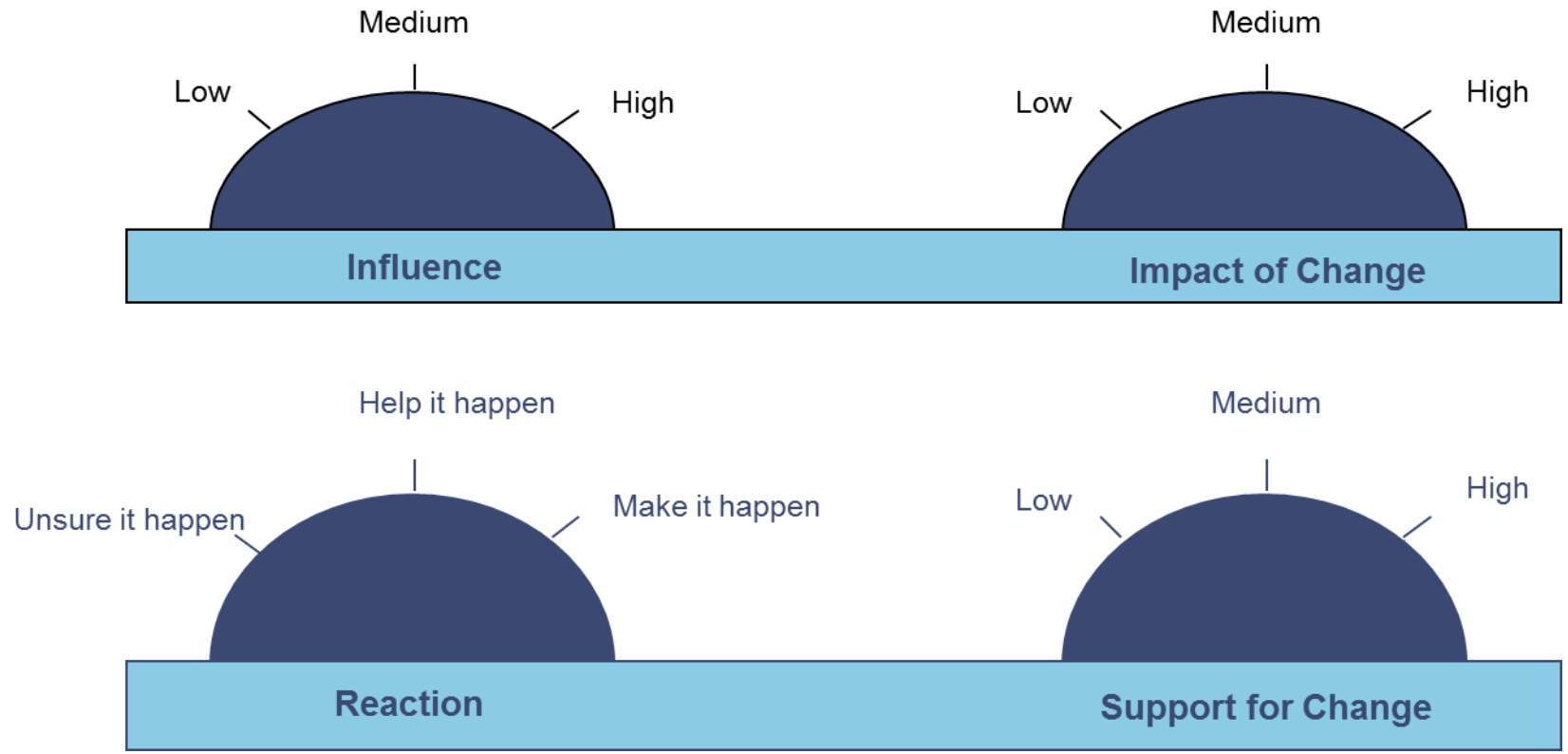


# Stakeholder Identification



# Stakeholder Identification

Parameters to be used to rate and analyze stakeholders



# Introduction to Detailed Project Report (DPR)

- Provides an overview of the envisaged project
- Submitted for Administrative Sanction
- Prepared very early
- Concept of the project explained
- Project owner in Government is typically identified by the time DPR is prepared
- Project Governance mechanism is also defined therein
- Is prepared for
  - Investment decision making
  - Project Planning
  - Approval of plans and designs
  - Implementation scheduling and budgeting

