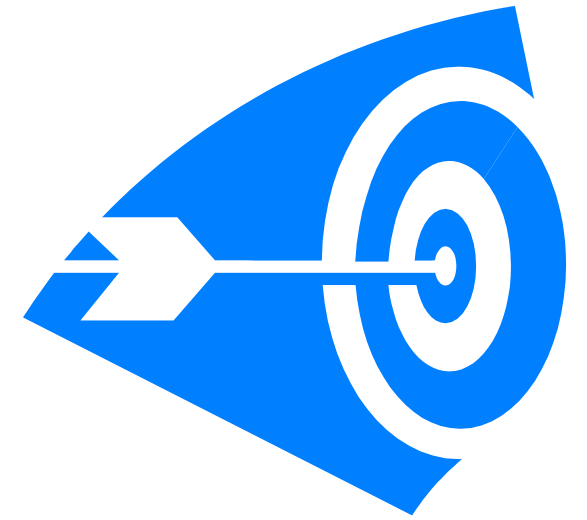


Course: DPR Preparation

Day 2

Implementation Strategy and Governance Structures

Agenda



- Relevance of Implementation Strategy for DPR
- Single Vendor vs. Multiple Vendors
- Big Bang vs. Phased Implementation
- Typical Implementation Challenges
- Governance Mechanism

Relevance of Implementation Strategy for DPR

- The pace of software implementation is a key determinant of project costing
 - Cost of implementation would vary if the project is to be implemented in 3 years as against 5 years
- Team size taken into consideration for costing will directly impact the project costing
- Business model adopted influences the cost items to be budgeted
 - (e.g.) In case of PPP model, transaction revenues earned from the project will pay for many expense categories
- Decision makers are keen to know the duration by which the project will get implemented
 - Timeline section in DPR should indicate the duration by which usage of the envisaged system will be effected

An Illustration

Key underlying assumptions

- Software developed in-house
- Bulk of the software development will be completed in 18 months
 - This explains reduction in the development team from the 4th Semester and onwards
- PMU established in-house
- User departments to be brought into the system in a phased manner over a period of 3 years
 - This explains gradual increase in size of PMU team
- System will be used by district administration from the 3rd semester and onwards
 - Hand-holding support increases from 2 to 9 members from then

An Illustration: Sample Sizing

Software Development Unit Requirements						
S.no.	Designation	Staffing Requirements Semester-Wise				
		First	Second	Third	Fourth	Fifth
1	Architect	1	0	0	0	0
2	Team Lead	1	1	1	1	1
3	Module Lead / Senior Developer	2	2	2	1	1
4	Developer	8	10	10	8	5
5	Testing leads	1	1	1	0	0
6	Testers	2	2	2	1	1
7	Document writers	1	1	1	1	1
8	Application and OS administrators	1	1	1	1	1
9	Database administrators	0	0	0	1	1
Total		17	18	18	14	11

PMU Costing						
S.no.	Designation	Staffing Requirements Semester-Wise				
		First	Second	Third	Fourth	Fifth
1	Head of PMU	1	1	1	1	1
2	Technical & Operations Director	1	1	1	1	1
3	Business Analysts	2	2	2	2	1
4	User Administrator	1	1	1	1	1
5	Training Specialist	1	1	1	1	1
6	Trainer	1	2	2	2	2
7	Hand-holding Specialist	2	2	9	9	9
8	Help desk staff	1	1	2	2	2
9	Accounts and admin Specialist	1	1	1	1	1
10	Accountant	0	0	1	2	2
11	Grievance Handling Specialist	0	0	1	1	1
12	Bonus to Govt. staff	0	0	0	0	0
Total		11	12	22	23	22

Single Vendor vs. Multiple Vendors

- Decision on whether to go for a single vendor or multiple vendors is impacted by:
 - Pressure on the government agency to show results within short time span
 - Availability of capable bidders in the market to address varied set of requirements (e.g. software development, training, call center, data center management etc.)
 - In-house capabilities of the government agency
 - Amenability of the requirements to be consolidated into the work of a single vendor
 - e.g. whether or not to combine the selection of 3rd party audit agency within the broader scope of a single vendor selected

