

**TENDER**

**&**

**CONTRACTS**

# TENDER & CONTRACTS

- **Tendering** is the process of Identifying and calling interested & prospective contractors/firms to give their offer for the work , examining their offer and awarding contract.
- When two or more persons have a common intention communicated to each other to create some obligation between them, there is said to be an **agreement**. “An agreement” which is enforceable by law is a “**Contract**”.

# **NECESSITY OF CONTRACT**

- Organizational policy for Minimizing labour force
- Difficult to carryout all works departmentally
- To achieve Efficiency, Speed And Economy in execution of work

# **NECESSITY OF CONTRACT**

- Specialized nature of job
- Higher technical qualification and better resources
- Petty affairs need immediate resolution

# **NECESSITY OF CONTRACT**

- Higher cost of manpower to do work departmentally
- Project-wise requirement of workforce (not fixed)

# **NECESSITY OF CONTRACT**

- Mobilization of advanced machineries (cranes, excavators)
- Mobilization of advanced technology [TBM(Tunnel Boring Machine), Horizontal boring technology, slip form technology].

# **NEED FOR LEARNING CONTRACTS**

- **CONTRACT HANDLING–INESCAPABLE( unable to be avoided or denied).**
- Selecting good contractor by following rules and regulation.
- Engineer's Role is not only to select him but also to make him successful.

# **NEED FOR LEARNING CONTRACTS**

***“Success of Engineer  
is in getting the work  
done with quality &  
within stipulated time  
period”***



# **TENDER PROCESS**

**Pre Tender Planning**



**Invitation of Tender**



**Opening Of Tender**



**Briefing Note and Comparative Statements**



**Consideration of Tender by Tender  
Committee**



**Acceptance of Tender**



**Award of Contract**

**TYPES OF TENDER**

**&**

**CONTRACTS**

# TYPE OF TENDERS

- Open Tenders
- Limited Tender
- Special Limited Tender
- Single Tender

# **CONSIDERATIONS FOR SELECTING TYPE OF TENDER**

## **OBJECTIVE:**

**To ensure Reasonable level of competition**

## **FACTORS:**

- **Importance and urgency**
- **Availability of contractors**
- **Specialized nature of work**
- **Value of work**

# OPEN TENDERS

## Tender Validity Period

- Shall be minimum 3 times of tender notice period
- Tender notice period shall be reckoned from the date of uploading of tender notice on the e-tendering site (IREPS)
- Shall be different in case of system of self certification of credential by the bidder.

# TWO PACKET SYSTEM OF TENDERING

## FEATURES

- Two sealed envelopes with one cover
- Technical bid is read out before the tenders.
- Same is then evaluated by the TC
- After acceptance of the TCM , the financial bids of technically acceptable tenderers are opened.
- The tenders are then processed in normal manner.

# **TWO PACKET SYSTEM OF TENDERING**

- **No mention in Engineering Code**
- **In 1985 RB appointed a committee (Shreedharan Committee) to suggest measures to improve the administration of contract and quality of works**
- **Committee recommended TPS to assess the tenders technically without being influenced by the bids**

# **TWO PACKET SYSTEM OF TENDERING**

- **Tenders valuing more than 10Crs.- Two Packet System is mandatory.**
- **For adopting 'single packet system'( for > Rs.10crs) approval of DRM/ PHOD/CHOD with concurrence of associate finance in open line/ FA&CAO(C) in construction.**
- **For tender upto Rs. 10 cr – for adopting Two Packet System decision can be taken by tender inviting authority with concurrence of associate finance.**



# **LIMITED TENDERS**

- Offers are invited from a limited number of tenderers.
- They are generally tenderers from the approved list to save the time,
- For smaller value of work or for the specialized nature of work.
- E-1214, (Bd's Lr. No. 83/W1/CT/14(Policy) dt.30.3.87)

# **LIMITED TENDERS**

- However if:
  - Insufficient response
  - Specialised nature of work, experienced contractors not available
  - Ring formation suspected.

