JUNE 2022

VIEWPOINT

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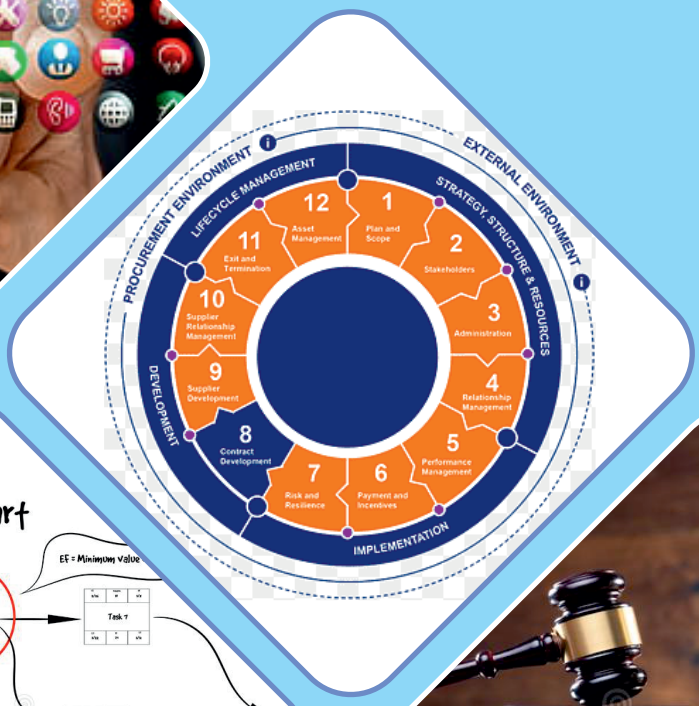
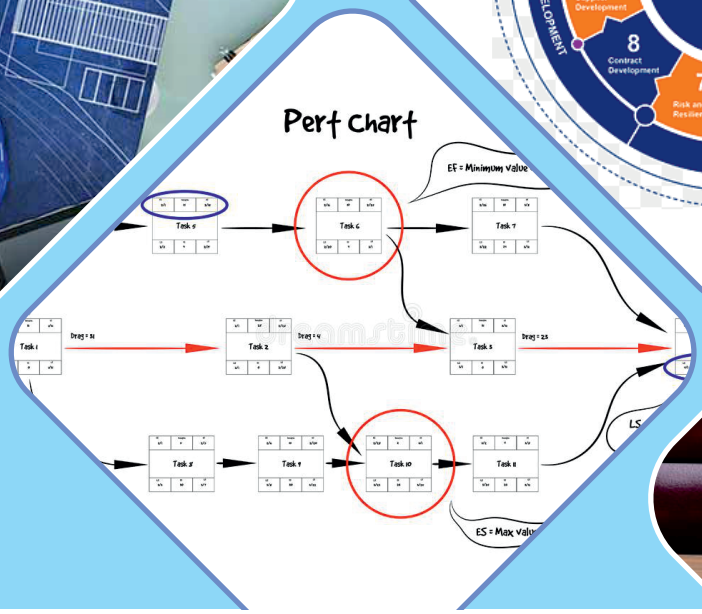
Contract Management





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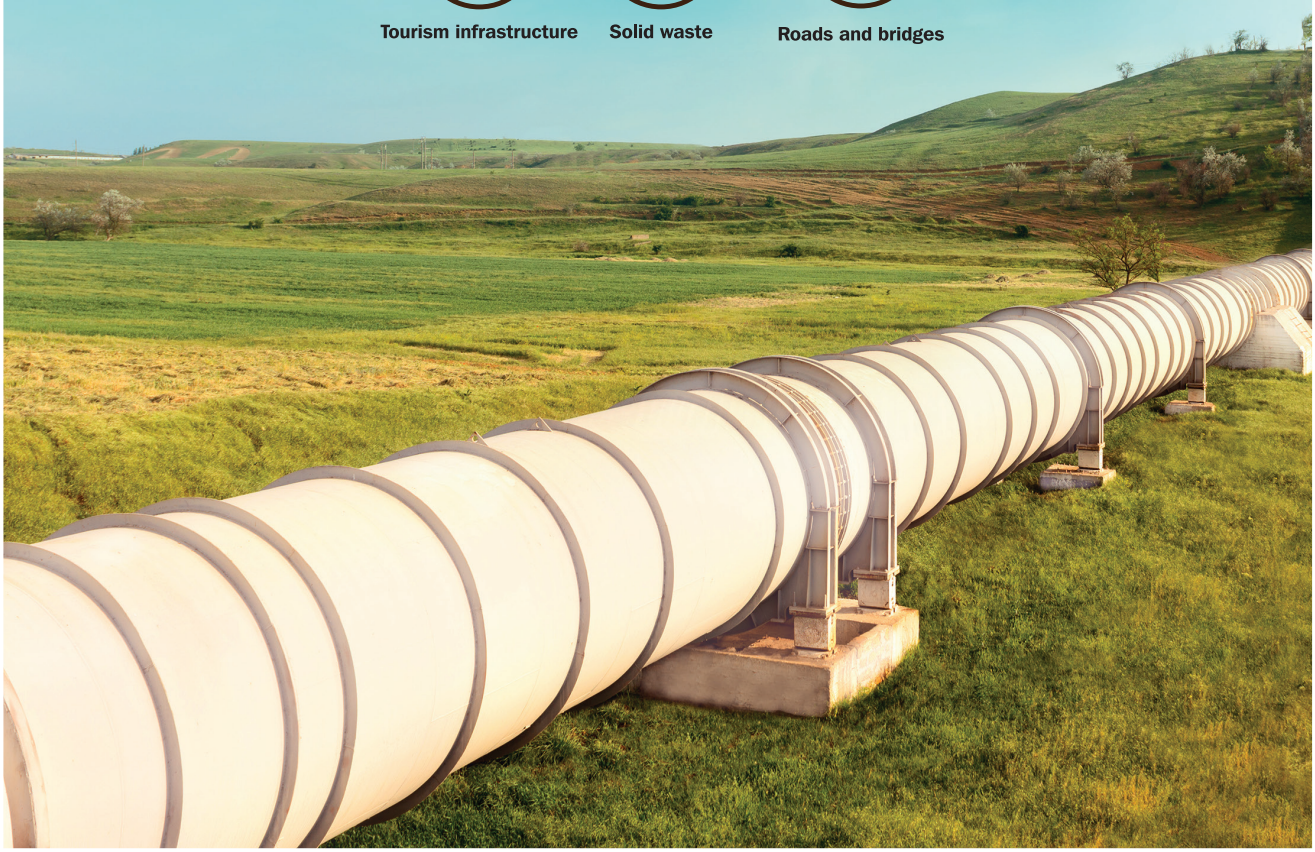

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- CEAI promotes the interest and works to enhance the status of the Consulting Engineering profession in India
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- CEAI helps to keep in touch with the latest professional updates – technical, regulatory, legal, financial, health & safety, environmental, etc.
- CEAI provides excellent opportunity to present papers in seminars and technical lectures organised from time to time
- CEAI aids in skill development through regular training programmes including training on FIDIC Conditions of Contract and sharing of the legal issues based on the Indian context
- CEAI takes-up various issues confronting the profession with government and other authorities from time to time with the objective of making the conditions of engagement on a fair and equitable basis so that Consulting Engineers can function in the best interest of the country
- CEAI promotes the cause of Women Engineers with a view to ensure rightful places for them in the engineering consultancy arena
- CEAI helps to develop Young Engineers who are the Future Leaders

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CODE OF ETHICS

June 2022

PREAMBLE

Engineering consultancy services make significant contributions to the economic growth and sustainable development of the nation, and in safeguarding health, safety, welfare, and happiness of the society.

