



सत्यमेव जयते

Ministry of Urban Development
Government of India



PPP and Procurement Training Workshop for Top 33 Smart Cities

Overview of Contract Management Practices

Global Procurement Consultants Limited

Day 2: Session 2

National, State, City Level

MONITORING ARRANGEMENTS



Smart Cities Mission Monitoring

- National level
 - Apex Committee (AC) headed by Secretary, MOUD
 - National Mission Directorate (headed by National Mission Director, not below the rank of Joint Secretary to GOI)
- State level -State level High Powered Steering Committee (HPSC) - chaired by the Chief Secretary
- City Level - CEO of the SPV is convener of the Smart City Forum.



Works/ EPC Turnkey and Consultancy Contracts

CONTRACT MANAGEMENT



Contract Management of Works/EPC Turnkey and Consultancy Contracts

A Contract is an agreement between two or more parties whereby each party promises to do, or not to do, something: a transaction involving two or more individuals, whereby each has reciprocal rights to demand performance of what is promised and enforceable by Law with remedial rights for non-performance.

(Modified definition taken from Page 123 of Friedman, Jack P., Dictionary of Business Terms)



Contract Management of Works/EPC Turnkey and Consultancy Contracts

- **FORM:** In Writing or Not?
- **FORMATION:** When does an Agreement become binding?

“A Contract comes into being when parties have reached agreement on all essential points in the form required by the applicable law.”

- Each Contract is unique and all parties must agree.
- Prepare in line with the applicable law and avoid Confusion and legal gaps (MDB’s Sample Bidding Documents).
- Make sure you know your contract.



Contract Management of Works/EPC Turnkey and Consultancy Contracts

Whose Function and the Actors?

- Essentially a function to be performed by the **Employer or Buyer or Purchaser (interchangeably used in the viewgraphs)** who issues the contract for the procurement of Works / EPC turnkey / Consultancy contracts.
- Four Main Actors are: The Buyer, the Buyer's Representative, the Contractor / Consultant / Service Provider and its Representative.



Contract Management of Works/EPC Turnkey and Consultancy Contracts

“CONTRACT FORMAT”

- ❖ Contract Agreement Form (Refers to all documents which form the contract).
- ❖ Relevant Price Schedules
- ❖ Relevant Schedules of Requirements and Distribution List
- ❖ Relevant technical Specification, Standards and Drawings
- ❖ The rights and obligations of the Purchaser and of the Contractor or Supplier; and functions and authority of the Engineer or Architect or Inspector or Supervisor.
- ❖ General Conditions of Contract
- ❖ Special Conditions of Contract
- ❖ Purchaser’s Notification of Award and all Addendums



Contract Management of Works/EPC Turnkey and Consultancy Contracts

Commencement of Tasks / Works

Commencement date shall be when following precedent conditions have all been fulfilled and Employer's instruction to commence work has been received by Contractor.

- Signature of the contract agreement by Parties upon submission of performance security if any.
- Possession of site or access / office given to contractor / consultant with such permissions (compliance with laws).
- Receipt of advance payment by the contractor / consultant (bank guarantee delivered!)
- Any other conditions if any as per agreement such as removal of utilities (Employers Responsibilities).



Contract Management of Works/EPC Turnkey

Some Important conditions of contract

- ❖ Force Majeure, Limitations of Liability
- ❖ Warranty / DLP, Insurance
- ❖ Dispute Resolution
- ❖ Time Control – Program , management meetings and early warning signals.
- ❖ Identifying Defects , Changes in Quantities or Variations
- ❖ Payment Certificates
- ❖ Compensation Events
- ❖ Price Adjustment Procedure
- ❖ Retention Money, Advance Payment and Liquidated Damages
- ❖ Subcontracting
- ❖ Termination



Contract Management of Works/EPC Turnkey and Consultancy Contracts

“FORCE MAJEURE”

- “Force Majeure” means an event or situation beyond the control of the Seller that is not foreseeable, is unavoidable, and its origin is not due to negligence or lack of care on the part of the Seller. Such events may include, but not be limited to, acts of the Employer in its sovereign capacity, wars or revolutions, fires, floods, epidemics, quarantine restrictions, and freight embargoes.
- If a Force Majeure situation arises, the Seller shall promptly notify the Employer in writing of such condition and the cause thereof but continue to work for performance not prevented by Force Majeure.
- The Seller shall not be liable for forfeiture of its Performance Security, LD or Termination for Default either for delay or other failures to perform due to Force Majeure.