# Introduction to Detailed Project Report (DPR)

- A high level document containing:
  - Break-up of costs
    - ✦ Various items for which funds are required
  - Implementation plan
    - ✦ Pilot followed by roll out (any of the four ways)
  - High level business model
    - ✦ How will the project get paid for
  - Sustenance
    - ✦ After the funding runs out, how the project will sustain
  - Metrics for measurement of project outcomes and impact assessment (i.e. envisaged service levels)

# Introduction to Detailed Project Report (DPR)

- A high level document containing:
  - Project vision and objectives
  - Project scope
    - ✦ Functional scope
    - ✦ Geographical scope
  - Benefits envisaged
    - ✦ Quantifiable
  - Stakeholders involved
    - ✦ Roles and responsibilities
  - Governance mechanism
    - ✦ Decision making hierarchy
  - Budgeted cost estimates
    - ✦ Time-wise and Head of Account wise

# GoI Guidelines for Preparation of DPR

- DIT, Government of India has prepared a guideline for preparation of DPR for NeGP projects
- Pre-requisite for preparation of DPR
  - Stakeholder analysis
  - Scoping study
- DPR template
  - Section I: Background of Project and other basic information
  - Section II: Project Overview
  - Section III: Project details including the implementation model

# GoI Guidelines for Preparation of DPR

## Section I: Background of Project and other basic information (key section)

- Title of the project
- Alignment of project to NeGP & Best practices
- Pilot or roll out
- Project initiator details
- Implementation agency details

# GoI Guidelines for Preparation of DPR

## Section II: Project Overview (Key Sections)

- Identification of all stakeholders
- Problem definition
- Service level improvements envisaged
- Project activities and timelines
- Past experiences and lessons learnt
- Summary of total project costs
- Sources of funding



# GoI Guidelines for Preparation of DPR

## Section III: Project Details Including its Implementation Model (Key sections)

- Goal and objectives
- Implementation strategy
- Project scoping, process reengineering, change management and infrastructure
- Monitoring, Evaluation & Assessment
- Proposed organization structure
- Assumptions and risks
- Sustainability plan
- Business model
- Project cost requirement
- Work plan

# Investments Needed in e-Governance Projects

- Investments needed in e-Governance applications depend on the model for application selection:
  - Custom development or
  - ERP/COTS model
- Each model has unique advantages and challenges associated, if not managed can seriously impact the project success
- Each model has unique cost elements – important to understand cost elements in deciding the business model

# COTS vs. Custom Development

## Custom Development:

- Application software is developed by the software developers based on the business needs of the customer
- Can involve development of a completely new software from grounds up or reusing the software components/code for requirements of similar customers (depends on IPR and source code rights)
- Can be a long drawn process as entire software is developed grounds-up
- Cost of the software development depends on the functionality of the system, technology adopted for development and the entity selected for software development – proportional to the quality

## COTS/ERPs

- COTS/ERPs exists for both support and core functions of government – predominantly used in support functions currently in government
- Low level of awareness on the COTS products existing in core functions of departments (e.g. tax collections)
- Industry specific solutions (tailored for government requirements) exists
- Built on global best practices and learnings
- Inbuilt features for addressing functionality, security, performance, scalability requirements
- Cost of application software depends on the product, vendor and number of users..

# Costs in COTS Projects

## Design and Development Phase:

- Services cost
  - Requirements study
  - Configuration and customisation of the product for business needs
  - Training
- Application & System software cost
  - License cost for the application software
  - License cost for the system software (e.g. database server, application server, web server)

## Operations Phase:

- Services cost
  - Software operations and maintenance
  - Software change management
  - Training
  - Helpdesk..
- System Software Cost
  - AMC for application software (application, web, database servers)
  - AMC for system software (application, web, database servers)

# Licensing Model in COTS Projects

## Licensing models for System Software (COTS/ERPs)

- Capital cost for purchase of software
- Licensing is based on the number of users
- For organizations with very large number of users – enterprise licensing policies exist
  - Not all vendors provide enterprise licensing policy
- Recurring cost for AMC of application software – to be paid on annual or quarterly basis
- AMC cost depends on the cost capital cot (generally between 15-22% of capital cost per year)
- AMC provides support for errors/bugs and upgrades for application software...