Single Vendor vs. Multiple Vendors

Advantages of going with a Single Vendor

- Acts as a single point of contact for the Government
- One single agency responsible for meeting the prescribed service levels
- Procurement of multiple cost items required for service delivery will be done by the single vendor selected
- Contract administration is simpler
 - Consolidated bill submission and bill processing
- Government need not get into the workings of service delivery (e.g.)
 - Vendor has to enhance the hardware in case of performance problems
- Coordination amongst the different service providers is the vendors responsibility (e.g.)
 - Making the help desk and software development team work together
 - Coordination between the software development team and database service provider

Single Vendor vs. Multiple Vendors

Dis-advantages of going with a Single Vendor

- It takes significant time and effort to detail the entire project's requirements
- Selecting one single vendor is tantamount to putting all eggs in one basket
 - The entire project will be at risk when an unqualified System Integrator (SI) or if the SI quotes low rates and is found incapable of project delivery
- The single vendor will tend to take time to set-up and operationalize the project
- RFP preparation, vendor selection and project implementation tends to happen sequentially causing the project delivery to get delayed
- It will take some time before usage of the system beings (i.e.) to see fruits of the envisaged project
- Project owners need to have patience and should do as much due diligence as possible upfront

Single Vendor vs. Multiple Vendors

Advantages of going with multiple vendors

- Requirements for a part of the project can be drafted relatively fast and vendor for that part of the project can be selected on priority
 - Thus, Government can show results relatively faster when compared with going with a single vendor
- Direct engagement of specialist agencies
- Government has direct contract with agencies delivering the services
- Risk of project implementation diversified amongst multiple vendors
- Government can express its preferences for the many works, goods and services procured
 - In case of a single vendor, it is for the vendor to decide the best combination required to meet the service levels

Single Vendor vs. Multiple Vendors

Dis-advantages of going with multiple vendors

- Government needs to have strong in-house capabilities to liaison and coordinate the work undertaken by many different vendors
- Lack of coordination amongst vendors may increase the overall cost of the project
- “It is not my mistake” is a difficult response to resolve
 - Sub-standard service delivery may result due to this
- Government agency may have to issue multiple change orders to make the vendors work together in an optimized manner
 - Reasoning the issuance of change orders is a challenge
- Transitioned in and transitioned out of multiple vendors will be a major challenge
- Administration of multiple contracts (i.e.) SLA’s, payments will increase the administrative burden on Government

Single Vendor vs. Multiple Vendors

Examples

- Single Vendor
 - Typical System Integration deals such as MCA 21, e-Passport and e-Procurement implementation, GoK
- Multiple vendor
 - Initial implementation by UIDAI is a classical example. Separate tenders were issued for:
 - Software development
 - Call center
 - Data center
 - Servers and storage
 - Training etc.
 - Now, the Managed Service Provider (MSP) has to transition from all the different vendors