**invite Open Tenders**

# LIMITED TENDERS

(PARA 2.4.4.1 TO 2.4.4.6 OF SCCR)

- **For works costing upto Rs. 7.5 crore**
- **To be invited from the contractors borne on approved list**
- **Notice to be published in newspaper, displayed on notice board and also put on internet where ever possible.**

# LIMITED TENDERS

## Approved List of Contractors

- In government departments many times the works to be executed are of repetitive nature. So to reduce the time of finalization of the tenders and to eliminate incapable bidders a system of preparing “Approved List of Contractors” is followed in the tendering process.
- The System intends pre-qualification of the contractors for the different categories or groups of the works in advance and updating this list periodically.

# **LIMITED TENDERS**

Ref: Rly. Bd's letter No.2013/CE-I/CT/O/20/POPt.II(ii) dated 26.11.13

- **Competent authority to approve calling of LT**

<b>S. No</b>	<b>Monetary Slab for LT</b>	<b>Category of Contractor</b>	<b>Lowest Competent Authority</b>
1.	Upto Rs. 37.5 lakhs	Class C	JAG / SG
2.	More than Rs.37.5 lakhs and upto Rs. 1.5 cr	Class B	SAG/DRM
3	More than Rs. 1.5 cr and upto Rs. 7.5 cr	Class A	PHOD/CHOD

# LIMITED TENDERS

Category	Eligibility Criteria		
	Engg Organisation	Work Experience	Contractual Payment
C	Diploma holder of 3 yr experience	2 works costing not less than Rs. 10 lakh each	Rs 25 lakh in last 3 Financial years
B	Graduate engineer of 5 yr experience	2 works costing not less than Rs. 25 lakh each	Rs 1 cr in last 3 Financial years
A	Graduate engineer of 10 yr experience and Diploma holder of 5 yr	2 works costing not less than Rs. 1 cr each	Rs 5 cr in last 3 Financial years

# **LIMITED TENDERS**

- Contractors in higher slab cannot tender for works of lower slab unless separately registered.

# **SPECIAL LIMITED TENDERS**

- For important or urgent works special limited tenders can be invited.
- In this system few contractors are picked up who are considered to be capable of doing that work. Their credentials are verified.
- These can be other than those on the approved list. But care should be taken to include the contractors in the approved list, in that area capable of doing that work.
- The calling of the special limited tender and selection of the limited contractors needs finance concurrence and approval of CAO/GM



# **SPECIAL LIMITED TENDERS**

- SLT in following cases in consultation with FA&CAO :
  - Works of Specialised nature (Personal Approval of PHOD- full power, DRM- upto Rs. 10lakh)
  - Works of Urgent Nature (Personal Approval of CAO/GM- full power, DRM- upto Rs. 10lakh)
  - Consultancy Work (Personal Approval of CAO/GM)
- To be invited from specialised and reputed contractors/ organisations/ agencies.
- Preferably more than six but not less than four.

# **SINGLE TENDER**

- When under special circumstances/urgency, the offer is taken from only a single agency, it is called single tender.
- Not to be called for routine works.
- Tight target cannot be accepted as reasons for calling the single tenders.
- Tender committee and the accepting authority should be one step higher than that in the case of open/limited tenders excepting in the cases where GM is the accepting authority.

# SINGLE TENDER

- E-1214A (C.S.25)
- In rare or emergent situations, with Finance concurrence
  - Accidents, breaches involving dislocation to traffic (powers to GM,PHOD,DRM)
  - Work of specialised nature-personal approval of GM required
  - Any other situation if GM personally approves
- AMC for equipment can be placed on Single Tender basis on authorised dealer on approval of AGM

# SINGLE TENDER

(Rly bd letter 2011/CE-I(SPL)/CT/O/4 dt 02/05/2017)

- CAO/C can call and finalise Single Tender of value upto Rs.5cr for early completion of the last milestone of throughput enhancement works under 'New lines', 'Doubling', 'Gauge conversion', and 'Traffic Facility' plan heads and CAO/RE in 'Railway Electrification' plan head in respect of projects targeted for completion.
- Personal concurrence of FA&CAO/C
- Tender Committee would be of SAG level and acceptance by CAO/C

# **SINGLE TENDER**

- PHODs Up to Rs.20 lakhs in each case subject to an annual limit of Rs.1 Crore.
- DRM Rs.10 lakhs in each case subject to an annual limit of Rs.50 lakhs.