For the nation and the society to derive maximum benefits from engineering services, it is essential that, in addition to being of high technical standards, the services provided are of the highest universally accepted moral and ethical standards.

With a view to achieve the stated objective the Consulting Engineers Association of India (CEAI) has framed a "Code of Ethics" which is mandatory for all members of the Association to adopt and abide by.

This Code presupposes that every member of CEAI is a law abiding, truthful, honest, fair and just citizen of the society. In addition, the member must follow the directives of the Code in his/her professional practice.

THE CODE

Each CEAI Member shall:

Responsibility to Society	1	Ensure that he/she shall be ethically and socially responsible, and his/her professional services safeguard and enhance the health, happiness and safety of the society.
	2	Ensure he/she, in his/her profession upholds the principles of environmentally sustainable development and considers climate change in decision-making with appropriate knowledge and training, and also informs clients about the need for its inclusion.
	3	Treat all persons fairly and encourage equitable participation without regard to religion, race, caste, gender, descent, place of birth, or residence, so that everybody works with honesty, integrity, and mutual trust and respect in a transparent manner.
Responsibility to Profession	4	At all times, uphold the dignity, standing and reputation of the profession.
	5	At all times, provide services: (a) in accordance with the principle of 'Duty of Care', implying the obligation to take reasonable steps to avoid foreseeable harm to another person, group, or their property and society; (b) to meet and fulfill the requirements as agreed with the client as per the Design Brief of the client, or as required by the employer as per the employment contract, and give feedback for any changed context; and, (c) to ensure that the said services utilise appropriate technology, and be fit for the design life of the product or facility and for its intended purpose and use.
	6	Always be responsible and accountable for all the professional services provided under his/her responsible charge, including using validated and legal algorithms and software.

	7	Refrain from: (a) expressing in public an opinion on a professional topic unless he/she is sufficiently informed on the facts relating to the topic and he/she is competent to comment on it; (b) making public statements which are not in an objective and truthful manner; (c) casting any aspersions of an unjust or malicious nature; and, (d) performing any service beyond his/her competency.
	8	Imbibe, inculcate and emphasise the Code of Ethics periodically and internally within the organisation and also for oneself.
	9	Maintain knowledge and skills at levels consistent with developments in technology, legislation and management, and apply due skill, care and diligence in the services rendered to the client or employer.
	10	Continue professional development and advancement throughout his/her career.
Integrity	11	Act, without prejudice to the rights of other stakeholders, in the legitimate interests of the client or employer, and perform professional services with integrity and faithfulness.
	12	Act with fairness and justice towards his/her client or employer, and towards vendors, contractors, and other professionals in all matters pertaining to contracts relating to his/her professional services.
	13	Refrain from: (a) indulging or being or getting involved in any activity which in any manner seeks to affect or in any way influence the client or employer with regard to the selection of or the compensation for professional services; and/or affect or influence the impartial judgement of the professional himself/herself; and, (b) participating in any shape or form in the process of giving, promising or taking money, gift, or favour which may influence the judgment or conduct of a person in a position of trust or authority.
	14	Inform: (a) the concerned client or employer organisation's management first, of any unethical or unsafe act or situation; known or learnt by him/her in the course of his/her work or in any other work within his/her competency; and (b) the appropriate authorities, if the client or employer organisation's management is unable or unwilling to address the unethical or unsafe act or situation referred to in (a) above
	15	Facilitate in ensuring legal compliance by client or employer, contractors, vendors and others.
	16	(a) Refrain from utilising any data, information, computer hardware or software in his/her work that might infringe upon any Intellectual Property Rights, without obtaining proper legal clearance; and (b) Use all the data, business plans or strategies, and any other sensitive or confidential documents or materials, whether from the client or employer, or internal to the organisation, in a responsible manner, so that their confidentiality and security are not compromised.

	17	Promote an ethical culture in the organisation based on shared values, beliefs and norms such as trust, honesty, integrity, fairness, confidentiality and accountability, and actively adopt them to uphold professional ethics, and make decisions that are above reproach.
Impartiality	18	Be free of prejudice and personal preferences, in his/her professional advice and judgement.
	19	Refrain from accepting an assignment for services which prejudices his/her independent judgement.
	20	Inform the client or employer of any potential conflict of interest that exists or might arise in the performance of an assignment.
	21	Promote the concept of quality based services to encourage fair competition
	22	Cooperate fully with any legitimately constituted investigative body appointed or setup for inquiry into the administration of any contract where the professional is involved.
Relations with Other Consultants	23	Refrain from directly or indirectly injuring/damaging or attempting to injure/damage the professional reputation or practice or prospects of another fellow professional, except when the fellow professional is incompetent or has violated ethical norms.
	24	Refrain from associating in work with a professional whose methods of practice do not conform to the ethical practices as laid down in this Code.
	25	Refrain from: (a) trying to supplant another professional in any particular assignment; and (b) intervening in work of any kind which to his/her knowledge has already been entrusted to another professional, except when appointed as a Reviewer by the client or employer.
	26	Refrain from taking over the services being provided by another professional unless the client or employer formally appoints the professional to take over the ongoing assignment, after legally terminating the previous contract, and legally indemnifies the appointed professional against any deficiencies and losses already incurred or liable to be incurred due to the errors of omission and commission by the previous professional.
Relation with Clients	27	(a) Refrain from disclosing confidential information concerning the assignment, any technical process or any related matter, of the client or employer without the client's or employer's consent. (b) making comments in public/ social media regarding the work being done for the client.
	28	Publicity material as well as any paper/ article developed, written and published by the professional regarding the project to be as per the contract and the scope of work therein.
	29	Amicably attempt to resolve any issue with the client.
Relation with Employees	30	Provide opportunities for the professional development and advancement to other professionals in his/her employment or control, aimed to foster a culture where people are motivated, engaged, valued and can learn, develop, and grow.

Message from Chief Editor

Dear Fellow Consulting Engineers & Readers,

This issue is on a theme that forms the fulcrum of the actions of human endeavour, and is thus of utmost importance to all, and that is "***Contract Management***". The term 'Contract' conjures many images in the minds of people. As is well known, contracts could be oral or written, simple or complex. It's the latter that Engineers are concerned with in their day-to-day work and as time goes by and projects become larger and more complex, or the dealings become bigger and more encompassing, and more challenging, the demand for explicit, fair, unbiased, and detailed agreements couched in clear, unambiguous language is the sine qua non for the proper and smooth execution of the works or the dealings for which the contract is entered into. The need to address the unknowns was brought out very succinctly by the COVID-19 pandemic which has taught a lesson to all concerned to ensure that the agreements are reduced in writing in a manner and language so that the intent is clear.