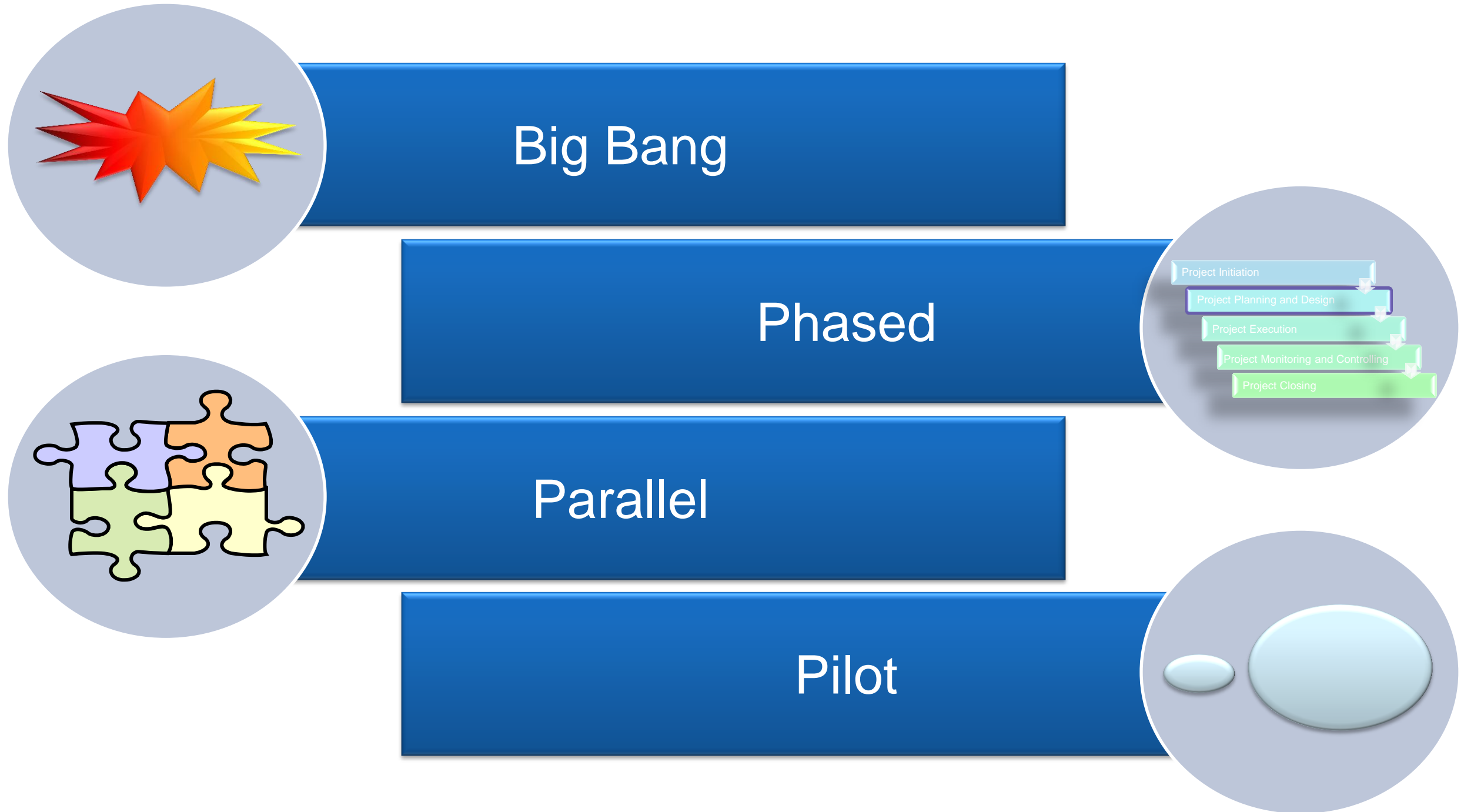
Typical Implementation Challenges

- Contract signing tends to be long drawn process
- Implementation agency tends to take time to identify and deploy people on-site to start the project implementation
- PMU structure often tends to be weak and in formative stages early in the project
- Getting the teams in place and to get going on the actual work takes time
- Consultancy documents tend to be at a high level
 - Implementation requires much more detailed documentation

Typical Implementation Challenges

- Resistance from end users is to be expected
- Requirements tend to flow in thick and fast post go-live of the system
 - Based on implementation experiences
- System will invariably throw errors in early stages of the project
 - Especially so in case of custom developed software
- Decision making by the various committees constituted by the Government
 - Project implementation will be governed by these decisions taken

Project Implementation Approach – Various Options



Project Implementation Approach – Various Options

The four most widely discussed implementation models are:

- **Big Bang** – The e-Governance project is launched across the locations for all the functions at the same time. All users move to the new system on a given date.
- **Phased rollout** - Changeover occurs in phases over an extended period of time. Users move onto new system in a phased manner.
- **Parallel adoption** - Both the legacy and new system run at the same time. Users learn the new system while working on the old.
- **Pilot and rollout** – A small (sample) part of the project is implemented for testing purposes before the complete project rollout is done.