## Licensing models for Application Software (COTS/ERPs)

- Capital cost for purchase of software
- Licensing is based on the number of servers, processors in the server or number of users
- Typically, web and application software licensing is based on the number of servers
- Database server software licensing policy is based on number of users or a number of processors in a server
- Processor based licensing is preferred in case of large number of users
- User based licensing is preferred in case of small number of users
- Recurring cost for AMC of system software – to be paid on annual or quarterly basis
- AMC cost depends on the cost capital cot (generally between 15-22% of capital cost per year)
- AMC provides support for errors/bugs and upgrades for system software...

# Business Model Options

- Government owned model
- Private Public Partnership
- Software as a Service

# Government Owned Model

- IPR belongs to purchaser / government
- Application takes time to develop and stabilize
- Error prone especially initially:
  - It is part of the software development process
- More management effort from Government
- No licensing hassles
- Code can be modified as per Government requirements
  - COTS products will have certain restrictions at some point

# Private Public Partnership

- Private Partner invests in the application software design, development, implementation and operations
- Private Partner revenue realization shall be through the extent of utilization of application software by the government or its customers and is paid through service charges or transaction cost
- Application software is owned by the private partner with an option to transfer the usage rights at the end of contract period at a cost...



# Software as a Service (SAAS)

- Both COTS and custom developed software are deployed in customer specific hardware
  - Web, application, database server, firewall, load balancer, Intrusion prevention system, physical servers, redundancy, data center rental costs & power costs
- Application is already installed and ready for use
  - A new customer is created as a user in the system, a la, Gmail e-mail account; a bit more complex though
  - Solution hosted in a centralized set of servers
  - All user agencies are logically separated, thus privacy and security are ensured
  - Set-up can be very fast
  - Data center can be anywhere in the World
  - Downtime will be minimal; heavily backed up infrastructure
  - Less control with Government

# Contract – General Conditions of Contract (GCC)

- Definitions of Terms used in the Contract
- Conditions precedent to contract signing
- Applicable Law governing the Contract
- Currency of the contract
- Language of the contract and administration
- Authorized representatives of the department and vendor
- Conditions on Taxes and Duties applicable for the contract, change in tax and duties and impact to project cost

# Contract – General Conditions of a Contract

- Approach for modifications or variations to the contract
- Force majeure
- Conditions for suspension and/or termination of contract
- Liabilities of parties
- Dispute resolution approach
- Exit management
- Arbitration and courts for dispute resolution

# Contract – Special Conditions of Contract (SCC)

- Do I have ownership & IPR on source code?
- Am I assured of post implementation support?
- How do I manage scope change?

- Is my warranty & insurance taken care of?
- Am I getting latest technology?
- Licensing Policies and upgrades
- Acceptance Testing

Software  
Development

IT Infrastructure

Service Delivery

Public Private  
Partnership

- Transfer and usage of govt facilities by vendor
- Addition / deletion of services
- Liability of government
- Working hours

- Does govt retain strategic control of critical infrastructure
- Exit Management
- Revenue sharing and safeguarding govt against excess payout

# Contract: Key Legal Terms

- **Limitation of Liability**
  - Typically capped at the contract value, except for death and IPR infringement
- **Intellectual Property Rights (IPR)**
  - It should clearly specify who will be the owner of intellectual property created during the contract term
  - Typically, intellectual property created before start of the engagement continues to be vested with the concerned stakeholders
- **Payment Terms**
  - Number of days by which payment will be made by procurement entity
  - Conditions precedent for payment of invoice
  - Payment in case of termination and Force majeure conditions

# Contract: Key Legal Terms

- **Termination of Contract**
  - Defines the conditions under which a contract can be terminated by
    - Procurement entity
    - Vendor
  - Specifies the minimum notice period to be served by either of the two parties
  - Refers to payment terms section or specifies the extent to which payment will be made for the work completed at the time of issuance of termination notice
- **Dispute Resolution**
  - The procedure of selection of arbitrator is specified
  - The legal jurisdiction in which the disputes will be resolved is specified