Contract Management of Works/EPC Turnkey and Consultancy Contracts

Works / EPC Turnkey Contracts – Limitation of Liability

- The total liability of the Contractor to the Employer, under or in connection with the Contract **shall not exceed the sum resulting from the application of a multiplier (less or greater than one) to the Accepted Contract Amount, or (if such multiplier or other sum is not so stated), the Accepted Contract Amount.**
- This Sub-Clause shall not limit liability in any case of fraud, deliberate default or reckless misconduct by the defaulting Party.



Contract Management of Works/EPC Turnkey

EPC – Warranty / DLP

- The Supplier warrants that **Goods supplied under this Contract are new, unused, of the most recent or current models and incorporate all recent improvements and further** warrants that shall have **no defect arising from design, materials or workmanship** from any act /omission of Supplier.
- This warranty shall remain **valid for 12 months** after the Goods have been delivered to , **or for 18 months** after the date of shipment whichever period concludes earlier.
- Upon receipt of notice, the Supplier shall, within the period, repair or replace the defective Goods, without cost to the Purchaser. If the Supplier fails to remedy the defect(s) within period, the Purchaser may proceed for **remedial action, at the Supplier's risk and expense.**
- *The Defects Liability Period is usually limited to 12 months in case of Civil Works and procedure for rectification of defects is same as above.*



Contract Management of Works/EPC Turnkey

INSURANCE

- ✓ The Contractor shall provide, in the joint names of Employer and Contractor, insurance cover from the Start Date to end of the DL Period for following events (Contractor's risks):
 - (a) loss of or damage to the Works, Plant and Materials; (b) loss of or damage to Equipment; (c) loss of or damage of property (except the Works, Plant, Materials and Equipment) in connection with the Contract; and (d) personal injury or death.
- ✓ Insurance Policies and Certificates shall be delivered by Contractor to Engineer before Start and shall provide for compensation to be payable in types and proportions of currencies required to rectify loss or damage.
- ✓ If the Contractor does not provide, the Employer may effect insurance and recover the premiums the Employer has paid from payments due to Contractor. No changes without approval of Engineer.



Contract Management of Works/EPC Turnkey

DISPUTES RESOLUTION

- If the Contractor believes that a decision taken by Engineer was either outside the authority or that the decision was wrongly taken, the decision shall be referred to Adjudicator /DRB within 14 days of the notification of decision.
- The Adjudicator/DRB shall give decision in writing within 28 days.
- Either party may refer a decision of Adjudicator to an Arbitrator within 28 days of the Adjudicator's Or DRB's written decision.
- If Adjudicator resigns or dies, or Employer and Contractor agree that the Adjudicator / DRB is not fulfilling its functions, a new Adjudicator /DRB will be jointly appointed.
- In case of disagreement, within 30 days, the Adjudicator shall be designated by Appointing Authority upon request of either party, within 14 days of receipt of such request.
- The arbitration shall be conducted in accordance with the Arbitration and Conciliation Act, 1996.



Contract Management of Works/EPC Turnkey

TIME CONTROL - PROGRAM

- Contractor shall submit to Engineer for approval a Program including EMP + the general methods, arrangements, order, and timing for all activities + **monthly cash flow forecast.**
- Kick-off Meeting.
- An update periodically submitted shall show actual progress achieved on each activity and the effect of it on remaining work - changes to the sequence of the activities + updated cash flow.
- If Contractor does not submit an updated Program within this period, the Engineer may withhold specified amount .
- Engineer's approval of the Program shall not alter the Contractor's obligations.
- A revised Program is to show the effect of Variations and Compensation Events.



Contract Management of Works/EPC Turnkey

TIME CONTROL - MANAGEMENT MEETINGS

- The Engineer shall conduct management meeting to review plans for remaining work and to deal issues with early warning signals.
- Engineer shall record minutes and share with all - responsibility of the parties for actions - either at or after the meeting and stated in minutes.

