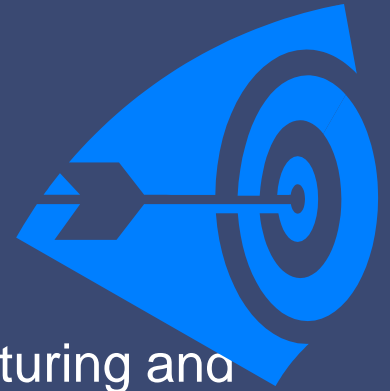


# Course: Business models and Public Private Partnership (PPP) for e- Governance Project

Day 2

Session 4: Contract Management aspects  
of different types of projects

# Agenda



- Contract Preparation: Relationship between project structuring and contract (PPP, Government Owned etc)
- Contract Finalization and Signing
- Contract Execution (Contract Monitoring and SLA Management)

# Different project types have different priority areas....

- 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

# Relation between Project Type and Contract Structuring

- The Contract clauses need to be tailored based on specific project requirements, based on the type of project
- One size does not fit all – the Contract clauses for a government owned bought out software development project may not be relevant in a PPP based service delivery project
- The Contract considerations for the following project types are explored in the subsequent slides:
  - Software Development project
  - IT Infrastructure projects
  - Service Delivery projects
  - Public Private Partnership
- Many e-Gov projects may have a combination of more than one of the above types and contract clauses shall be suitably tailored

# Software Development – Contract Considerations

- Contract clauses should ensure that the department is provided continued support in Operations & Maintenance of the Software Development, post roll-out of the Software. The contract considerations include:

Source code ownership

IPR on the source code and system

Transfer of rights

Change control management

Transition management

Exit management

Ensuring proper documentation

Acceptance Testing

Duration of post implementation support

AMC for system software

Licensing policies and upgrades

Data ownership rights

Other project types with a Software development component will also have to address these considerations

# Source Code Ownership & Intellectual Property Rights

- **Source Code** is the term for individual modules, class layers, images, and pieces of computer programming that are compiled together to make up your software system. Ownership of Source Code is an ethical and legal issue
- **Bespoke Software** means the software designed, developed, tested and deployed by the SP for the purposes of rendering the Services as part of the project, including customization components to other third party software.
- As per the Indian Copyright Act, 1957, the Copyright of the Software developed by a third party rests with the third party, unless **obtained through a written deed** of assignment
- Only if the Source Code Ownership of all Bespoke Software is **transferred** to the Government by assignment in the contract, will the government be able to undertake maintenance and enhancement of the Software

# Intellectual Property Rights

- Any Software Development project should have a clause, assigning exclusive Intellectual Property Rights to the department:
  - IPR to all the Bespoke Software developed , forms and the compilations of the project
  - IPR to any logo, trademark, trade name, service mark or similar designations
  - Exclusive rights to all project proprietary data
  - For third party products for which the SP had IPR before the contract, IPR will continue to vest with the SP. But the department will have exclusive IPR to the project specific customisations on the product (e.g. Bolt-on built on top of an ERP product, developed specifically for the department)
- Obtaining the IPR by assignment allows the department to share / extend the application to other departments / agencies