Contract Management, in a systematic manner is the next essential aspect, however, the process really starts once an owner conceives an idea which needs to be made a reality. From there each party that is necessary for converting the idea into reality, must play its part in a coordinated manner and function as part of the team to achieve the goal.

The forms of contracts that have been in use in the country are based on the old formats of the British era. However, with international funding agencies stepping in, the need for equitable forms of contract such as the FIDIC contracts is being emphasized. The intent being that each party must fulfill its role and share the risks instead of thrusting them all on another party. There is a dire need to change the thinking of the owners, the processes and procedures adopted for executing contracts. Of these, time bound execution and the payments for the works/ services rendered must form a part of the contract. The owner must be equally liable for any default on the owner's part. Risk Assessment and Due Diligence are also very important and necessary activities to be done by each party prior to even committing verbally to enter into a contract.

Digitalisation has made tracking of progress and administration of compliances of the contractual requirements, which used to be a very hard chore, more efficient and timely. Each and every activity can be represented in a schedule and tracked. Reminder alarms can be setup so that nothing is unknowingly missed. The IT has enabled and made many activities to be more efficiently addressed and keep all parties informed and send alerts. That's the way forward.

The papers in this issue of "***Contract Management***" have discussed many of the issues which are current.

Comments and suggestions are based on the experience of the authors hence everyone has to see what best suits the situation.

The revised CEAI Code of Ethics after due deliberations and vetting, has been issued in May 2022 and is on the CEAI website. It is also being provided in this issue of ViewPoint for ready reference. All professionals are exhorted to abide by the cannons of the Code of Ethics and to make the world a better place to live for the current and the future generations. The webinar held by CEAI to create and spread greater awareness amongst professionals infact all stakeholders for a project or service was very well attended and received an excellent and encouraging feedback.

Time and again it has been stressed in these columns that Consulting Engineers are the backbone of development. With a very large number of Engineers, India has the potential to grow and sustain itself and at the same time aide other countries. However, they need to do all that ethically and in a properly contracted manner so that all are satisfied at the end of the contract.

Prepare the Contract Judiciously & in Writing

Manage the Contract Scrupulously & Timely

Close the Contract Amicably & Gainfully

Happy Reading & Learning

A P Mull

Marketplace Morning Report

What if the next big crop we grow is for building materials?

John Laurenson Jun 20, 2022

Heard on: MARKETPLACE MORNING REPORT®

Our weekly "Econ Extra Credit" newsletter is an unexpected way to learn about the economy, one documentary film at a time. Sign up to watch, and learn, with us.

Elizabeth Beck, a tourist visiting the Dutch town of Almere from Pennsylvania, is standing on a bridge made of natural fiber.

"Honestly, I think it's amazing. I actually use flax, the flax seed, for breakfast and now I'm standing on a flax bridge so it's kind of … pretty cool!" she said.

Frans Van Der Wel is commercial advisor at FibreCore Europe, the company that built this 15-meter, single-span bridge for pedestrians and cyclists.

"Our business is making composite bridges. Normally we use glass fiber or carbon fiber even, but in this bridge we use flax fiber," he said.

Flax is a plant with a pretty blue flower and seeds you can sprinkle on salads.

In the way steel wire is set in concrete in conventional construction, a mesh of flax fiber is set in resin that is part natural, part not. So far, this method costs about twice as much as building the standard way.

The Netherlands is full of canals and has many bridges.

"In the Netherlands, over 85,000 bridges will be replaced, renewed in the coming 20 years. And if we do that in the same way we built them there's this enormous carbon dioxide coming out of the process," said Jan Hoek, Almere's deputy mayor.

They're looking at alternatives. The Netherlands has pioneered greenhouse farming and other technological farming advancements.

Lucas De Man is the founder/CEO of Biobased Creations, which promotes organic building materials.

"I'm talking about hemp, I'm talking about cattail which is a cigar plant that grows in swamps and water regions," he said. "I'm talking about mycelium which is the roots of the mushroom. Straw – just very simple straw. You can build houses completely of it."

In the future, he said, we'll buy building materials from farmers.

Source: https://www.marketplace.org/2022/06/20/what-if-the-next-big-crop-we-grow-is-for-building-materials/

01

Contract Management

Anuradha Maheshwari
Founder, Lex Mantis
Advocates & Legal Consultants

Introduction

Contract management forms an important and critical aspect of the functioning of a company or any other business entity. All businesses, big or small, function on the basis of contracts of some form or another, with either trading partners, third parties or even employees. Contracts whether for leasing an office building, or employing a skilled professional, or even trade agreements, are central to modern businesses. And yet contracts and their management are the bane of most corporate professionals looking into the same. They are a headache for most and are often perceived as being far too complicated.

The risks associated with poor contract management include avoidable breaches and disputes, overlooked penalties, lost revenues through ineffectual terms, a damaged brand due to poorly constructed or missed terms, lost savings and opportunities through poor administration, unexpected renewals and expirations, additional costs to remedy subcontract/order of non-standard terms and conditions, and hidden clauses that leave the company open to liabilities and other disadvantages.

To understand the issues related to contracts that make it difficult to deal with for most, one needs to understand first and foremost what is a contract and two, what is contract management or for that matter, why would a contract need managing? This article is thus an attempt to simply these issues and familiarize the reader with the typical aspects of contract management.

Contract

Legally speaking, a contract in order to be considered valid, has to be an "*agreement which is enforceable by law*", and because of which rule, all agreements cannot be contracts. Only those agreements, which display a legal character and can be enforced in a court of law, can be termed as contracts. Simply put, an agreement is a voluntary undertaking of two or more parties, who have expressed their willingness to be bound in a relationship. When that relationship clearly displays an intention between the parties to be 'legally' bound or a legal relationship, can the relationship be termed as a contract. For example*, "A promises to pay B Rs. 5 lakhs, once he kills C",* cannot obviously be a legally binding or enforceable agreement, even though there may be an agreement of such nature between two parties. Such agreements are clearly wrong and are therefore untenable, legally speaking. Thus, globally accepted standards and territorial laws, set out the essential elements that constitute a legally binding and enforceable contract.

Section 10 of the Indian Contract Act, 1872, states that "*All agreements are contracts if they are made by the free consent of parties competent to contract, for a lawful consideration and with a lawful object, and are not hereby expressly declared to be void".* Simplified, it means that for an agreement to be considered a valid

contract, certain essential elements must be present in the agreement to lend it that required legality, for it to be enforceable in a court of law. The essential elements of a contract, are thus:

i. A lawful offer (proposal) and lawful acceptance,
ii. Lawful Consideration;
iii. Lawful object of the agreement,
iv. Parties 'capacity(competency) to contract
v. Free consent (willingness) of the parties to the contract;
vi. Agreement not expressly declared to be void;
vii. Terms and conditions of performance of the contract;
viii. Possibility of Performance of contract.

A contract needs to be enforceable to give the parties therein, the security of appropriate remedies and reliefs in case of breach of the contract, especially in the event of disputes between the parties.