Big Bang vs. Phased Implementation

- Big Bang

- Rolling out the system amongst all users at once
- Not the most suited method to handle initial teething problems
- May be adopted for small scale implementation
- Not recommended for large scale implementations

- Phased Implementation

- Better to go for a pilot implementation with a limited set of users
- Make necessary corrections based on Go-live experiences
- Gradually roll out the system across the entire spectrum
- Conduct training and conduct change management activities through out the project

Governance Mechanisms

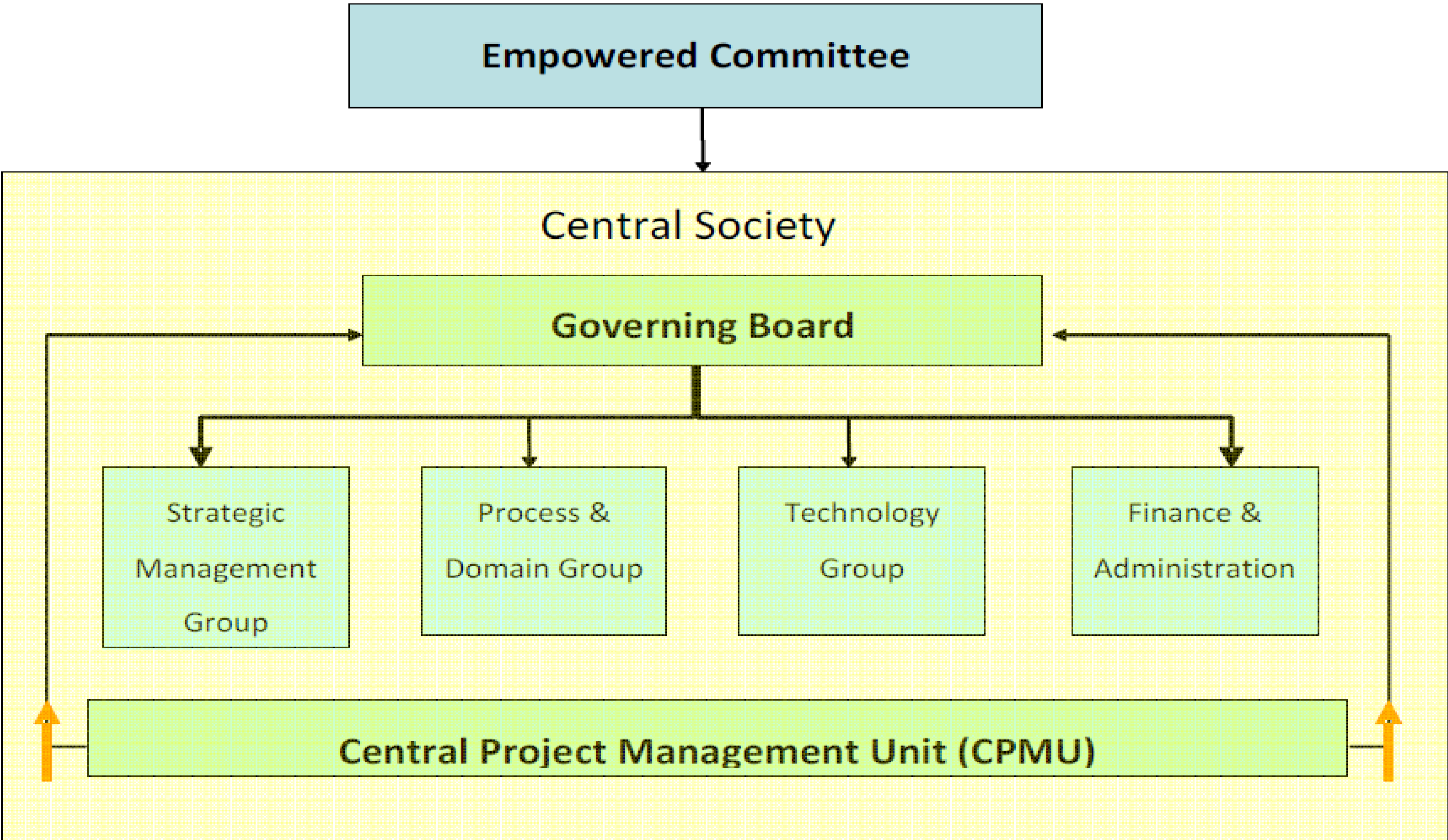
Governance Mechanism

- Key stakeholders in the project are engaged in decision making through a committee
- Large projects tend to have multiple committees
- Roles and responsibilities of the committees have to be drafted early during project conceptualization
- Typically, there is one over-arching committee such as the Steering Committee / Empowered Committee / High powered committee
 - For taking strategic decisions
 - Such committees typically have Secretaries and Principal Secretaries as members
- There could be one or more committees beneath the Steering Committee such as Project Implementation Committee, Working Group etc.
 - For taking tactical and operational decisions
 - Such committees typically have domain experts as its members