# Transfer of Rights

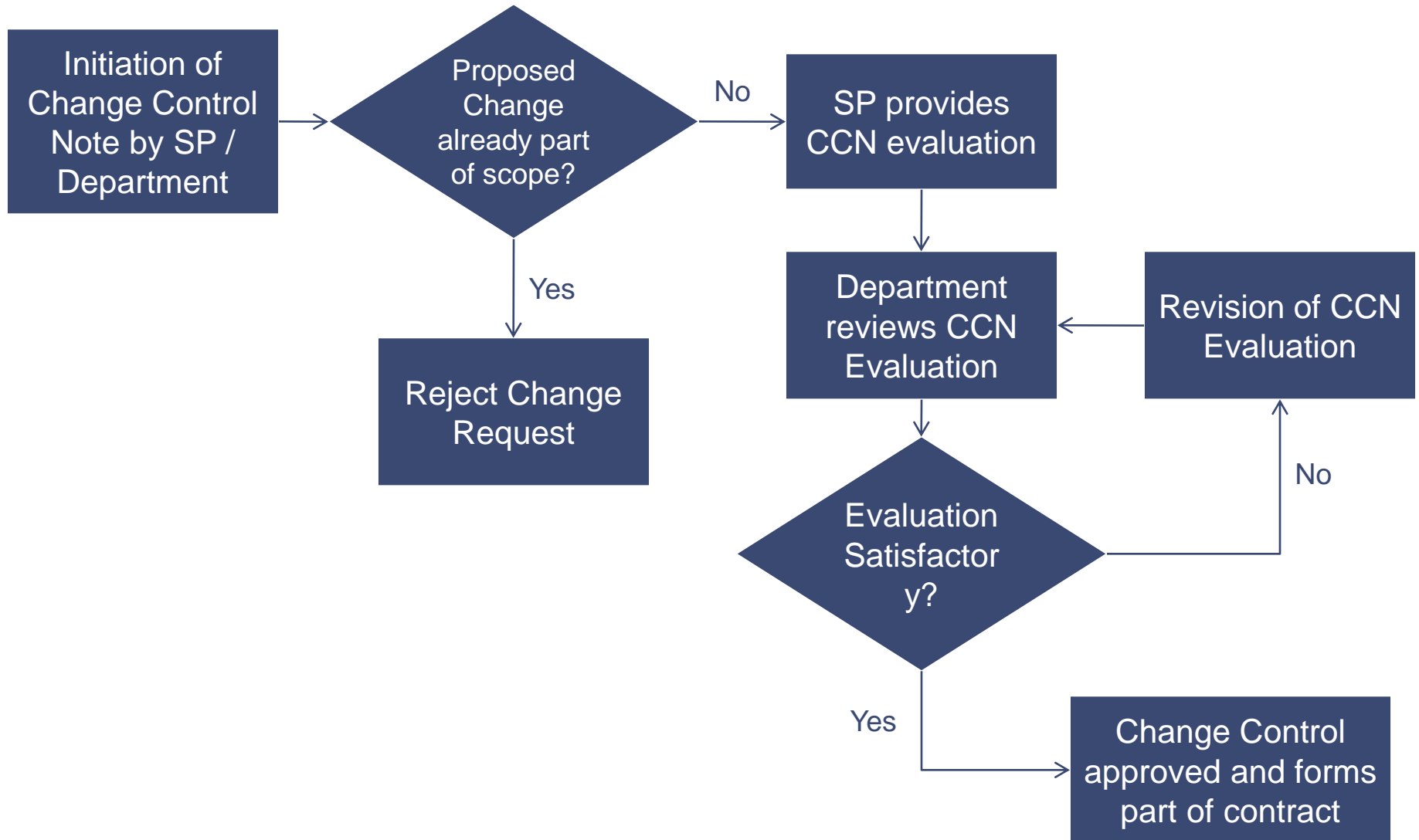
- Certain rights on the deliverables of the Software Development project may not automatically vest with the Government, unless explicitly assigned in Contract
- A transfer of any or all rights under copyright must be in writing and signed by the owner of the rights conveyed (or the owner's duly authorized agent)
- The writing should describe the nature of the rights conveyed.
- The contract should specifically provide information about the rights for retaining the work, especially with regard to exploitation of the work in new media or technological formats developed in the future.
- The transfer of rights allow the owner to re-sell the products/ software to others (e.g. Software developed by a state government department for Scheme monitoring of a Central scheme, can be shared with other states rolling out the same scheme)



# Change Control Management

- In any Software development project, it is inevitable that changes will be required, from the original specifications. For a project of any complexity, the software will rarely be implemented as originally specified
- Change Control is the mechanism for parties to agree scope and cost implications of a particular change (whether amendment to the MSA / Service Level Agreements or service change)
- Some of the reasons which result in Change Control being necessitated:
  - Changes in processes / addition of a new process
  - Scope expanded to include additional functionalities
  - New services introduced by department
- The change control procedure should be detailed in the contract and should set out the steps of suggesting, documenting, pricing and implementing variations

# Change Control Management – Process Flow



# Initiating the Change Control - Change Control Note

- Change Control Note should include the details of the proposed change and appropriate details / specifications
- The initiator of the Change Control Note should provide sufficient justification that the Change requested is beyond the existing scope of work
- Once the Change Control is accepted, the SP is requested to provide an evaluation of the Change Control Note
- The Change Control Note evaluation shall include the estimates of the proposed change and the implementation timelines for the change control
- The estimates in the evaluation should be based on the unit rates quoted by the bidder in his original commercial bid
- The department reviews the Change Control evaluation, and approves it after discussion with the SP. Once approved, the Change Control becomes part of the Contract