Phases of Contract Management

Since contracts are the backbone of a thriving market place and businesses, and the pivot of all business relationships, it is important to realise that no company or business entity can get by without relying on contracts and their proper management. Contract management, thus means **the process of administering the request, creation, negotiation, review, execution, and post-execution management of contracts and supporting documents**. Regardless of whether it is a small business dealing with a couple of vendors on an ongoing basis, or a colossal service provider working on a one-off project, organisations need to invest the right amount of work in the preparation, negotiation, execution, and monitoring stages of the contracts, as well as adopt and maintain effective contract management systems to help them track all of their contracts from beginning to end. Organisations need to manage efficient flows of the contracts entered into, in order to improve legal and regulatory compliance and reduce business risks. It is critical therefore to first understand the three phases of contract management.

The first phase of contract is the **pre-execution phase**, which involves everything from the initial request through the drafting and negotiation of the contract, both internally and with third parties. Thereafter, follows the **execution phase** that involves the signing and finalization of the contract. And finally, the **post-execution phase**, which involves fulfilment of the contractual obligations through performance, reporting and archiving the contract. The 3 phases of contract management often involve tedious, and repetitive tasks. Nonetheless, all active contracts have to go through all three phases – and it is possible for these phases today to be simplified, and even automated and further streamlined through various, available contract management software.

Pre-execution Phase

This phase/ stage begins with identifying the scope of a contract and the best party to partner with in a specific contract, which may involve inviting bids or offers and that may take several months, to zero in on the desired partner to contract with. Post the identification of the desired partner, begins the stage of negotiation of the contract and setting out the terms and conditions of the agreement in writing. The whole exercise of contracting is a complex long-drawn-out process, involving several rounds of discussions and drafts amongst the parties to the agreement. Generally, this process begins with the offeror providing a term sheet, articulating the offeror's terms and conditions. The terms and conditions could then be either approved, amended or rejected by the acceptor, or have fresh terms provided by acceptor, called as a 'counter offer/s'. The back and forth continues, till the parties agree on consensus terms, which is when the parties communicate their readiness to ink and seal the agreement through a contract.

Typically, this phase involves a careful analysis of all the risks involved in entering into a specific contract with a specific party, addressing those risks in the contract, defining particular requirements of the parties and devising a proper contract strategy. A point to be remembered here is that "*There is many a slip between the cup and the lip,* and many of the assumptions and details relating to the working of the contract that come to mind, are often missed completely or are not properly

articulated in the agreement. Parties then presume and rely on orally expressed thoughts, and hope that such details would be known to the other party or understood by it, based on prior discussions between them. This creates a void in the understanding between the parties, and leads to avoidable disputes and breaches in the performance of the contract. An auto equipment and spare parts supply agreement with a party situated abroad, and having many separate components to it, comes to mind. The contract took over two years to negotiate and close and the multiple iterations in it, caused immense confusion to those working on the draft. The team on the draft job also kept changing. It was important for the organisation, to have had someone to have kept a track of all the changes, for ease of reference to arrive at the final draft of the agreement.

Delays in closing contracts could be several, not the least being unforeseen events like deaths, major illnesses or the churn in team members of an organisation and new incumbents having to learn all aspects and nuances of the negotiations from the beginning, or change in organizational policies that impact contracts, like new rules relating to hiring of employees or rules relating to making and receiving payments, etc. Ultimately, one must realise that an agreement/contract can be reached, only if it's a win-win situation for both the parties willing to contract with the other. If there is no meeting of minds, the negotiations would eventually fall apart, would have to be abandoned and the search for another partner/party would have to begin anew.

Execution Phase

This involves the closure of negotiations of the contract, and the parties finally agreeing to the terms and conditions as is listed out and drafted in the agreement. At this stage a final review of the draft is called for and for all terms to be agreeable, which is followed with the signing of the contract by the parties to it. Signing of the contract would necessarily entail some legal formalities, like executing the documents on stamp papers, getting them notarized, sending copies to the opposite parties, etc. The time taken to close this phase is entirely dependent on the errors and shortfalls discovered in the drafts in the final review (which may lead to another round of negotiations) and the organizational procedures adopted for executing contracts.

Post Execution Phase

This phase is everything to do with an agreement after it's signed.

It is essentially the working of the contract, which in legal terms is referred to as the 'performance' of the contract. This phase deals with the mechanics of the execution of the contract, including deliveries if any, the milestones to be achieved, which may be linked to the deliveries; rights and obligations of each of the parties at every milestone and monitoring every step of the contract; all of which have to be clearly spelt out in the agreement, so that confusions, delays and disputes with respect to 'what has to be done where and how' is eliminated. All contracts must be continually monitored after closure, to ensure that both parties remain on the same page, compliant and evaluate risk and performance at each stage.

A critical aspect of this phase of the contract is maintaining communication with the other party and periodically reviewing the performance of the contract. The last step in the management of this phase is monitoring the contract's end date. If there's a definite end date, each party must confirm that all the obligations have been met and unresolved issues are fixed. Only then can final payments be coordinated.

Most Common Problems In Contract Management

The reason for contracts not going according to the plans as laid out in the agreement, is often because of the poor management of the same, for which multiple factors are responsible. Gleaned from my experience, listed below are some of those prime factors for problems related to management of contracts:

1. **Preamble to the Contract:** A welcome trend in contract drafting as seen nowadays, is starting the contract with a preamble and an index. While the index helps in the organisation of the contract and

knowing what to look for and where, the preamble in particular, though not mandatory, includes the scope, purport and intent of the contract, and can help in lending direction to the involved parties and the courts of law, in understanding how certain clauses ought to be interpreted in the event they are found confusing. Preambles are known to have played a meaningful role in resolving disputes and stalemates in contracts through the direction they provide.

2. **Poor communication and poorly drafted contracts:** Often times, teams entrusted with the jobs of drafting the agreements are not completely in step with their clients' briefs, because of either lack of proper information or lack of proper communication or lack of sound knowledge with respect to drafting of the agreement, all of which impact the quality of the draft of the agreement. At other times, business managers (parties) not wanting to be bothered with what they consider "a legal business", are just too keen to do a quick job, rather than pay attention to complete and careful articulation of the clients' terms and conditions. Hence, they opt for 'quick fix' template jobs, using boilerplate language that may be out of date and which in turn causes compliance issues. Either way and often times, it results in a lot of holes in the contract, with both parties feeling dissatisfied and disgruntled with the way the contract moves. If unclear terms and conditions are set out in the documentation, or the responsibilities for the contractor or other party aren't clearly defined, resultantly, either party might not be willing to fulfil their side of the agreement, leading to possible problems. As such the legalese used in contracts is beyond the comprehension of non- legal persons, and hence members outside the legal teams are not willing to look at or read contracts. Contracts, should therefore be made easily readable and comprehendible for everybody, to provide the people in the involved organisation greater access to the contract. It would also be advisable, to create a clause and template library with the organisation's approved legal language, terms, and document formats to enable assembling contracts faster and eliminate deviations.

3. **Oral Instructions:** Another observation for lack of proper contract management, is that despite written down contracts, it is commonly found that parties alter/amend parts of the execution and performance clauses of the contract or their scope, through oral communication between the parties. Written down terms are simply changed/amended orally, because it seems quicker and easier to do so. For example, if the contract mentions a date of delivery at a particular stage to be 'X" and the party obligated to perform is encountering some difficulties with the delivery date, it may simply call up the other party and forward the date of delivery to another convenient one date for both parties. Parties fail to realize the legal complications that emerge caused by such changes and revisions, and which surface when the disputes reach the courts of law.