# Contract: Key Legal Terms

- **Exit Management and Transition Management**
  - Specifies what all assets and documentation about the project will be transferred by vendor to procurement entity at end of the project
  - Has a reference to whether procurement entity is authorized to hire in its pay-roll employees of the vendor who worked on the project
  - Knowledge Transfer support to be provided by the vendor to a newly selected vendor, so as to ensure smooth transition
- **Risk Purchase**
  - Addresses what if the vendor is unable to deliver the work / good / service as per the RFP
  - Make a provision to allow Government to hire a new vendor to address the RFP requirement and specifies the amount to be paid by the vendor who could not deliver

# Contract: Key Legal Terms

- Risk Purchase (cont'd)
  - Additional costs quoted by the new supplier if any shall be borne by the initially selected supplier
  - What about components already delivered?
  - Will the increase in costs be capped at certain value
  - What happens to components already accepted by purchaser?



# Contract: Key Legal Terms

- Indemnification

- Defines the circumstances under which the vendor shall indemnify (defend) the procurement entity for litigations brought on by 3<sup>rd</sup> party on account of wrongful acts (such as infringement of Intellectual Property Rights) by the vendor
- Specify the person authorized to negotiate and finalize indemnification claims with 3<sup>rd</sup> party (i.e.) whether vendor or procurement entity is authorized
  - Regardless of who negotiates, settlement of the claims will be done by the vendor

# Contract: Key Legal Terms

- Force Majeure
  - An event which is beyond the reasonable control of a Party, and which makes a Party's performance of its obligations under the Contract impossible or so impractical as to be considered impossible under the circumstances
  - Issues addressed related to Force Majeure are:
    - Payment for work completed when Force Majeure condition is in place
    - Termination of contract
    - Service delivery obligations of the vendor
    - Informing about the Force Majeure condition

# Referencing to Scope of Work

- Safest approach is to Annex the following documents to the contract:
  - Request for Proposal
  - Technical Proposal submitted by the bidder
  - Clarifications to Technical Proposal submitted by the bidder
  - Financial proposal submitted by the bidder
- Disclaimer to include: In case of any discrepancies between the RFP and the Technical Proposal, RFP will prevail over Technical Proposal submitted by the second party.

# Pre-bid Response

- Do not respond queries bidder-wise
- Remove bidder name wherever specified in your response
- Classify questions and respond to the questions in sequence
- Do not be defensive and argue for why things are done the way they are done
  - Simply state the facts
- Addendum and Corrigendum shall over-rule the original RFP
  - There should be such a clause specified in the RFP

# Evaluation of Proposals

## Pre-Qualification Proposals

- Every document required in RFP shall be provided by all the bidders
- Do not be lenient
- Strictly verify whether a bidder qualifies in all the criteria specified
- Pre-qualification is strictly “Yes” or “No”
- Even one “No” typically disqualifies the bidder

# Evaluation of Proposals

## Pre-Qualification Proposals

- Clarifications can be sought from the bidders
- Establish with certainty whether a bidder actually qualifies or not
- Read the forms submitted by bidders and ascertain whether each form submitted is as per RFP requirements

# Evaluation of Proposals

## Technical Proposal

- Make sure to read every detail specified in technical proposal
- Many times, bidders specify some deviations to RFP
  - Such deviations, when go unnoticed, and the bidder gets technically qualified, will imply that customer has accepted such deviations
- Identify all such deviations and ask bidders to withdraw the deviations
- Obtain all necessary documentation to evaluate objective criteria

# Evaluation of Proposals

## Technical Proposal

- Read in detail the work plan and methodology submitted by bidders
  - Based on that provide grades for the same
- Get an impression on whether the bidder will actually be able to deliver the project as required
- Ask clarifications as required and obtain documentary evidence
- Ensure to keep a copy of the clarifications provided by the bidders
  - Especially withdrawal of technical deviations specified by the bidder



# Evaluation of Proposals

## Commercial Proposal

- Re-do the mathematical calculations
- Look for deviations
  - If deviations are submitted, bidder shall give a letter withdrawing all the deviations