# Change Control Note Evaluation

The Change Control Evaluation should at the minimum contain the following:

- Detailed description of the change;
- A list of deliverables required for implementing the change;
- A timetable for implementation;
- An estimate of any proposed change, including detailed costing;
- Any relevant acceptance criteria;
- An assessment of the value of the proposed change;
- Material evidence to prove that the proposed change is not already covered within the scope of the project, SLAs, or MSA.

# Transition Management

- Transition management should provide for a seamless implementation and transition between the service providers with minimal disruption to the project
- Transition occurs in following cases:
  - Different vendors for Software development and Operations & Maintenance
  - Selection of new SP for O&M at end of contract period
  - Termination of Contract
- The clause on transition management should include the transition plan which details procedures for transition of:
  - Tasks, Responsibilities and Resources
  - Timeframes for each task
  - Policies and procedures associated with the transition.
  - Proper documentation of project details

# Exit Management

- This clause sets out the provisions which will apply on expiry or termination of the “Contract Agreement”, the “Project Implementation, Operation and Management SLA (Service Level Agreement)” and “SOW (Scope of Work)”
- The Exit Management Schedule details the following:
  - Cooperation and provision of information by the SP
  - Handing over confidential information and data of the project to the department
  - Transfer of project assets
  - Transfer of Certain Agreements
  - Transfer Costs on transfer of project assets to the department
  - General Obligations of the SP
  - Exit Management Plan

Clauses in the Schedule will vary according to project type

# Why is Exit Management important?

- Smooth transition should be ensured at contract expiry, to a new Operations & Management vendor (or in some cases, internal IT team of department)
- If exit management is not properly planned, high termination costs might arise. These costs may be due to:
  - Intellectual Property Rights not transferred to the department
  - Assistance from incumbent vendor to transition to third party not provisioned in the Contract
  - No provisions in the Contract to calculate residual value of equipment and other assets
  - Transfer of Assets or any remaining payables (e.g. lease payments)
- All these can be eliminated by having a well designed exit management clause in the Contract

More applicable  
in PPP, IT  
Infrastructure  
projects

# Knowledge Transfer at Exit Management

- Exit Management period usually starts before the contract expiry (e.g. 6 months prior to expiry) and extends till contract expiry of contract
  - During the exit management period, the SP shall transfer the appropriate project information and know-how to the department and / or replacement SP to the extent required for continuation of the project
  - All confidential information of the project which the SP was given access to shall be handed back to the department
  - Making SP resources available to transfer project knowledge to department / replacement SP
  - Clauses to facilitate department / replacement SP to hire the resources of the SP as reasonably required for project continuation (non applicability of Transfer Regulations)



# Acceptance Testing, Audit & Certification of Projects

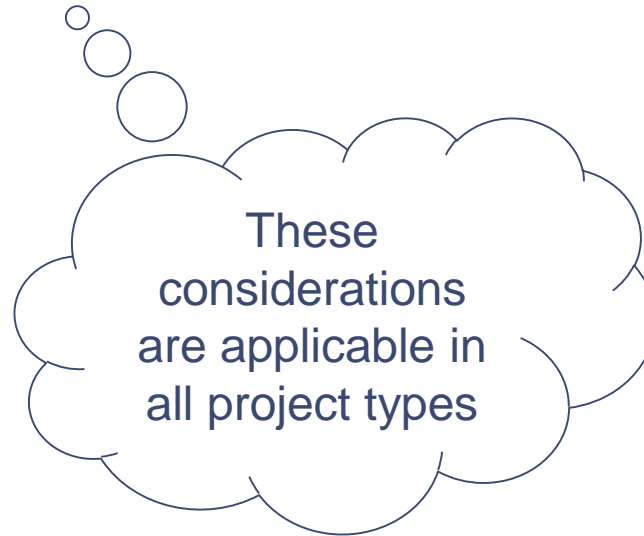
- The primary goal of Acceptance Testing, Audit & Certification is to ensure that the proposed system meets requirements, standards, and specifications as required by the client and as needed to achieve the desired outcomes
- The contract clause should clearly specify the scope of acceptance testing, the testing schedule, evaluation criteria and the threshold limit for service levels
- A Third party audit may be carried out to ensure compliance to the requirements set out by the department:
  - Concurrent audit – Audit carried out in parallel with design, development and implementation to certify deliverables at each stage
  - Certification audit – Audit carried out once the Software is fully developed and ready for deployment