# **DISPENSING WITH CALLING** **OF TENDERS**

- For small value urgent works powers have been given to various officers for dispensing with calling of tenders in case of small value urgent works.
- Para E-1211,

# **DISPENSING WITH CALLING** **OF TENDERS**

- (Letter no. 2007/CE-I./Ct/18/Pt.13 dt. 11/09/2017)
- (A) Works directly related to safe running of trains:

without finance concurrence, on a certificate by accepting authority that the work is of urgent nature and directly related to safe running of trains in his jurisdiction:

<b>Rank/Grade</b>	<b>Cost(per case)</b>	<b>Annual Ceiling</b>
S.S.(ind. ch.)	Rs.2 lacs	Rs.10 lacs
JAG/SG		

# **DISPENSING WITH CALLING** **OF TENDERS**

- (Letter no. 2007/CE-I./Ct/18/Pt.13 dt. 11/09/2017)
- (B) All other works including Woks directly related to safe running of trains: with finance concurrence:

<b>Rank/Grade</b>	<b>Cost(per case)</b>	<b>Annual Ceiling</b>
S.S.(ind. ch.)	Rs.5 lacs	Rs.60 lacs*
JAG/SG	Rs.5 lacs	Rs.60 lacs*
SAG	Rs.10 lacs	Rs.1.2 Cr.

**\* Including (A)**

- Powers to be exercised with own administrative approval.



# QUOTATIONS DOs & DON'Ts

- Powers will be exercised by the officers with their own administrative approval and no separate administrative approval is necessary.
- Powers should be exercised sparingly.
- The circumstances under which quotations have to be called should be spelt out.
- The work should not be split up for the purpose of bringing it within the ambit of this dispensation
- The reasonableness of rates should be gone into objectively and in detail by the accepting authority.