# General Observations

- Don't be biased
- Don't appear biased
- Don't be Careless
- Internal discussions remain internal
- Enable closure
- Present facts such that decision making is simplified

# Expression of Interest

- There are certain circumstances when Government does not know its requirements well
  - For example, in emerging areas as such as the UID, item code classification and State of the Art e-Payment solutions
- To firm up its requirements, Government prepare a set of questions (areas where it is not clear) and seek information from qualified players in the market. This document is referred to as Expression of Interest (EoI)
  - Pre-qualification criteria is usually set
- Agencies operating in the space would then provide their response to the EoI
- The responses will be studied by the Government and presentations are usually made by the participants

# Expression of Interest

- Short-listing of vendors is also done at end of this process. Usually, those complying with the qualification requirements are qualified
  - This short-listing is a form of pre-qualification procedure
- The RFP documents are subsequently finalized
  - Inputs provided by those responding to EoI are considered to finalize the requirements in RFP
- Requirements herein need not be only functional or technical in nature
  - It could also be related to payment terms or business model or service levels

# About Expression of Interest

- The finalized RFP will be issued to the short-listed bidders (i.e. if short-listing was done) for bidding
- Short-listed bidders may or may not choose to bid in response to the RFP. It is their discretion
- Pre-bid procedure follows just as it is with the standard tendering process
- Bids are received and evaluated just as it is with the standard tendering process

# Differences between RFP and EOI

- Number of stages
  - RFP: One stage (i.e. it could be single cover or two cover or three cover, regardless, bidders will submit their responses and their responses evaluated at once)
  - EOI: Two stages (First stage is where bidders provide their suggestions to government on the requirements and Second stage in the bidding stage)
- Requirements
  - RFP: Presumably known
  - EOI: Presumably not known during the first stage

# Differences between RFP and EOI

- Time taken
  - RFP: Usually shorter than Eoi
  - Eoi: It is a prolonged process
- Restriction in bidding
  - RFP: Restricted bidding is adopted if pre-qualification or empanelment procedure was followed earlier
  - Eoi: Second stage bidding is usually restricted

# EOI in e-Governance Example

- Problem Statement:
  - High percentage errors were reported in reconciliation of bid security and tender processing fee payments in e-Procurement project
- Level of Knowledge
  - Many Banks had visited the e-Procurement office as part of their marketing efforts and explained about various solutions available with them to address reconciliation issues
  - e-Procurement cell broadly understood that there are solutions available to minimize reconciliation errors



# EOI in e-Governance Example

- EOI Published
  - An open EOI was published stating our problems and seeking information about solutions available in the market. Also, information was sought about possible payment models
  - Pre-qualification criteria were specified
- Response
  - Many Banks attended the pre-bid meeting for EOI and few submitted their response
  - A round of interactions were held with the bidders as part of processing the EOI response

# EOI in e-Governance Example

- Key Learnings
  - Usually, service charges for the net banking aggregator solution is offered as a percentage of the transaction amount (1-2%). However, “Flat Fee model” was just introduced by one of the vendors in the market.
  - Clarity on service levels emerged. For example, by which day Banks will be able to credit the amount in Bank account after the date of transaction (T) was known for the various payment types
  - The concept of virtual account was well understood
- Banks short-listed
  - Three Banks were short-listed, who met the pre-qualification criteria specified in the Eoi

# EOI in e-Governance Example

- RFP published
  - A detailed RFP was prepared and published incorporating the key learning's
- Tender evaluation
  - Technical proposals submitted by bidders were evaluated and clarifications on the same were sought
  - All the bidders made a detailed demonstration of their proposed solution

# EOI in e-Governance Example

- Tender results
  - Flat fee business model for Net Banking aggregator worked out very well. Helped save significant amount of money for suppliers and indirectly for Government. Such low fee will help enhance use of Internet Banking, where reconciliation errors will be less
  - Virtual account concept was firmly incorporated as a requirement in the RFP
  - Workable service levels were defined
  - The process took a while, but definitely the process helped in defining a suitable solution