# Scope of Audit in Software Development projects

- To audit and certify that the software developed is as per the original functional and technical requirements:
  - Functional Requirements compliance
  - Interoperability and adherence to standards
  - Meeting of Service Levels
  - Controls review
  - Accuracy
- To audit Quality as per ISO 9126
  - Data Integrity
  - Efficiency/ Performance
  - Usability
- To audit Security compliance as per BS 7799/ ISO 17799

# Information Security Liability

- Information System Security (ISS) is protection of the integrity, availability, and confidentiality of automated information and the resources
- The contract clause should include, security measures and program safeguards to ensure that the information system resources developed, acquired, operated, maintained, and/or used by contractor and subcontractor personnel
- These requirements are specified in the Information Systems Security Plan



# Information System Security Plan

- Information System Security plan should include:
  - Protection from unauthorized access, alteration, disclosure, or misuse of information processed, stored, or transmitted;
  - Continuity of information systems (IS) support for programs and functions;
  - Management, operational, and technical controls to provide assurance of the systems' confidentiality, integrity, and availability;
  - Appropriate technical, personnel, administrative, environmental, and access safeguards;
  - A virus protection program for all IS resources under their control;
  - A network intrusion detection and prevention program for all IS resources under their control
  - A continuity of operations plan in the event of a major system failure or disaster.

# Post Implementation Support

- The contract should have special mention of the clause for duration of support from the service provider/ OEM for the implemented IT solution.
- The clause should clearly specify:
  - ✓ Time duration for which the support will be required.
  - ✓ Type of support required
  - ✓ Support required for complete solution/ particular modules
- Inclusion of this clause would enable optimization of time, effort and financial investment from the government and service provider. The service provider can also scope in and tender appropriate cost for the support required.

# Other considerations for Software development contracts

- **Documentation:** Contract to ensure that project documentation is updated by SP at specified intervals and latest documentation to be maintained with the department
- **AMC for system software:** In case of third party system software (Database Servers, Operating Systems), the SP should have AMC arrangements with the OEM for the contract period.
- **Licensing Policies and Upgrades:** The Licenses to the System Software and other licensed products should be obtained in the name of the department. Any upgrades updating of patches / service packs / fixes from product vendors should be provisioned to be provided free of cost by the SP

# IT Infrastructure projects – Contract Considerations

Transfer of Rights

Warranty Terms

Transition Management

Ensuring updated documentation

Acceptance Testing

Licensing Policy and upgrades

Exit Management

Insurance

Procurement of items over and above Contract quantity

Spares and Replacement SLAs

Ensuring that product is not at end of life

Support hours, Consumables etc

# Warranty Terms for IT Infrastructure

- Warranty ensures sustainability and assurance or guarantee by a service provider/ OEM to the client.
- The Warranty clause should detail the following:
  - Warranty period (subject to the warranty period provided by the OEM)
  - Date of commencement and commissioning
  - Type of warranty (Express / Implied / Disclaiming)
  - Warranty coverage
  - Cost arrangements
- The contract clause should clearly specify the kind of arrangements that the service provider should have with the product supplier / manufacturer (Tripartite / Back to back arrangement)



# Audit and Certification of IT Infrastructure

- To audit IT infrastructure deployed is as per the specifications provided in the Request for Proposal
- To audit Quality as per ISO 9126
  - Reliability
  - Availability
  - Efficiency/ Performance
  - Usability
- To audit Security compliance as per BS 7799 / ISO 17799

# Exit Management Clauses for IT Infrastructure projects

- Exit Management is applicable when the O&M contract ends and the IT Infrastructure is handed over to the department
- The Exit Management clauses should take into account the following considerations:
  - Transfer of Assets
  - Inventory / Stock management and transfer
  - Condition of assets
  - Transfer of project related agreements
  - Documentation relating to IT infrastructure supply and installation
  - Terms of payment / penalties, during exit
  - Legal terms for exit
  - Calculation of true value of assets