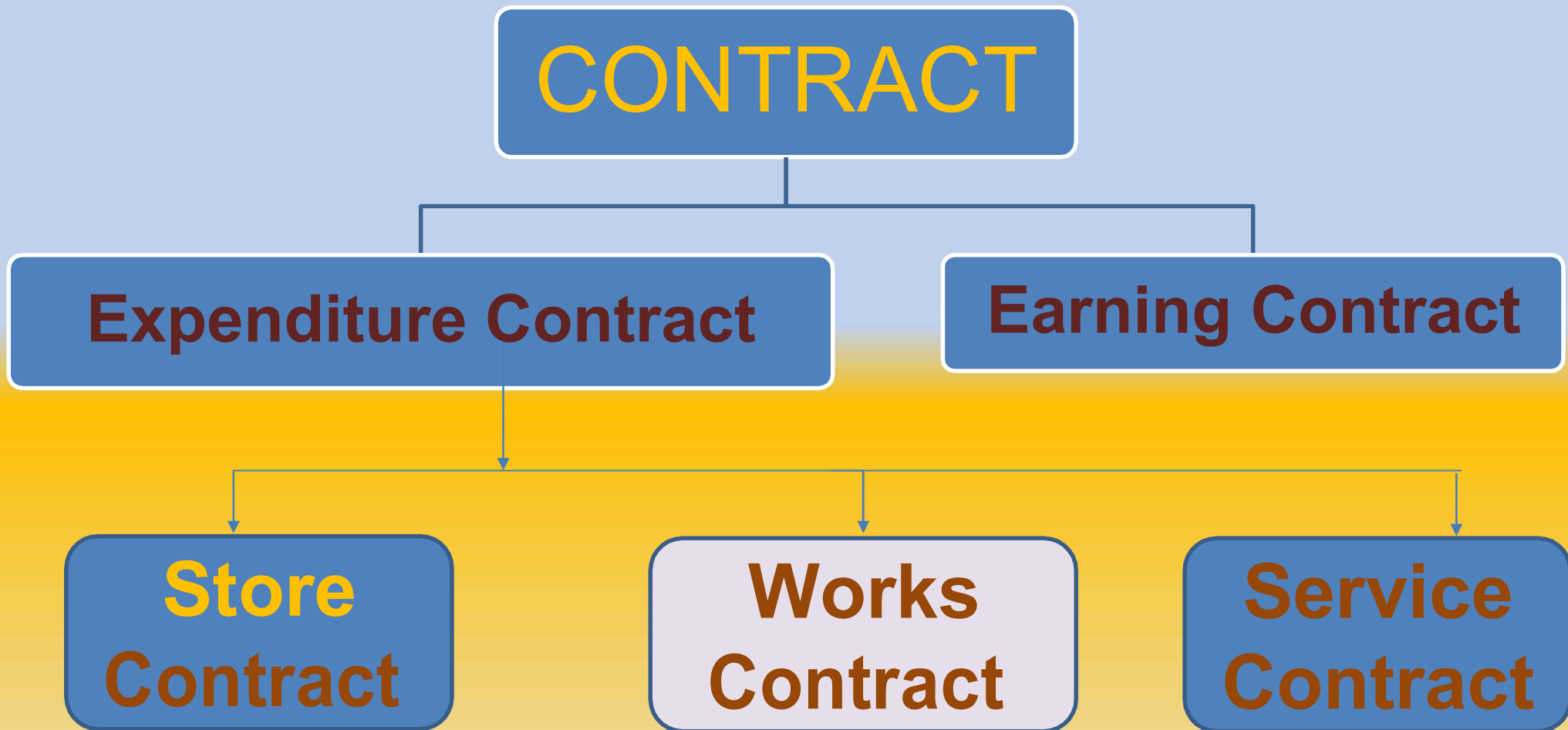
# QUOTATIONS DOs & DON'Ts

- Quotations should not be for items which can be executed through the existing contracts including zonal contracts.
- Quotations should not be for fancy (expensive but of low utility) items.
- Quotations should only be for works which are urgent in nature.
- Quotations should normally be invited from at least three well experienced contractors/agencies not necessarily borne on the approved list.

# QUOTATIONS DOs & DON'Ts

- Accepting Authority must take precautions to see that the quotations are from genuine firms (and not from fictitious firms).
- A Register showing the full particulars of works authorized through quotations will be maintained by the officer having powers to dispense with calling of tenders. The register shall be sent to associate finance while seeking their concurrence.
- Powers to be exercised only by FIELD Officers and their controlling HODs and NOT by other HQ Officers in-charge of Planning, Design etc.

# TYPES OF CONTRACTS



# EARNING CONTRACT

- It is for earning of Non-Fare revenue for the Railways
- Mostly handled by commercial department.
- Such as Contracts for
  - Leasing of parcel vans
  - Leasing of cycle/car parking spaces
  - Advertisement rights at station and other railway premises
  - Leasing of shops at platforms and circulating area
  - Annual contract for leasing of land for private sidings

# WORKS CONTRACT

(Para 1203 of Engg. code)

All works and supplies relating to the Engineering Department and other engineering (electrical general, TRD, S&T, Mechanical) department are executed through the agency of contractors.

**Types of works contract are**

**(i) Zonal Works**

**(ii) Special Works:** All construction and maintenance contracts other than zonal works & supply works fall under this category, e.g. construction of bridge, formation of an embankment etc.

# **WORKS CONTRACT**

## **(iii) Supplies of building materials.-**

Such as supply of bricks, tiles, lime, doors, windows, ballast, moorum, fire bricks, pitching stone etc. These materials are not purchased by the Stores Department.

Contracts relating to these three classes are termed as 'Work Contracts'.

# STORES CONTRACT

- This type of contract is being dealt by stores department.
- In this type of contracts materials for various department of Railways are procured, such as
  - Purchase of Medicines and equipments for medical department
  - Purchase of Machines and spare parts for electrical departments



# **STORES CONTRACT (Contd)**

- Purchase of copper wires for TRD and cables for S&T departments
- Purchase of gang tools, uniforms, boots etc for class IV staff
- Purchase of consumables such as K-oil, grease, diesel etc.