# Request for Proposal (RFP)

## **A RFP needs to provide Clarity on:**

- On the scope of work
- Vendor's capabilities required to deliver solution
- Measuring solution and services delivered by vendor (i.e. Key Performance Indicators and Service Level Agreement)
- Investments needed in project lifecycle (i.e. payment schedule & business model)
- The efforts needed to delivery solution (i.e. work plan / implementation schedule)

# Request for Proposal (RFP)

## **A badly drafted RFP could cause:**

- Selection of a unqualified vendor
- Conflict in understanding on the scope of work between government and vendor on account of ambiguous requirements; causing delays and termination
- Delay in finalizing selection of the vendor
- Government agency to procure goods/services not inline with the business requirements
- Overshooting of budget of both vendor and the Government
- Confusion in SLA administration due to ill-defined Service Level Requirements (SLR) leading to delays in payment
- Government to levy penalties leading to delays/terminations
- Litigations/court cases by vendors or government

# Request for Proposal (RFP)

A Request for Proposal (RFP) is an invitation for suppliers, often through a bidding process, to submit a proposal on a specific commodity or service.

This document contains:

- 1) Project requirements including
  - Vision, Service levels, Implementation plan, Functional & Technical and Hardware requirements
- 2) Terms and conditions governing vendor selection
  - Proposal evaluation methodology and selection method
- 3) Business model
- 4) Legal terms governing the contract between procurement entity and the selected vendor
- 5) Forms to be used by bidders to submit their responses

# Request for Proposal (RFP)

Request for Proposal (RFP) is usually structured in 3 Volumes, wherein one Volume is assigned to dedicatedly address the requirements listed below:

- 1) Technical and Functional Requirements
- 2) Bid Process and Commercial Specifications
- 3) Contractual and Legal Specifications



# Request for Proposal (RFP)

## Contents of Volume I: Functional and Technical Requirements

- Introduction & Detailed Background of the Project
- Project Vision, Mission and Objectives
- Services Definition
- Detailed Scope of Work for the Vendor
- Functional Architecture & Requirements
- Technical Architecture & Requirements (including Security Requirements)
- Other Requirements (e.g. Data Migration, Digitization etc)
- Timelines for implementation of the Project
- Project Deliverables

**Illustrative**

# Request for Proposal (RFP)

## Contents of Volume 2: Bid Process & Commercial Specifications

- Bidding Terms and Conditions (Guidelines for preparing proposal)
- Pre-qualification Criteria
- Technical Evaluation Criteria
- Bid Opening and Evaluation Process
- Evaluation of Commercial Bids
- Negotiations, Contract Finalization and Award
- Formats for providing bid response
  - Pre-qualification
  - Technical and
  - Commercial

**Illustrative**

# Request for Proposal (RFP)

## Contents of Volume 3: Contractual and Legal Specifications

- Roles and Responsibilities of Stakeholders
- Service Level Agreement
- Master Service Agreement
  - Scope of Services under the Contract
  - Breach, Rectification and Termination
  - Intellectual Property Rights
  - Disputes & Amendments
  - Change Control Schedule
  - Exit Management
  - Program Governance Structure & Schedule
  - Payment Terms and Schedule
  - Implementation Schedule

**Illustrative**

# Request for Proposal (RFP)

## Key Activities Related to RFP Preparation and RFP Processing

### RFP Preparation and Publishing



### Bidding Process



### Bid Evaluation Process



# Activities Subsequent to Vendor Selection

- Award of contract procedure
  - Issuance of Letter of Intent (LoI) by procurement entity
  - Letter of Acceptance by the selected vendor
  - Signing of legal agreement between procurement entity and the selected vendor
  - Submission of Performance Bank Guarantee (PBG)

# Activities Subsequent to Vendor Selection

- Contract execution
  - Selected vendor will conduct detailed study of the requirements and prepare project design and Software Requirements Specification (SRS)
  - Vendor will
    - Develop / customize the software to address project requirements stated in RFP
    - Deploy server side infrastructure (e.g. servers and storage) as required in the RFP and as per the vendor's technical proposal
    - Deliver and install end user infrastructure (i.e. computers, printers, scanners etc.) as required in the RFP
    - Test and then deploy the software in production environment
    - Maintain the software and hardware in accordance with service levels defined in the RFP