4. **Timely Reviews of Contracts:** It is absolutely vital to conduct regular and periodic reviews of all contracts at each of the stages, to keep track of compliance issues. A dedicated legal team, who is familiar with the contract, is required to monitor payment and delivery timelines, to ferret out important specific information that maybe lost amongst the thicket of words and other pertinent issues in a contract. It is seen, that deadlines are often missed or are plainly forgotten as there were no alerts or reminders set for the events in the contract, leading to avoidable breaches and dispute between the parties.

5. **No Contract Managers:** Extending the above-stated point, it is pertinent to highlight, that organisations often undermine the importance of contract management and employing dedicated professionals for the job. As mentioned before, contracts have to be constantly monitored and reviewed to inform, alert and sensitize the involved parties about performance related events in the contract and to the possibility that unforeseen legal issues may emerge from a particular business decision. Therefore, it is advisable to hire legal professionals familiar with the language of contracts, to monitor them and to timely inform the management on target dates and expiry of the contract, so that the organisation is able to attend to issues on time. Such professionals can also

be expected to explain all the risks and repercussions in case of an unintended breach of contract and to create workflows for the entire contract lifecycle, for easy management of the contract. It is especially important in long functioning contracts, like an ongoing supply agreement for ten years or more, to hire such professional contract managers to review the contracts regularly, so as to not miss important dates or events in the contract. Having contract managers ensures that contract related clarity is maintained, the right language is used, organisation remains contract compliant and the legal risks are minimized.

6. **Not clearly defined payment plans:** Often it is observed that payments or payment related milestones are linked to complex payment calculations, which the parties attempt to explain verbally in the contract and which continues to perplex the business team reading the contract and who have to make the payments. It therefore stands to reason to adopt payment structures through known formulas of calculation, which can be further supplemented through good illustrations of how the payment is actually to be made and which can be appended as annexures to the contracts. This avoids unnecessary, confusions, discussions and delays in contract execution.

7. **Not archiving contracts properly:** Another cause for poor management of contracts is that they are not archived systematically or in a proper place, with the result that they are not accessible at all times to the team handling the contracts. Generally, no standards are followed in storing the contracts through the year. They are often relegated to dusty files and attics and access to them becomes difficult. Organisations need to develop a system for digitally archiving of contracts, so that they can be easily accessed and referred to, can be tracked, managed and secured as and when needed without any difficulties.

8. **Events beyond one's control:** Apart from breaches and disputes, another reason for a contract failing is to do with the occurrence of events, which are beyond one's control like earthquakes, floods, pandemics like the one we recently witnessed, or even events like monetary devaluation, which could deeply impact the pricing dynamics in a contract. These events are also referred to as " Acts of God", and includes many types of natural disasters. They are protected by a boilerplate clause called as ' Force Majeure Events', a terminology that has been adopted from the French language. Force majeure meaning "superior force" in French, and exempts parties from adhering to the contract when an unforeseen event radically changes the existing state of things in a contract. Being a standard clause, people simply copy and adopt the broad language as used in other contracts, rather than think through their specific requirements in such eventualities. Consequently, when such events do occur, parties realise that their Force Majeure clause was inadequate to handle the situation arising from such an event. Therefore, it is advisable to articulate through time lines, the rights and obligations of the parties in case of a Force Majeure event.

Conclusions

As an organisation working with contracts, it is critical to understand and appreciate the importance of adhering to best practices related to all phases of the contract management lifecycle. One cannot overemphasize the importance of determining the role of the legal team or contract managers in the contracting process and the level of active involvement that they may have in negotiations relating to the contract. It is critical for such team or manager to maintain and keep clear and unambiguous channels of communication with the business team who would be executing the contract, to minimise embarrassing conflicts, misunderstandings and sparring with the party on the other side of the transaction and its teams.

Once the organization has adopted necessary guidelines with respect to its contract management practices and has implemented a process across the pre-execution and post-execution phases, productivity is enhanced, risk is minimized, and profitability is maximized.

02

Contract Management – *All for one and one for all*

Somnath Roy
Sr. Vice President – Contracts
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Contract Management has gained immense importance on account of the competitive environment in today's world. The Black's Law dictionary[1] defines Management as a function with three components: (1) setting standards, (2) measuring actual performance, and (3) taking corrective action, fully aimed at achieving defined goals within an established timetable.

Contract Management is nothing but managing the relationship with the Employer and other stakeholders as defined in the Contract, for minimization of the Organization's Risks/Losses and maximization of profits during the entire life cycle of the Contract. In the fast paced times and very large projects, Contracts are becoming more complex, giving rise to entwined promises and reciprocal promises[2] to be performed by both the parties. With this, the possibilities of disputes have also increased significantly. An essential role of the Contracts Management team is to ensure that the disputes are avoided, or once arisen, are resolved without requiring to resort to taking more time and getting involved in a costly dispute resolution process.

The role of Contract management can be understood in a simplified way by the "Equilibrium Principle".

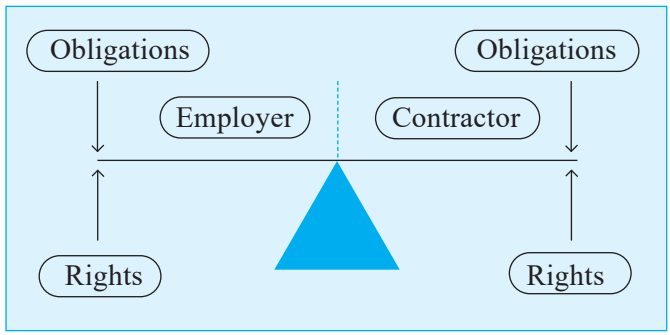

Figure-1: Equilibrium Principle

As can be seen in the Figure-1, there are two main parties to the Contract – The Employer and the Contractor. Now the left-hand side of the seesaw has the rights and the obligations of the Employer and the right-hand side has the rights and the obligations of the Contractor. The position of the see-saw in the diagram (flat horizontal) is in Equilibrium when the contract is entered into between the Employer and the Contractor irrespective of the type and terms and conditions of Contract.

The Equilibrium is established based on the agreed defined terms and reciprocal rights and obligations (set of promises) and a fixed priced value (the consideration). Thereafter, the key to maintaining the seesaw of obligations and rights in equilibrium is **effective Contract Management**.

More often than not, the rights and obligations

forming part of reciprocal promises are not kept either by Employer or by the Contractor despite making best effort. In such a scenario, the equilibrium is disturbed and the see saw deflects to one side because of the failure of the Contractor to keep up its promises which results in Liquidated Damages (LD) apart from Extension of Time (EOT); refer Figure-2.