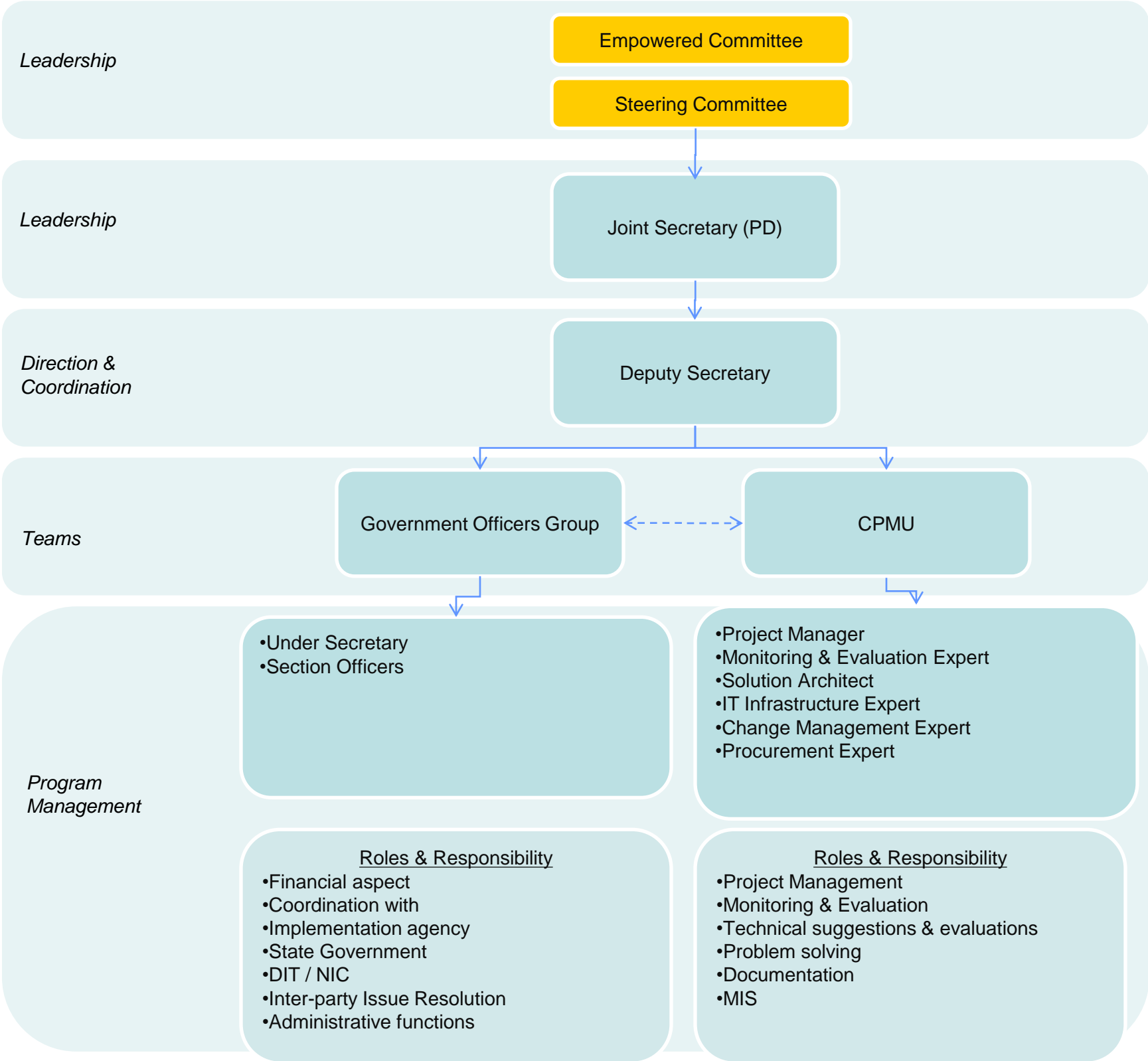
Governance Mechanism

- A Project Management Unit (PMU) is typically constituted to manage the project on a day to day basis
 - The PMU identifies the decision areas, prepares agenda notes, explains the subjects in detail, documents the decisions taken
 - PMU does (among other things)
 - Preparation of Request for Proposal (RFP) for vendor selection
 - Processes payments due to the vendors and
 - SLA administration and other aspects of contract management
 - Organizes training of end users
 - Publicity and awareness creation