# STORES CONTRACT

## Exemption-

Procurement of sleepers, ballast and all track materials such as rails, rubber pads, liners, ERC, switches, X-ing, SEJ etc are done at HQ level by Track-procurement wing of Engineering department.

# SERVICE CONTRACT

- This is a new type of works contract introduced in the railway system.
- Separate GCC has been issued by Railway Board for Service Contract.
- Service contract GCC is similar to works contract GCC with additional safeguards on welfare on labours employed viz. Minimum wages act, payment of Bonus, PF, ESIC, HRA etc. Additional provision of different insurance scheme viz. Atal Pension yojana etc

# SERVICE CONTRACT

- This contract deals with the types of works which involves deputing of manpower for various types of activities such as
  - Platform cleaning contract
  - Watchman for hospital, office, depots etc.
  - Housekeeping contract for daily/routine maintenance for hostels
  - Catering contracts for hostels of CTI's (Centralized Trg Institutes)
  - OBHS (On Board Housekeeping Service)contract on Trains

# **Works Contract**

## **FORMS OF WORKS CONTRACT**

- SCHEDULE CONTRACT
- PIECE WORK CONTRACT (e.g. Zonal contract)
- LUMP SUM CONTRACTS
- EPC CONTRACTS
- CONSULTANCY CONTRACT
- SERVICE CONTRACTS

# SCHEDULE CONTRACT

- It is the the Simplest form of Contract.
- In this type of Contract rates and quantity of various activities are fixed beforehand at the time of award of contract.
- The contractor agrees to carry out a work as specified, within a given period, at the fixed/accepted unit rates for each of the various items in the schedule of work.

# **SCHEDULE CONTRACT**

- The total amount to be paid to the contractor will depend on actual quantities of the work done against each item of schedule of work (as measured in the Measurement Book).
- It is the Most commonly used type of contracting format in Railways

# **SCHEDULE CONTRACT**

- QUANTITY of each item in schedule of work should be precisely known before inviting tender.
- POOR QUANTITY CALCULATION WILL RESULT IN unnecessary VARIATIONS
- DRAWINGS wherever needed SHOULD BE AVAILABLE beforehand.
- BILLING of each item should be based on DETAIL MEASUREMENT.



# **SCHEDULE CONTRACT**

- No lump sum payment is permitted except for earthwork item.
- There is very **LITTLE FLEXIBILITY** in time period, quantity of individual items, rates & other contract conditions, **AFTER AGREEMENT IS SIGNED**
- **BUT** such types of contract often **GENERALLY RESULTS IN ECONOMIAL OFFERS**

# PIECE WORK CONTRACT

- The **zonal contracts** adopted on the Railways fall under this category. Also called fixed rate contract.
- In this type of contract only unit rates for various kinds of the works are agreed upon, without reference to the schedule of quantity of work to be done, within a given period.
- Generally time period of such contracts is one year

# **PIECE WORK CONTRACT (contd)**

- The Railway indicates the approximate total cost of work based on USSOR value (% above or below).
- After the contract is executed/signed the specific work orders or supply orders are placed based on master schedule of the rates.
- The rate of progress of work may not be specified but if it is unsatisfactory the contract can be terminated.
- To avoid the vitiation or undue benefit, the approximate cost in each group of the works of master schedule is specified.

# PIECE WORK CONTRACT (contd)

- **Prerequisite:** Availability of an updated master schedule of the rates (USSOR)
  - If the schedule of rates is old, for some items the rates will be profitable and for some items loss making. There is likely a tendency on the part of the contractor not to execute loss making items.
- Maximum value of one work order is Rs 5.0 lakhs

# **PIECE WORK CONTRACT (Zone)**

## ITEMS WHICH CAN BE EXECUTED

- New Works, additions and alterations to existing structures, special repair works and supply of building materials subject to the contract value of each such work not exceeding Rs.5 lakh. (Authority: Railway Board letter No.2001/CE-I/CT/17 dated 27.0917: Advance correction slip no. 51 of Engg. code)
- All ordinary repairs and maintenance works
- Supply of building materials/fittings/spares e.g. bricks, lime, sand, sanitary fittings, paints, tiles/stones etc. which are likely to be required in a zone during the year.