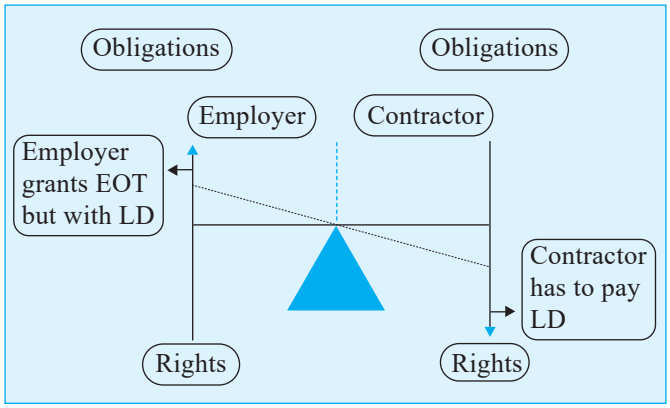

Figure-2: Failure of Contractor to keep promises

Similarly, when the defection is the resultant effect of the Employer failing to fulfil its promises; time and cost as suffered by the Contractor follow. Those are realised by the Contractor by filing EOT and cost claims. The situation can be seen in Figure-3, to understand this basic principle for all types of contracts.

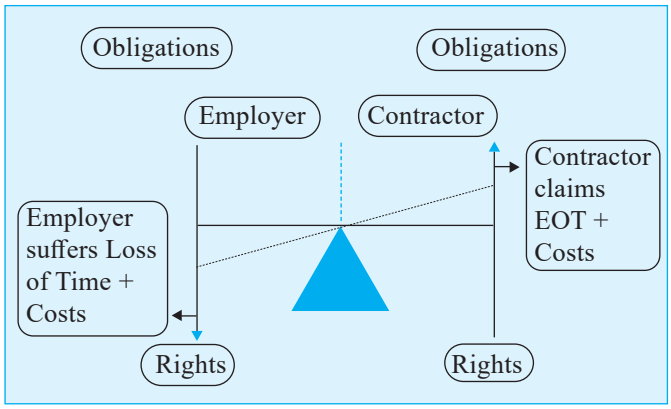

Figure-3: Failure of Employer to keep promises

Time is lost in both the cases and eventually the project is completed after the scheduled completion date but there arise some rights. The Employer has the right to impose Liquidated Damages while fixing the revised time for completion; on the other hand, the Contractor becomes entitled to claim damages provided the delay is caused by the Employer despite making best Efforts. The legal consequences are captured in Section 73 of the Contract Act in case of damages that were not specified in the contract, and Section 74 of the Contract Act when such damages are specified as a pre-estimate of damages when parties entered into the Contract. They are separate issues and not being dealt with in this paper.

Broadly speaking, the best contract management is not only to safeguard one's interest but in fact it is adopting a win-win situation for all the Parties to the Contract with an ultimate goal of delivering a successful project. Successful Contract Management implementation ensures that there is meeting of minds of all the parties involved and also that their interests are protected.

Attributes and Practices for effective Contracts Management

For effective contract management the following attributes are necessary:

- Understanding the Contract as a whole
- Keeping the goal in mind from the beginning
- Packaging the claims

One must always bear in mind that Contract Management is a team work and a successful project through effective contract management can be achieved by an integrated team. Hence, everyone (Contractor, Engineer and Employer) involved in the Project should be on it and function as one. Some of the practices that can be adopted for achieving that are:

1. Submission and approval of a detailed Work Programme:

A Work Programme or a Baseline Programme, a tool reflecting the completion of the entire scope of the Project within the scheduled time for completion agreed upon, can ideally serve its purpose once it is submitted along with a Resource Schedule. A Contract

document merely mentions the Project duration as well as various reciprocal and concurrent obligations of each party to be performed at appropriate times. In the Work Programme, such obligations of both the parties are produced in a connected and reciprocal way, with a set timeline fixed for each obligation.

It can thus be established that Work Programme is a tool reflecting order in which work could be completed the essence of which is captured in Section 52 of the Indian Contract Act.

Along with the timelines, a Work Programme needs to include resource deployment plan, cash-flow forecast and the list of assumptions.

Some of the points making Work Programme an essential tool in any time based Project are:

i. It gives timelines to each activity, whether specified or not in the Contract, giving a realistic dimension to the Contract.

ii. The parties have a clear picture at the very beginning as to how the Project would roll out and at what juncture do they have to perform their obligations.

iii. Some of the obligations, which are not expressly mentioned in the Contract are often included in the Work Programme.

iv. It serves as an easy and efficient tool and acts as a document to track delays for both the parties.

v. Revised Work Programmes can be prepared by adding the delays occasioned, to arrive at new, realistic timelines.

vi. It serves as a basic tool for assessing and granting extension of time by the Engineer/ Employer.

It is also critical that the Engineer and Employer review and approve the Work Programme so that it is established as an agreement by all parties, to base their future steps and strategies. The Engineer/ Employer in such case can seek corrections/ modifications to the Work Programme as found appropriate and important before finalising the same. Once the Baseline programme is reviewed and approved by the Employer it acts as the pulse of the Contract for monitoring the health of the project. It is to be noted that it is the bounden duty of the Engineer to comment on the Work Programme submitted by the Contractor to establish the order and the way of performance, within the time mentioned in the contract else it would be considered as deemed accepted. The baseline Work Programme works as a pivot on which rights and obligations of both the parties are assessed during the currency of the contract so as to whether the same has been fulfilled or not.

2. Assessment or ordering Variation

All contracts are prone to changes due to some unforeseen and unavoidable situations not contemplated at the time of entering the Contract. To accommodate such changes there exists a "Variation" clause in the Contract. As per FIDIC Yellow Book of 1999, Variation is any change in the employer's requirement or any change in the scope of work in terms of the contract.

It is imperative to include a variation clause in any agreement so that if there is any change in the original envisaged scope, then the agreement does not become void for uncertainty under Section 29 of Indian Contract Act. To avoid entering into repeated agreements on account of variation of quantities or otherwise, a clause in a contract is introduced to validate such variation during the course of execution of works.

A Variation clause is necessary to accommodate new items or change in quantity of existing items including that of change in specification of few items, which are absolutely necessary to complete the works. Employer cannot order any variation which is not necessary to complete the main Works contracted for. Sometimes limits in terms of percentage of original works are mentioned to cap the variation but that does not legally invalidate a contract and operation of such variation purely affects the procedural part of it. If such a variation is necessary to complete the works, the Contractor need not ask for permission of the Employer/ Engineer even in case such variation is not the effect of any instruction by Engineer/ Employer. The Employer cannot deny any payment of such works just because notice has not been given by the Contractor. Section 70 of the Indian Contract Act provides that works executed for absolute necessity cannot be gratuitous.

Another point to be noted is that any variation ordered by the Employer/ Engineer within the ambit of the contract needs to be responded to by the Contractor within the time prescribed in the contract or within reasonable time to ask for actual rates/ prices for such work before the work commences. At the same time, when the quantity is increased or decreased substantially, the Employer/ Engineer should notify the Contractor about any revised rates that they want to fix for such varied works once a limit prescribed in the contract exceeds or falls short of. The revision in rates and/or prices cannot be fixed after the work has been fully completed or substantially completed.

In essence, acceptance of variation in terms of time and cost by either of the Party needs to be notified to the other Party, before the work is commenced and not after its completion. Notification of variation in rates and prices after completion usually give rise to dispute on account of non-acceptance of rates and prices by the executing party. Hence, caution should be exercised by both the parties to accept the variation or reject the variation at the appropriate time so that the aggrieved party can proceed with the dispute resolution mechanism during the currency of the Contract.