# Transfer of Assets and Certain Agreements on Exit

- Transfer of Assets:
  - Project assets including Hardware, Software, Documentation and any other infrastructure to be renewed and cured of any defects and handed over to the department
  - Basis of calculation of depreciated value of project assets (IT Infrastructure) to be specified in the Exit Management clause
  - Applicable transfer cost and stamp duty on transfer of project assets to be borne by the SP (except in case of termination due to department's default)
- Transfer of Certain Agreements
  - Shifting of assignments, transfers, licenses and sub-licenses related to any equipment lease, maintenance or service provision agreement between SP and any third party to department / new SP appointed by the department

# Variation of Quantities

- The contract clause should clearly specify the procedure for procurement of additional items beyond quantity specified in the scope of the tender document.
- Variation is usually dictated by the regulations which govern public procurement (GFR / Procurement Law / Manuals):
  - e.g. KTTP Act in Karnataka, allows for variation of quantities, 25% above or below the RFP quantity. Procurement above 25% should be through a fresh tender process
- In case of staggered procurement (delivery staggered over project duration), quantities in each lot to be clearly specified
- The clause should also include the process of payment to the supplier during the procurement of additional items.

# Scope of Consumables

- The contract should clearly specify the scope of supply and usage of consumables.
- The clause should include:
  - The supplier of consumables (client or service provider)
  - Usage capacity or limit for consumables
  - Types of consumables required (supply of consumables by service provider)
  - Quantity of consumables required (supply of consumables by service provider)
  - Geographic scope for the supply of consumables
  - Inventory/ Stock control of consumables



Also  
applicable in  
PPP / Service  
Delivery

# Other Considerations for IT Infrastructure Contracts

- **End of Life:** Clauses to ensure that the IT Infrastructure components are not in the end of their product lifecycle and support is assured during contract period
- **Documentation:** Ensuring that up to date documentation is available with the department
- **Insurance:** Cost of insurance for components to be borne by SP
- **Spares and Replacements SLA:** SLA clauses to address quick delivery of spares and fixing of defects in the IT Infrastructure
- **Hours of Support:** Working hours for the support staff for IT Infrastructure maintenance

# Service Delivery projects – Contract Considerations

Transfer of Assets (Centre / Infrastructure)

Ownership of assets

Usage of government facilities for non government transactions

Addition / Deletion of Services

Exit / Transition Management

Funds Management

Insurance

Liability and Responsibility in fraudulent transactions

Approach to add new service delivery channel

Working Hours

# Service Delivery projects – Key Contract Considerations

- **Transfer of Assets:** Contract to provide clarity on ownership and transfer of assets created for the project (service delivery centers, related infrastructure etc..)
- **Usage of government facilities for non government transactions:**
  - Contract to clarify whether any non-government services can be delivered through the service delivery channels (for increasing project viability e.g. payment of mobile bills for private operators through CSCs)..
  - If yes, approach for addition/deletion of such services
  - Revenue sharing (if needed)
  - Avoiding conflict of priority between government and private services



# Service Delivery projects – Key Contract Considerations

- **Funds management:**
  - Remittance and accounting procedures for collection of payments and taxes
  - Tim lines of remittance
  - Payment of transaction fees (deduction at source by vendor or payment based on quality of services??)...
- **Hours of operations:** Working hours for service centers or call centres, support needed for online service delivery channels..
- **Liability and responsibility of Service Provider in case of fraudulent transactions:**
  - Liability to be with the SP in cases of claims / damages against the department in case of fraudulent transactions
  - SP to arrange for insurance coverage, at its expense, for cases of third party claims

# PPP projects – Contract Considerations

Strategic Control

Liability and Responsibility in fraudulent transactions

Usage of government facilities for non government transactions

Ownership of assets

Exit / Transition Management

Funds Management

Revenue Sharing Model

Cap on Revenue for SP

Approach to add new service delivery channel

Working Hours

# PPP Project Considerations

- **Revenue Sharing Model:**

- How will revenues from the project be shared between the Government and the Service Provider?
- What are the safeguards in place to prevent excess payout from government, in case transactions are much higher than projected numbers (transaction fee based model with cap, sliding scale etc)
- What safeguards are the vendor provided in cases of projected transactions not materializing (upfront payment for certain components e.g. IT Infrastructure)