EARLY WARNING

- The Contractor is to warn the Engineer at the earliest opportunity of specific likely future events or circumstances that may adversely affect the quality of the work, increase the Contract Price or delay the execution of works and provide an estimate if any.



Contract Management of Works/EPC Turnkey

IDENTIFYING DEFECTS

- The Engineer or employer's technical auditor shall check and notify any Defects found. The Engineer may instruct the Contractor to search for a Defect and to test any work.
- The Engineer shall give notice of any Defects before the end of the DL Period. The Defects Liability Period shall be extended as long as Defects remain to be corrected.
- Contractor shall correct the notified Defect within time and if not, the Engineer will assess the cost of correction, and the Contractor will pay this amount.



Contract Management of Works/EPC Turnkey

CHANGES IN QUANTITIES / VARIATIONS

- If the final quantity of work done differs from the quantity in BoQ by more than 25%, provided the change exceeds 1% of Initial Contract Price, the Engineer shall adjust the rate to allow for change. If requested, Contractor shall provide breakdown.
- For all variations (other than above), the Contractor shall provide the Engineer with a quotation. The Engineer shall assess the quotation and orders the execution on BoQ rates or his own forecast of the effects of the Variation.



Contract Management of Works/EPC Turnkey

PAYMENT CERTIFICATES

- The Contractor shall submit monthly work done statements less the cumulative amount certified previously + measurement details.
- The Engineer shall check and certify within 14 days certify the amounts to be paid to the Contractor and adjusting for deductions and taxes.
- **The Employer shall pay the Contractor the amounts certified within 28 days of certification. Delay to be compensated with interest.**
- **Interest shall be calculated from the date by which the payment should have been made up to the date when the late payment is made at 8% per annum.**



Contract Management of Works/EPC Turnkey

COMPENSATION EVENTS - I

- The following are Compensation Events unless they are caused by the Contractor:
 - (a) Employer doesn't give access to Site by Possession Date .
 - (b) Employer modifies work of other contractors that affects this contractor.
 - (c) The Engineer orders a delay or does not issue drawings, specifications or instructions required.
 - (d) The Engineer instructs Contractor to carry out additional tests upon work when found no defects.
 - (e) The Engineer unreasonably does not approve for a subcontract to be let.



Contract Management of Works/EPC Turnkey

COMPENSATION EVENTS - II

(f) Ground conditions are substantially more adverse than could reasonably have been assumed before LoA issuance to Bidders.

(g) Engineer gives an instruction to deal with unforeseen condition, caused by Employer, or additional work for safety , etc.

(h) Other contractors, public authorities, utilities or the Employer cause delay or extra cost to the Contractor.

(i) Advance payment is delayed.

(j) Effect on the Contractor of any of the Employer's Risks.

(k) Engineer unreasonably delays issuing a Certificate of Completion and others listed in the Contract Data.



Contract Management of Works/EPC Turnkey

PRICE ADJUSTMENT

- Contract price shall be adjusted for increase or decrease in rates and price of labor, materials, fuels and lubricants in accordance with agreed formula:
 - (a) The price adjustment shall apply for work done (Fixed and Variable components) from the start date up to end of the initial intended completion date or extensions granted by Engineer and shall not apply to work carried out beyond the stipulated time for reasons attributable to the contractor.
 - (b) The price adjustment shall be determined during each quarter from the formula given in the contract data.



Contract Management of Works/EPC Turnkey

RETENTION AMOUNT

- The Employer shall retain from each payment due to the Contract (the **proportion of payments retained shall be 6% from each bill Subject to a maximum of 5% of final contract price**) until Completion Works.
- On Completion of whole Work, half the total amount retained is repaid to Contractor and half when DLP has passed (Engineer certified all corrections were done).
- On completion of the whole works, the contractor may substitute retention money (*balance half*) with an “on demand” Bank guarantee.