3. Submission of Monthly Report

Monthly Progress Report (MPR) is a comprehensive document containing complete details of the Project, particulars of the preceding month and plan for the next month submitted by the Contractors to the Employers. The particulars of the preceding month include the progress made, resources deployed, financial performance, issues faced in the month, etc.

In that context, an MPR sheds light on what lies ahead, occurrences in the immediate past and where the Project stands at that moment. Submission of the MPR might or might not be an express requirement of a Contract. However, it is crucial and essential to submit the same to act as a contemporary record, which should be utilised better by all the parties.

A thorough review of the MPR would provide the Employer better insights and a holistic view of the Project, enabling them to take corrective actions timely. It is often the case that the MPRs are submitted by the Contractor on a monthly basis but those are never reviewed or commented upon by the Engineer or Employer. If the Employer has not made any comments on the contents of the MPR within a reasonable time then it amounts to deemed acceptance of the facts narrated therein and the same can be established during the dispute resolution process, aiding the Contractor. It is thus critical to view MPR as a crucial contemporary record, and not just as a routine formal communication.

During the entire life cycle of the project several events occur that are required to be captured in the form of a document, preferably jointly or through capturing those events in the form of monthly or daily progress report. These are contemporaneous documents, which determine the outcome of any issue later on.

All the events which have the effect of causing delay or sustaining additional cost should be intimated by means of Notice to the other party as per the terms of contract or otherwise also. The issuance of Notice whether for claiming time and cost or making application for Extension of Time are very important as Notice per se narrates the event that happened on contemporaneous time having the effect of causing time and cost overrun. Without Notice, the party is kept in the dark about such an occurrence and its effect thereof.

The requirement of issuing a Notice in a construction contract, is used and misused equally by all the stakeholders of the project, hence it requires some amount of deliberation as per the prevailing law in force. Another area that requires utmost attention is the Extension of Time as most of the construction contracts are not completed within the time as per the Contract. These two issues carry substantial weight in fulfilling the requirement of successful Contract Management.

Issuance of Notice

Issuance of a Notice from a party to another party is to convey the event(s) that has (have) happened and about which the other party may not be aware of or even if

aware of may not be able to assess the consequence of the event(s) that has (have) occurred. Notice is must in such cases to inform the other party of the events so that the other party in turn could suggest some action by which the consequences can be reduced to nullity. On the other hand, some event that has no connection with the project that is being executed, even though it occurs in the surrounding area need not be informed to other party as it has no consequence on the project execution. Similarly, any event, which is known to all need not be notified to the other party as that party is already aware of it. What is important in such a situation is to inform the consequences at appropriate time if that event has an effect on time and cost. In other words, the N**otice must serve the purpose of letting others know of what they are not or may not be aware of – nothing more or less than that.** That is the general principle however; the requirement of contractual Notices work in a slightly different manner though their effects are governed by the principle postulated herein above.

Under the law of Contracts, issuance of Notice is often a "condition precedent", which is a legal term describing condition(s) that needs to be satisfied or fulfilled before the subsequent part of the contract can take effect. Non adherence by a party to such "condition precedent" of issuance of Notice might result in loss of entitlement to a claim for that particular delay. Such clauses make the issuance of Notice necessary and crucial.

A contract provides a time limit to issue a Notice, failing which a certain right to make a claim would be lost.

The 2017 FIDIC based contracts require Notices of claim to describe the event or circumstances giving rise to the claim in the same way as under the 1999 Conditions, but they further provide that:

- "Notices" must be in writing, signed by the authorized representative of the party named in the contract, identified as a Notice, and delivered to the address stated in the Contract Data; and
- nothing stated in any progress report, programme, or supporting report shall constitute a Notice or relieve the Contractor of any obligation to give a Notice.

The basic intent behind issuing a timely Notice is to provide for a better control for administration and managing of contracts. It ensures that the other party is notified and the events made known to the other party at an early stage, giving the other party enough time to assess the issue and take required steps to mitigate any possible impacts.

Time bar clauses are also intended to avert an accumulation of claims during the course of a project, which can have a snowballing effect resulting in difficulties and complexities. The FIDIC 2017 clauses encourage co-operation between the parties, enhance transparency and promote an attitude to resolve the issue as soon as a party is made aware of the same.

In Indian Contracts, though time limits are stipulated for issuance of Notices and submission of claims, but that does not deter a Contractor or the affected party from issuing Notices later on within a reasonable time and claiming the effect of time and cost. "Reasonable time" is always determined based on the facts of the case and not the rule of law and as such varies from situation to situation which bothers and at times confuses the Engineer as to what is to be done with such notices. Essentially an Engineer in a FIDIC environment can always recuse himself from performing any determination if a Notice is not served on the Engineer as per the time period prescribed in the contract. In the same way, the Engineer's Determination after a specified time does not bind the party against whom the determination has been made. Delayed Determination or action carried out after the specified period causes a breach of Contract by the Employer as the Engineer acts as an agent of the Employer though he plays a dual role.

However, in both the cases the essence is not lost and that is even if the Engineer does not determine an issue, the Contractor still has a chance to prove his case before any Tribunal or court of Law without derogating from his position save and except that the Contractor has to carry a little more onerous burden of proving the facts through contemporaneous documents. Similarly, the Engineer's delayed Determination does not belittle

its impartiality of assessment which the other party can take shelter under a court of law or before any ordinary tribunal.

The entire aspect has long been codified through amendment in Section 28 of the Indian Contract Act by adding a proviso to Section 28(b) which states that any agreement that extinguishes the rights of any party or discharges either of the parties from liability is a void agreement.[3]

It is to be understood that the application of Section 28(b) is to be used as a fall back mechanism by either of the parties to the contract – it cannot be made as a norm. It would be correct to give Notice in proper time as per the provision mentioned in the contract except in the few instances which the Contract emphasises very categorically, for which the requirement of Notice should not haunt both the parties to elicit their respective rights once they have performed their part of the obligation.

With the aforementioned explanation the issue of Notice is put to rest, however, another issue that always causes confusions among all the stake holders of a project is that of Extension of Time and its effects thereof.

Extension of Time

Extension of Time is not only a requirement but of utmost necessity for almost every construction Contract to validate a Contract which is completed after its scheduled completion date. Scheduled completion date is important for Government or its instrumentality to declare before the common public about the completion of the project that is being executed. The Government, being the custodian of the property of common public should declare as to when the project is being thrown open to public use at the same time the requirement of law mandates that Contract that is executed does not get invalidated by lapse of time. To reconcile these two very important issues, almost every construction Contract has provisions of Extension of Time.

Provisions of Extension of Time serves the dual purpose – a) Promise not fulfilled by Employer enables Employer to declare a fresh date for completion of the project before the common public b) Contract is spared from its invalidity even in a case when the project is delayed due to default of the Contractor. Without having any a provision for Extension of Time would make a Contract where time is of the essence in strict sense of the word, inoperable if there is delay on any account. The same is not the case when a contract has a provision for Extension of Time despite of mentioning that time is of the essence of the contract repeatedly in every nook and corner of the contract. The legal effect of both these postulations can be understood from the provision of Section 55 of Indian Contract Act.