# Activities Subsequent to Vendor Selection

- Contract execution (cont'd)
  - Government will
    - Set-up a Project Management Unit (PMU) to deliver on its roles and responsibilities as per the RFP and specifically to
      - Review and provide feedback on detailed design and process documents and SRS submitted by the selected vendor
      - Convene meetings with stakeholders / committees constituted to monitor and take decisions related to the project
      - Manage and monitor delivery of the project as per implementation timelines and service levels specified in the RFP
      - Manage day to day project operations (including project and payment management) in coordination with the selected vendor

# Activities Subsequent to Vendor Selection

- Contract execution (cont'd)
  - Government will
    - Engage services of a 3<sup>rd</sup> party audit agency to conduct Final Acceptance Testing of the system set-up by the vendor
    - Create awareness and capacity building amongst prospective users and key stakeholders about the project
    - Assess effectiveness of the project by measuring the envisaged project outcomes (captured during pre-RFP stage) with the actual project outcomes
    - Plan for Exit management at end of the vendor's contract period



# Project Requirements: FRS

- The software to be developed in a project is defined in detail in Functional Requirements Specification (FRS) section of the RFP
- FRS is typically derived from the Future State definition (i.e.) TO BE processes prepared during activities preceding RFP preparation
- Typically, a software is conceptually sub-divided into multiple modules and functional requirements are defined module-wise
- Care has to be taken to ensure that all requirements of a project are correctly defined in FRS. Else, the (inadvertently) left out requirements may have to go through a cumbersome change management procedure before it gets implemented

# Project Requirements: FRS

- Don't define requirements beyond what is required
  - FRS compliance statement will be prepared subsequently as part of Final Acceptance Testing
  - Then, arguments have to be presented as to why certain requirements originally envisaged in RFP could not be implemented
- Remember:
  - Though it is detailed, FRS defines the requirement in abstract format
  - Often, few of the envisaged requirements defined in RFP cannot be implemented in software pending further clarity
  - Selected vendor is often required to develop software to address functionality not originally envisaged in RFP, but quite essential for implementation of the project

## Project Requirements: FRS

- Where implementation of the system is sought as Commercial Off the Shelf (COTS) deployment, care should be taken to ensure that FRS is drawn directly from the Future State definition and it is vendor neutral

# Project Requirements: Hardware

- As hardware specifications tend to continuously evolve, one needs to keep up with the market to know the current trending specification
- Hardware vendors tend to differentiate their products by offering a unique combination of hardware specifications, as against the competition. For example
  - Vendor A would offer duplex printer with Automatic Document feeder at 24 PPM
  - Vendor B would offer duplex printer at 24 PPM but with scanning capabilities

# Project Requirements: Hardware

- It will be best and non-controversial if specifications could be defined directly based on requirements
  - Vendors will tend to seek changes to specifications as pre-bid clarifications, so they can offer a equipment exactly matching the specifications specified in RFP
  - Procurement entity can evaluate such requests and take a decision on whether to dilute/modify the specifications based on their requirement
- Often, procurement entity will have to establish the equivalence of competing products. For example
  - Whether the twelve-core AMD Opteron 6100 and six-core Xeon 5600 perform more or less the same