Contract Management of Works/EPC Turnkey

LIQUIDATED DAMAGES

- Contractor may delay delivery/ completion, or performance of Equipment/Plant fails to meet by a few percentage points (e.g., 98%)
- In either case, parties would have to negotiate the amount of damage caused to purchaser and such negotiations may be time-consuming and result in costly court proceedings.
- Parties agree in advance on an amount payable by contractor for each day/week of delay, and/or for each percentage point of performance not met.
- Usually set between 0.05% & 0.20% per day for civil works with a maximum of 10% of the contract price. Deduction of LD shall not relieve contractor's obligation to complete work or any other obligations and liabilities.



Contract Management of Works/EPC Turnkey

ADVANCE PAYMENT

- The Employer shall make advance against UBG and shall remain effective until fully recovered but could be reduced progressively. **Interest will not be charged on advance.**
- Advance only to pay for Equipment/Plant (normally 90% for new and 50% of depreciated value for old equipment & total amount will be subject to a maximum of 5% of Contract price), and Mobilization (5% of the Contract price) & by supplying copies of invoices.
- Deductions shall commence payments has reached **not less than 15% of the Contract Price or 3 months from date of payment of advance**, whichever concludes earlier, and shall be **at 15% of Interim Payments** prior to expiry of original time for completion.



Contract Management of Works/EPC Turnkey

SUBCONTRACTING

- Beyond **WHAT HAS BEEN NAMED IN THE CONTRACT AS A SUBCONTRACTOR**, if the contractor proposes sub-contracting during execution due to some unforeseen circumstances, Engineer will consider following before according approval:
 - Contractor shall not sub-contract the whole of Works.
 - Any such consent shall not relieve the contractor from any liability or obligations and shall be responsible for the acts, defaults and neglects of any sub-contractor, his agents or workmen as fully.
 - Engineer should satisfy whether (a) the circumstances warrant; (b) sub-contractors so proposed for the Work possess experience, qualifications and equipment necessary for job proposed to be entrusted.
 - If payments are proposed directly to sub-contractor, this should be subject to specific authorization by the prime contractor so that this arrangement does not alter the contractor's liability or obligations.



Contract Management of Works/EPC Turnkey Termination - I

- **The Employer or Contractor may terminate the Contract if the other party causes a fundamental breach of the Contract (but not limited to following):**
 - (a) Contractor stops work for 28 days unauthorizedly;
 - (b) Engineer instructs delay and instruction is not withdrawn within 28 days;
 - (c) Either party declares bankruptcy or liquidation other than re-engineering;
 - (d) Payment certified by Engineer not paid within 56 days of date of certificate;
 - (e) Engineer notices failure to correct a particular Defect is a fundamental breach of Contract and Contractor fails to correct it within reasonable time;
 - (f) Contractor does not maintain a security at site;
 - (g) LD has been reached maximum due to delay by Contractor and
 - (h) Contractor has engaged in fraud & corruption (competing for or execution).



Contract Management of Works/EPC Turnkey

TERMINATION – II

- Employer may terminate the Contract for convenience.
- If the Contract is terminated the Contractor shall stop work immediately, make the Site safe and secure and leave the Site as soon as reasonably possible.
- If the Contract is terminated because of a **fundamental breach of Contract by the Contractor**, the Engineer shall issue a certificate for the value of the work done less recoveries and taxes, and less the percentage to apply to the work not completed (Employer's additional cost for completing Works shall be 20 percent).
- If the total amount exceeds any payment due to Contractor the difference is debt.
- If the Contract is terminated at the **Employer's convenience or because of a fundamental breach of Contract by the Employer**, the Engineer shall issue a certificate for the value of the work done, the reasonable cost of removal of Equipment, employees repatriation and costs of security less recoveries and taxes.



Contract Management of Consultancy Contracts

General Issues affecting consultancy contracts

- Delay in signing of Contract
- Delay in submission of Advance Payment
- Security and release of payment
- Frequent replacement of key staff
- Delays in approval by Client
- Client not making agreed facilities available
- Non clarity on taxes and duties payable by Client and Consultant.
- Delays in execution by the Consultant



Contract Management of Consultancy Contracts

Risks associated with Poor Management of consultancies - I

- The Consultants do not spend the requested time working with Client's staff - no actual transfer of knowledge/capacity building is achieved.
- Consultant is over-charging, especially the “home/office” time.
- Same consultant charging the same professional time (same days) in two or more assignments.
- Client is billed for senior costlier consultants, while the actual work done by less qualified staff (staff substitution).