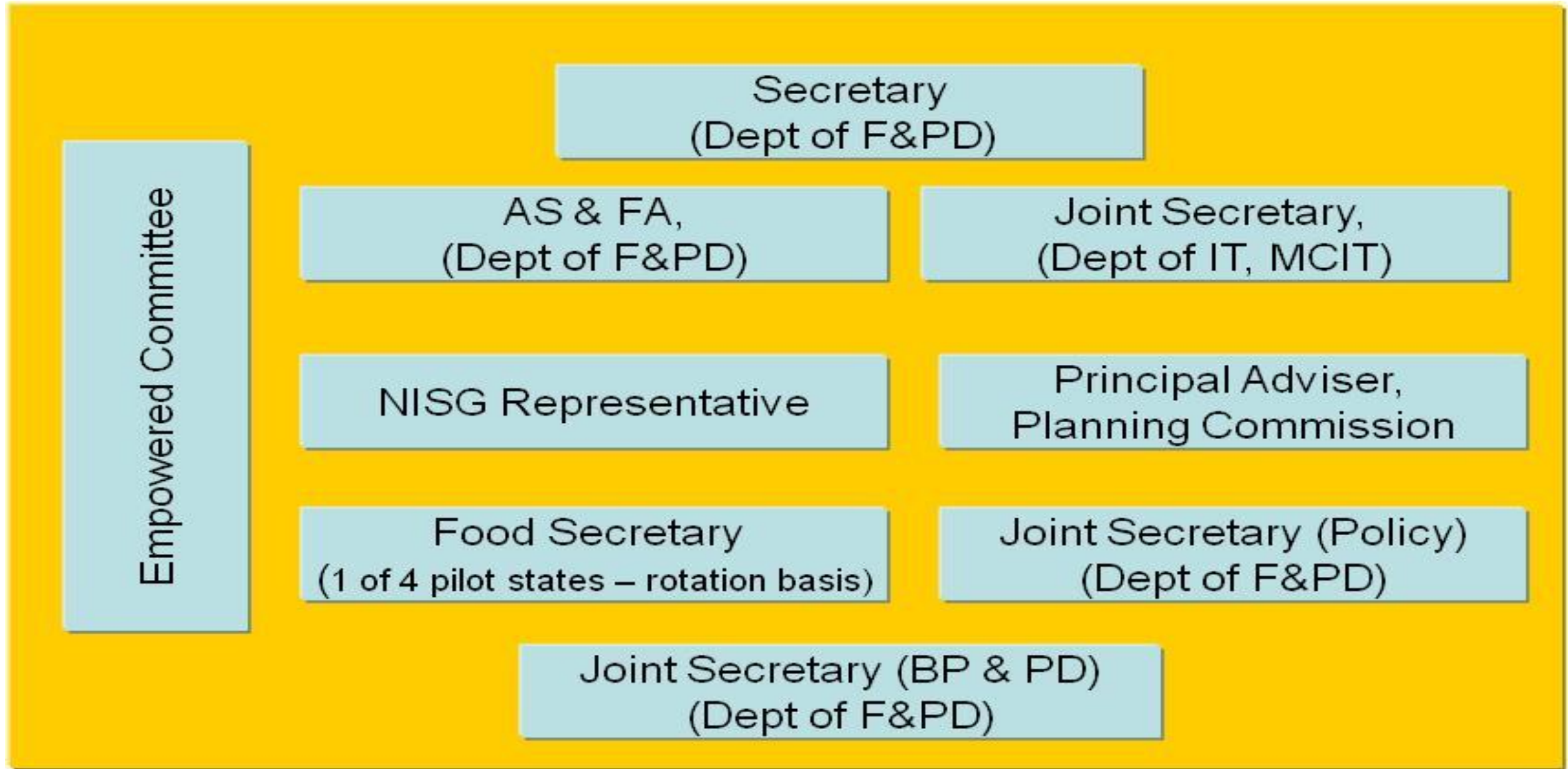
Governance Mechanism – Sample



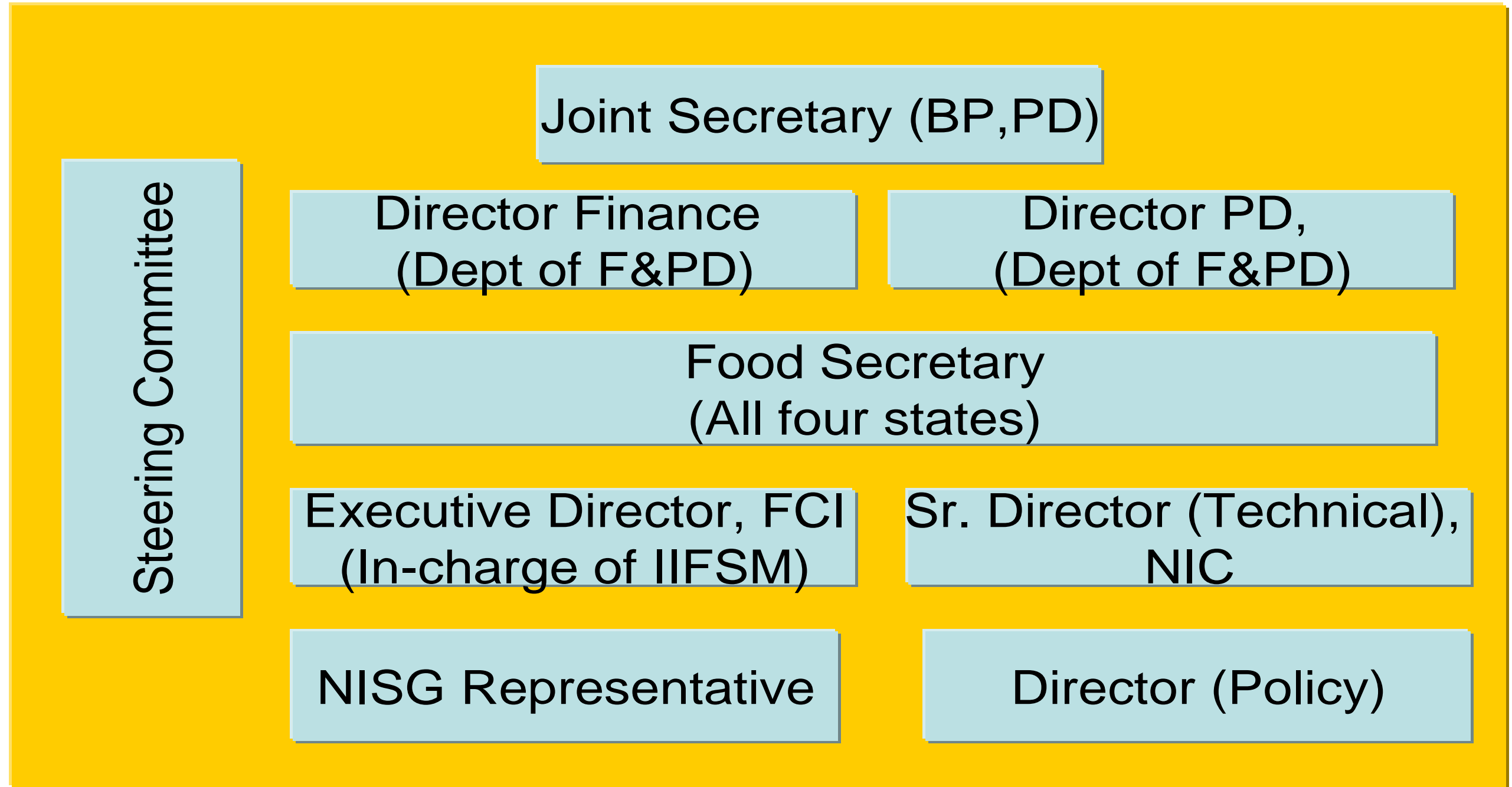
Governance Structure



Empowered Committee Sample



Steering Committee Sample



End of Session