# Project Requirements: Technical

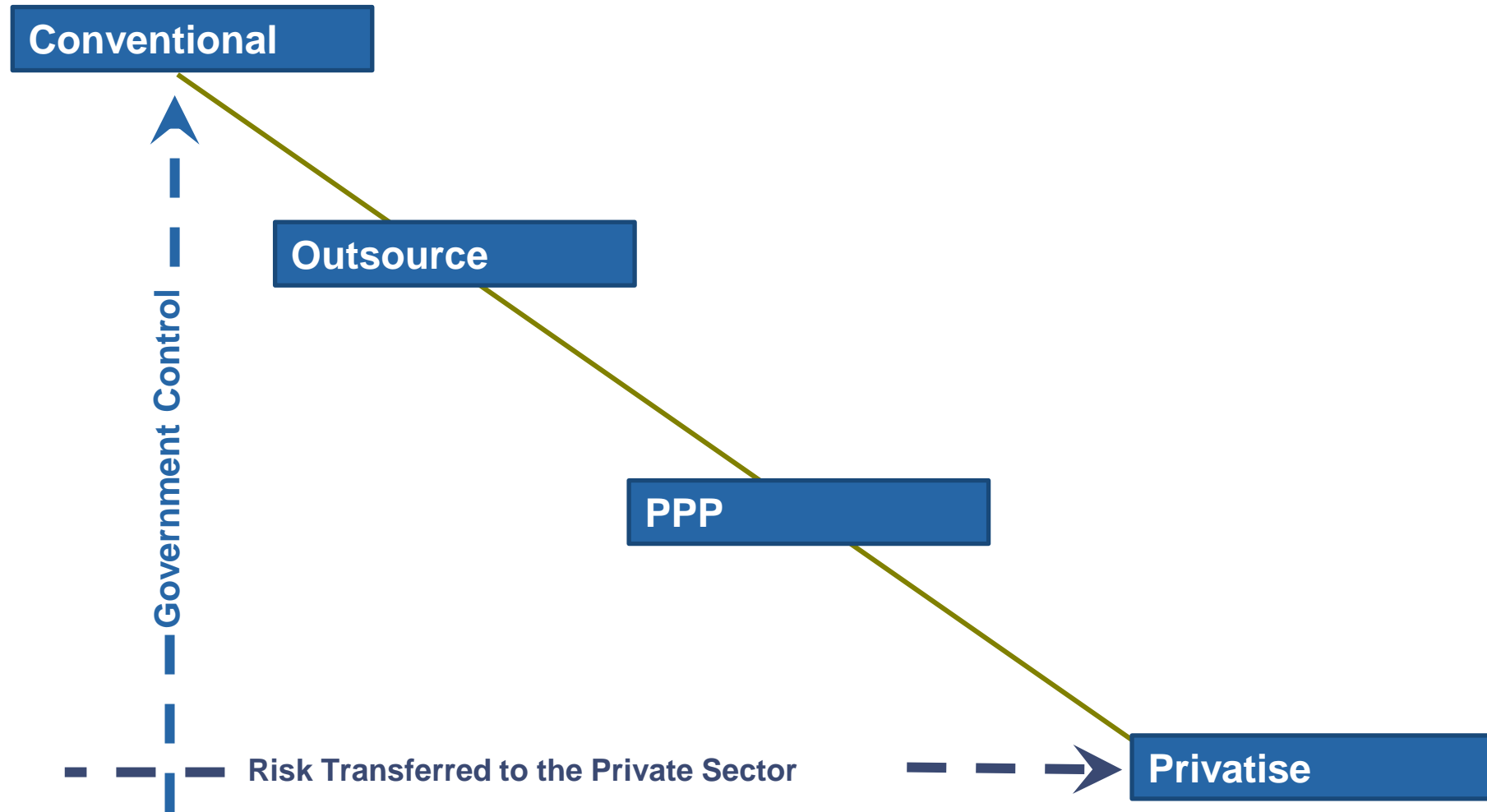
- Typically, certain standard technical requirements are specified in the RFP such as:
  - Application should be designed as n-tiered architecture
  - Application should be accessible over the Internet
  - The software installation should comply with security guidelines laid down by Government of India and international standards such as ISO 27001
    - In this regard, it needs to be noted that adhering to security guidelines is different from obtaining security certification such as ISO 27001. The latter requires engaging a 3<sup>rd</sup> party agency and exhaustive documentation
  - Audit trails of all key activities shall be logged and this log data shall be shipped to an environment under the direct control of procurement entity
  - The system should be designed such that it works in a load balanced mode, to address scalability requirements of the project

# Business Model – Basic Introduction

- A Business model for a project should address/answer the following
  - How much does it cost to create and maintain the project?
  - Is the project feasible?
  - Who is funding for the Project?
  - Who is developing or implementing the project?
  - Who is paying for the project?
  - What are payment terms?
  - Roles and responsibilities of the parties concerned with the business model
  - Duration of the contract etc.

# Business Model – An Overview

## Various Models for Private Sector Participation





Thank you