- **Addition / Deletion of new Services / Service Delivery Channel:**

- In case of addition / deletion of new Services / Service Delivery Channels, the modality of revenue sharing, renegotiation of transaction fee for other services etc should be addressed
- Interests of department and the SP to be taken into account in designing the modalities (deletion may result in lower payout to SP, addition may result in higher payout)

# Strategic Control

- Most Government Projects are highly sensitive as they deal with issuance / provision of statutory documents and services to the citizens in a secure and reliable environment
  - e.g. Issuance of Driving License, Issuance of Certificate of Registration
- Government's strategic control over such systems should be maintained in the case of a PPP arrangement, to ensure:
  - That the application system has been designed, developed and maintained in exact **conformance to the rules and regulations** in force.
  - That any **changes to the application system** are made under due authority of Government
  - That the **database** is administered with utmost care and caution
  - That the **security of the database and application systems** is of the highest order following international standards and
  - That the application and the database are **owned by Government**

# Contract Finalization and Signing

- Contract is signed between the successful bidder and the department, on the bidder's fulfilment of conditions precedent:
  - Furnishing of Performance Bank Guarantee
  - Furnishing of other documentary evidence as set out in the RFP
- The Contract shall include the MSA with all its schedules, together with the RFP Volumes (and any amendments thereof) and the Technical and Commercial Proposals submitted by the bidder
- The Draft MSA provided in Volume III of the RFP forms the basis of the Contract. Any clarifications / queries regarding the MSA should be raised by the bidders at the pre-bid meeting, and no further material change should be entertained.
- The specifics MSA (e.g. Program Governance structures) may be refined upon negotiation by the department and successful bidder

# Contract Execution

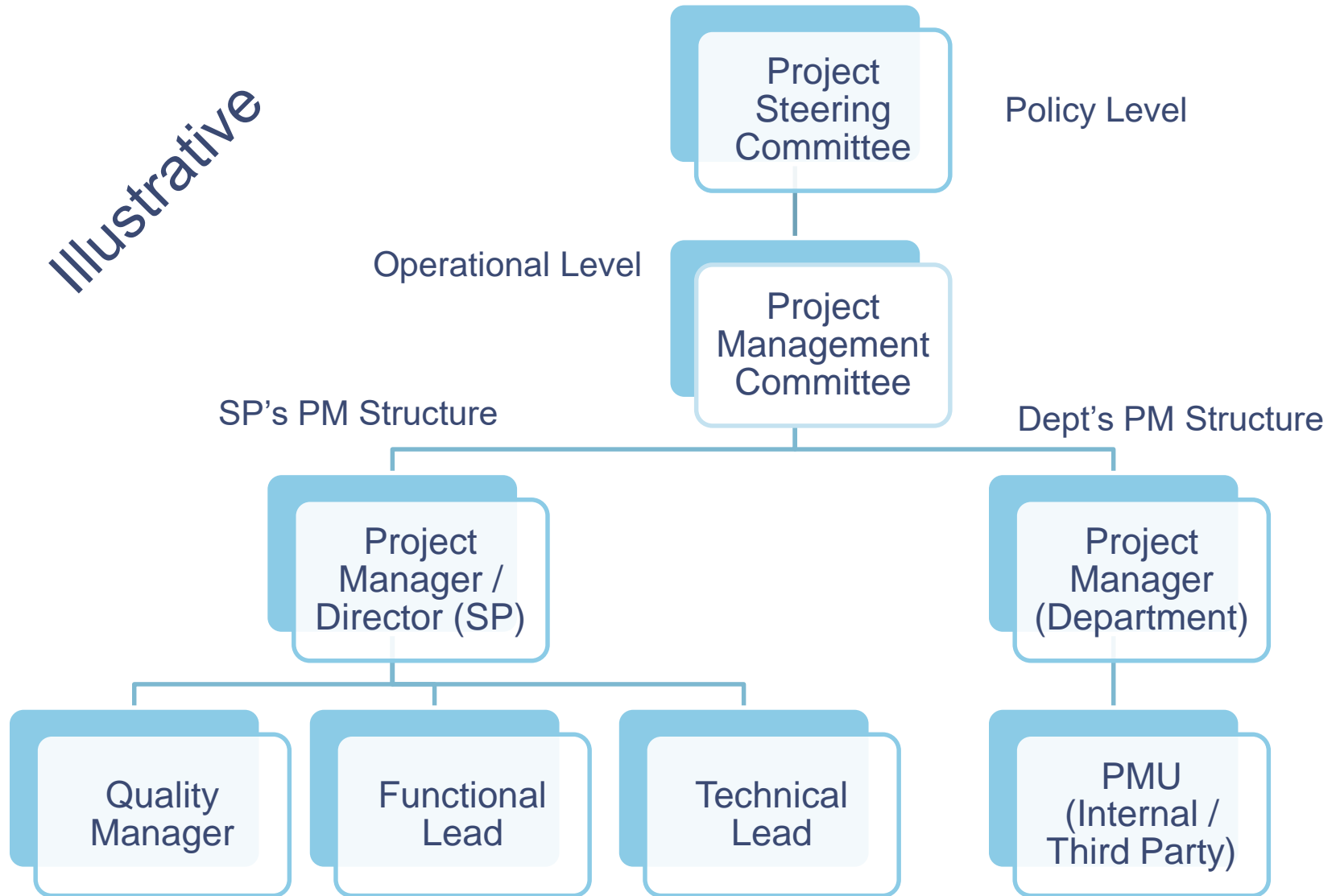
- The steps involved in Contract Execution include the following:
  - Setting up of Project Governance Structures
  - Project Kick-off (Handing over of project facilities and assets to the vendor as provisioned in the Contract)
  - Software development / Customization and deployment
  - Deployment of IT Infrastructure
  - Third Party Audit & User Acceptance
  - Contract Monitoring / SLA Management
  - Exit / Transition Management at the end of Contract