Contract Management of Consultancy Contracts

Risks associated with Poor Management of consultancies - II

- Consultant tries to reallocate time from field to home/office activities;
- Payments are not related to actual deliverables;
- Front-loading: claiming more days at the start of the assignment and delay completion once most of the money has been paid;
- Unresolved disputes
- Delays in contract execution
- Poor quality of deliverables



Contract Management of Consultancy Contracts

Questions on Consultancy Contract

- ❑ PIU is keen to seek performance security from the selected consultant as repercussions of the report if implemented will be very high, what is your advise!
- ❑ During execution, Consultant proposed to substitute a key person with another person with less qualifications and experience, but nevertheless, PIU considered that the proposed key person meets the needs of the assignment. Is this acceptable?
- ❑ One of borrower's key staff (a government official) has taken official leave to join our project as a consultant on temporary replacement basis. Is it okay?
- ❑ Consultant, in view of family situation (his wife is pregnant), seeks to reallocate time from field to home/office activities, is this acceptable?



Contract Management of Civil Contracts

Case Study on Adjudication and arbitration

- Tender document for road maintenance works was floated with provision of adjudication clause. In this clause the proposed adjudicator's name was referred to be in the Bid Data Sheet.
- In bid data sheet there was no name for the proposed Adjudicator but mentioned the arbitration shall be as per the country's arbitration rules. The contract was made without fixing the adjudicator's name. Later, the contractor wanted to go in adjudication process and requested to appoint Mr. X as Adjudicator.
- What would you do as employer?



Contract Management of Civil Works

Case Study on remunerative rates for works

- Bids were invited through NCB to rehabilitate 25 schools during summer vacation of 3 months (insulation, replacement of windows and roof to improve heat conservation with estimate of US\$300,000/). Out of 4 bids were received, the lowest responsive bidder 'A' quoted the unit price for windows substantially lower than others and engineer's estimate. Evaluation committee asked the bidder to substantiate and then award was made when explanation was found acceptable.
- During middle of execution, Contractor stopped the work saying that the rate agreed was not remunerative to continue and requested for increase in rate. This is a unit rate contract (measure & pay).
- How do you handle the situation? What precautions could have been taken?



Contract Management of EPC Contracts

Case Study of Power Plant not operational - I

- ✓ A contract for design, supply and installation contract + O&M for 5 years of 10 MW power plant was awarded in May 2007 with duration of 24 months and plant is located on sea coast.
- ✓ After commissioning, the submerged intake water pipeline (for cooling water supply) got damaged in heavy sea storm in 2009. The damage was possibly due to faulty design or workmanship of the offshore sub-contractor for this pipeline (there might be other causes). The main contractor repaired this pipeline, carried out performance test (unapproved) in 2010, but defects continued in the intake pipeline system.



Contract Management of EPC Contracts

Case Study of Power Plant not operational - II

- ✓ Another attempt was made to fix problem by contractor (through sub-contractor), but even after repair and commissioning in 2011, the submerged pipe again failed.
- ✓ A connection is being made by contractor between fault by Owner's personnel in operating the pump for intake water and storm event. and the case is under dispute. Cause of failure, method of repair and implementation of repair is being investigated.
- ✓ The plant with an investment of more than \$ 13 million is lying idle (for defect in a part of facility costing less than \$ 0.5 million) as the province is facing huge power shortages particularly in summer.
- ✓ Based on above limited facts, what are your views on the given situation? What went wrong and at what stage(s), and how would you salvage?



Contract Management of Consultancy Contracts

TAKE HOME POINTS

- ✓ Understand the signed contract along with respective roles, obligations and responsibilities.
- ✓ All advances must be secured /instruments submitted verified.
- ✓ Single point responsibility for monitoring and control with periodical reporting and meetings with action plans to overcome constraints.
- ✓ Payments are made in line and timely as per terms in the contract by ensuring the timely budget releases of counter part and Donor funds.
- ✓ Each constraint is unique requiring specific solution.
- ✓ Good Contract Mgt Team, maintain Records and Documentation



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THANK YOU