# **PIECE WORK CONTRACT (Zone)**

Time Period:-

- Time period of such contracts is normally for one year i.e. from **1st of July to 30th of June.**
- If any special advantage viz. favourable rates, is likely to be received, longer time period of more than one year may be adopted with concurrence of finance officer.
- No work orders to be approved against old contracts after opening of new tenders.
- Work orders of old contracts should be completed before 30<sup>th</sup> June.

# **PIECE WORK CONTRACT (contd)**

## **Merits:**

- Detailed advanced planning is not required.
- As and when petty repair works arise, the work orders can be placed.
- Very convenient for the subordinate officials if implemented properly.

# **PIECE WORK CONTRACT (contd)**

## **Demerits:-**

- Most of the expenditure on such contracts is on unimportant and non-plan work.
- Very difficult to keep track of individual work.
- As the value of individual work-orders are very small, it results into poor supervision and hence generally bad quality of work.



# LUMP SUM CONTRACTS

- Such type of contracts are suitable for repetitive works e.g. construction of 100 nos. of type II quarters, replacement of old wiring in 200 nos. of type-III quarters etc.
- To carry out a work as specified and within a given period for a fixed total sum;
- payment being dependent on his completing the work to specification and time, irrespective of the actual quantities.

# **LUMP SUM CONTRACTS**

- For handling variations (+/-) a scale of rates or prices need to be agreed upon by which enhancement of or reduction from the lumpsum may be regulated in the event of any departures from the work as specified being made subsequently under the order of competent authority.
- The payments in between can be made on completion of the various stages and should be prescribed/decided before inviting tender.

# LUMP SUM CONTRACTS

## Merits:

- easy to finalize,
- do not result in the tender vitiating,
- do away with the need of the detailed measurements, and readily indicate the cost of work.
- Very easy for subordinate officials as it involves less paperwork and field measurement.

# EPC CONTRACTS

- EPC stands for Engineering, Procurement, Construction and is a prominent form of contracting agreement in the construction industry and is the need of the hour
- It is very common for high value contract.
- But Railway has been very late in adopting such type of contracting system.

# EPC CONTRACTS

- The engineering and construction contractor will carry out the detailed engineering design of the project, procure all the equipment and materials necessary, and then construct to deliver a functioning facility or asset to their clients.
- Companies that deliver EPC Projects are commonly referred to as EPC Contractors.

# **NEED FOR EPC CONTRACT**

Conventional item-rate contracts are generally prone to time & cost overrun due to:

- Involvement of multiple agencies- generally a new line/doubling project involves 15 to 20 different types of contractors
- Failure of even one contract delays the whole project
- Lack of flexibility in replacing failed agency on real time basis

# NEED FOR EPC CONTRACT

- Allocation of construction risks are largely to Railway, particularly the onus of design which many times lead to:
  - Delays in design and drawings by the Railway
  - Variation in items and quantities

# NEED FOR EPC CONTRACT

## Problems in Conventional item-rate contract:

- Considerable time of Project Engineers is consumed in processing of:
  - Variation in quantity of items
  - Introduction of NS items
  - Variation in contract price



# **OBJECTIVE OF EPC CONTRACT**

- Implementation of project to specified standards with a fair degree of certainty relating to time & cost
- transferring the construction risk to contractor.
- Awarding contract for a LS price ensures predictability and financial discipline both for Government & Contractor.

# OBJECTIVE OF EPC CONTRACT

- Well defined system of obligation associated with damages both for Railway & Contractor.
- Assigning risk to the party who is in a better position to mitigate it
  - Providing encumbrance free land and obtaining statutory clearances has been assigned to Railway
  - design, site uncertainty (day to day issues), sub contracting etc. are assigned to contractor.