# Program Governance Structures

- The Program Governance Structures Schedule is part of the contract to:
  - Establish and maintain the formal and informal processes for managing the relationship between the Department and the SP
  - Define the principles that both Parties wish to follow to ensure the delivery of the Services
  - Ensure the continued alignment of the interests of the Parties;
  - Ensure that the relationship is maintained at the correct level within each Party
  - Create the flexibility to revise and maintain the relationship and this Agreement during the Term
  - Set out the procedure for escalating disagreements
  - Enable contract administration and performance management

# Typical Program Governance Structure

Illustrative





# Program Governance Structures

- The **Project Managers / Directors** from SP and Department will provide the interface between the executive management of the respective Parties, and will be the single point contacts of their Organization
- The **Project Management Committee** will have representatives of both the SP and the Department and will act as the oversight committee and first level of dispute settlement for the project
- Project Management Committee to meet periodically to review project progress and take corrective measures
- **Steering Committee** set up at the highest level, will provide policy support and bureaucratic and political leadership to the project
- **Program Management Unit (PMU)** – set up internally at the department or a neutral third party - will monitor the project on a day to day basis

# Components of Project Management

Integration  
Management

Scope  
Management

Time  
Management

Cost  
Management

Quality  
Management

HR  
Management

Communications  
Management

Risk  
Management

Procurement  
Management

# Issues in Project Management

## Integration Management

Lack of Team Spirit  
No e-Champion

## Scope Management

Scope is not precise  
Scope Creeps

## Time Management

Delay in decisions  
Delay in sign offs

## Cost Management

No Flexibility  
Delays in Payments

## Quality Management

Lack of skills  
Lack of institutional approach to QM

## HR Management

Turnover of key people  
Lack of PM skills

## Communications Management

Too many meetings  
Too few decisions

## Risk Management

Risk aversion  
One sided contracts

## Procurement Management

Vagueness in requirement specification

# Mitigation of Project Management Issues

- Having Empowered Structures in place
  - Empowered / Steering Committee for Major Decisions
  - Project Implementation Committee for operational decisions
- Ensuring all skills required for Project Management are in place
  - Partial outsourcing of PM activities (e.g. Technology Manager, SLA Monitoring)
  - Select a Professional Organization as PMU
- Capacity Building in PM skills within the department
  - Institutional Capacity
  - Identifying and grooming e-Champions
  - 'Creating' CIO & CTO
  - Sponsoring Key people for PMI / PMP Certification

End of Session