# PERCEIVED ADVANTAGE OF EPC

- Effective project management - less no. of contracts to manage.
- Engagement of professionally managed agencies.
- Well defined system of obligation associated with damages both for Railway & Contractor.

# PERCEIVED ADVANTAGE OF EPC

- Assigning risk to the party who is in a better position to mitigate it e.g. land, statutory clearances assigned to Railway whereas design, site uncertainty, sub contracting are assigned to contractor.
- Milestone based payments.

# **CONSULTANCY CONTRACT**

- Consultancy Contracts are required for advisory services for works requiring highly specialized technical assistance and such expertise not available with railway.
- These could be
  - Pre-investment studies for new lines (ROR of the project),
  - Design of OHE system as per proposed alignment
  - Design of SSP/TSS for Railway electrification project

# **CONSULTANCY CONTRACT**

- Specialized design of structures using advanced software such as bridge or multistoried buildings,
- Acoustics and illumination in auditorium or important buildings viz. illumination scheme of Crly HQ building at Mumbai,
- Architecture or landscaping of important structures viz. IRICEN Building, Division office building at Pune

# CONSULTANCY CONTRACT

To incurrence of expenditure in engaging /obtaining consultancy services from outside (for calling tender)

<b>GM</b>	Rs. 10 Crore per case with concurrence of PFA
	<b>Further delegation is as under</b>
<b>CAO</b>	Rs 50 lakh each case, with annual ceiling of Rs.5 cr.
<b>PCE/ CHDD</b>	Rs 20 lakh each case, with annual ceiling of Rs 1.5cr
<b>DRM</b>	Rs 10 lakh each case with annual ceiling of Rs. 1.5cr

Minimum level of tender acceptance - SAG level

Means minimum level of TC- JAG/SG

# CONSULTANCY CONTRACT

- **For single tender –**
- TC shall be of SAG level.
- Generally single tender for consultancy for consultancy is considered for
  - Railway PSU (RITES/IRCON)
  - other PSU's
  - Agency of national/international repute



# CONSULTANCY CONTRACT

- For single tender –
  - If contract is to be fixed only on single tender basis due to spl circumstances-
  - GM' personal approval is a must irrespective of value of contract

# ACCEPTANCE OF TENDERS

- 1.1 An unqualified acceptance of tender constitutes a binding contract until a formal agreement is constituted and in order to ensure this fact, the acceptance letter should be suitably worded. However, if the acceptance of the tender by the Railway is a conditional acceptance, it requires the consent of the tender before binding contract takes place (Para 1256-E).
- 1.2 In case the terms & conditions incorporated in the letter of acceptance/ purchase orders are different from those originally offered and modified by the tenders subsequently during the course of negotiations, discussions or otherwise, the contractors should be asked to return one copy of the letter of acceptance/purchase order duly signed by the same person who signed the original offer

against the tender in token of his acceptance of contract to revised conditions {Board's letter no. 67/RS(G)/779/17, dated 22.6.1967 (Annexure-32)}.

- 1.3 The letter of acceptance and the agreement should be signed for and on behalf of President of India by the competent authority of the Railway, as delegated in SOP GEN in this respect.
- 1.4 The recommendations of Tender Committee should be put up to the accepting authority.
- 2.1 The acceptance or rejection of tenders is left entirely to the discretion of the authority empowered to do so. The reasons for departing from the recommendations of the tender committee should be recorded by the accepting authority. If the 'Finance Member' finds some financial impropriety in the award of contract, he can report the matter to FA&CAO. Though the final decision

would rest with the accepting authority, he may obtain the opinion of Associate Finance at the appropriate level, if necessary before making final decision. {Board's letter no.74/AC-III/30/6, dated 28.12.1983 (Annexure- 33)}

2.2 Where for any reasons, the accepting authority does not consider justifiable to accept the recommendation of the tender committee he may, if so desires, refer the matter to the tender committee for re-consideration setting out reasons for not accepting the recommendation of the Committee.