Section 55 of the Indian Contract act deals with two situations when a) Time is of the essence in strict sense and b) Time is not the essence of the contract. In the former case, if there is a delay caused by any party, the other party can avoid the contract and claim compensation – such is the force of the provisions of the section. Fortunately, almost every construction contract falls under the category being time is of the essence. The second proviso stipulates that in a contract where time is not the essence, the non-breaching party would be entitled to damages from the party causing delay but would not be able to terminate the contract so long as the reasonable time for completion is not given by the non-breaching party or exhausted by the executing party. What is the reasonable time that may be required to complete the works depends upon various instances – one among them would be to compute the time by which the entire Liquidated Damages is exhausted by the executing party. There is no such yardstick though and has to be ascertained from the circumstances of the cases.

The construction Contract, where time is not of essence generally, the second paragraph of Section 55 provides the contract is not voidable, but the innocent party is entitled to compensation for the loss occasioned, without the requirement of service of any Notice upon the breaching party.[4] It is an application of the "prevention principle", that a party may not insist on compliance with a contractual obligation in circumstances where it has itself been prevented from such compliance.

It is to be noted here that there is no requirement of serving any notice to the breaching party for his non fulfilment of promise which goes on to prove that a party who has the actual or imputed knowledge need not further be forewarned through Notices. This requirement is again misused by breaching party by resorting to contractual provisions. Contract may provide such requirement but legally Notice requirement in those cases are not a must; in other words, non-serving of a Notice does not become fatal to the claim. That is the effect of Indian Contract Law on the breach and damages in case there is Extension of Time.

However, instead of terminating the contract where time is of the essence, if the innocent party accepts belated performance of the contract, it cannot claim compensation for any loss occasioned by non-performance of the contract in the agreed time, unless at the time of such acceptance, it gives notice to the breaching party of its intention to do so[5]. Mostly this postulation is theoretical as construction contracts are those contracts where time is of the essence. Any extension granted thereof is without prejudice to the claim of actual damages/ liquidated damages, as the case may be, instead of awaiting the end of the contract to lodge any such claim.[6]

The law has been laid down in the Hind Construction case[7] where it has been held that in a contract where there is provision of Extension of Time and Liquidated Damages, time is not of the essence of the contract. Those contracts do not lose their utility even after lapse of time. How much time before which that can be said is a matter to be ascertained on a case-to-case basis.

Another point which requires proper understanding is as to when time is to be extended or if not extended what forewarning is to be issued to the executing party so that it stands to legal scrutiny in so far as action of both the parties are concerned. In fact, Extension of Time application need to be applied by the Contractor well before the original time expires so as to enable Engineer and/or Employer to grant Extension and to fix a further date for completion when extension is due to default of Employer/ Engineer. Even in case, extension is necessary due to default of the Contractor, the Engineer/ Employer should fix a future date for completion with a warning that there would be application of Liquidated Damages. However, mere reservation of right to apply liquidated damages at a later stage may not be sufficient and such conduct would be subject to legal scrutiny. In both the cases, the executing party is made known of the future date of completion – with or without liquidated damages. It enables the executing party to proceed with the works accordingly or challenge the extension so granted without stopping the execution of works. However, despite of this requirement, in majority of the cases, Extension of Time is fixed retrospectively after the original time period has lapsed and many a times, no further completion date is fixed with an age old practice to fix a completion date when contract would be actually completed. In former case, it is not correct as the executing party is not aware of the further date for completion and hence cannot factually challenge such a date successfully. In the latter case, time is "set at large" and the executing party is only required to complete the work within reasonable time without being subjected to any Liquidated Damages. Both these practices need to be obliterated and Engineer should play a vital role in determining the Extension of Time well before the original time expires by directing the Contractor to apply for Extension of Time well before the time or Engineer can suo moto determine the Extension of Time to be on the right side of the law.[8]

Another practice that has gained ground wrongly is that of extending the time period provisionally for a number of times without finalising the actual date of completion. The Employer is under misconception in those cases that they are only extending the time to keep the contract alive and once the Work is completed, they would be entitled to impose Liquidated damages. "Provisional extension" means extension granted temporarily but once that period expires and the Employer fixes a further time for completion, the earlier time already fixed becomes permanent. Unless, the Employer imposes Liquidated Damages while fixing the further time for the provisional time fixed earlier – they lose the chance of imposing Liquidated Damages after such time has expired as the Contractor was not under Notice to be

subjected to Liquidated Damages. Secondly, reserving the right to impose Liquidated Damages cannot go on for ever; Employer must express his intention to impose LD while fixing the further time, or else his so called rights does not give any effect to it in law. Therefore, extension of time cannot be provisional all the time and the delays cannot be reassessed once a request is received and extension of time is granted.[9]

An ideal scenario is when the Employer determines the EOT before the Original completion elapses and the determination clarifies the type of delays along with the form of compensation. There are a few broad types under which, apportionment of delays can be made and EOT can be granted by the Employer at material time as shown below to avoid disputes in the future:

a. **Excusable & compensable** - amount of additional duration granted on account of issues attributable to the Employer

b. **Excusable & non compensable** - amount of additional duration granted on account of issues attributable to third party delays

c **Non excusable & non compensable** - amount of additional duration granted on account of issues attributable to the Contractor

Conclusions

The issue of Contract Management is best served once it is followed with the best practices of contract administration by all the stakeholder of the project. A Party's autonomy in establishing its rights and fulfilling obligations always gives an edge and ensues less dispute and completion of project well in time or completion with minimum delay. The Employer should consider the Contractor as the major stakeholder who is creating an asset for him and Contractor too requires to be endowed with his rights and obligations, once fulfilled should be rewarded properly within the time under the terms of contract. An Engineer plays a vital role in establishing a bridge between the Contractor and the Employer by means of showing the right path in case of any impending dispute. In that sense, Engineer should not only be technically qualified he should be a person of some knowledge in Contract Law besides awareness of terms and conditions of contract and ideally, he should perform his role in an independent manner as far as possible. The author believes that there is no dearth of knowledge in our country but what the Engineer's fraternity lacks is implementation due to fear of not being chosen by the Employer for the next project. Such misconceptions need to be removed. At the same time, the Engineer should be trained in Contract Law and its practical application so that they can monitor the project armed with pertinent legal knowledge concerning contracts. The days are not far when the "Engineer" has to add the above to his engineering skills and has to deal with Contract and its allied law for successful monitoring and completion of projects.

Note: The views, thoughts and opinions expressed in this article are solely of the Author and are not in any way attributable to the Author's Employer's organization, committee or other groups or individuals.

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03

Neither Final Nor Infallible - "Final and Binding" Engineer Decisions Under Indian Law

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Introduction

"We are not final because we are infallible, but we are infallible only because we are final."

~ Justice Robert Jackson[1]

Justice Robert Jackson's oft-quoted witticism – describing the US Supreme Court – has had a significant impact on how the judiciary sees itself around the world.[2] This has been especially true in India, so much so that a volume of essays released to commemorate fifty years of the Indian Supreme Court was titled "Supreme but not Infallible".[3]

This article, analyzes the jurisprudence on "final and binding" Engineer determination clauses – which are very common in the Indian construction contracts. Using that as the basis, the author argues that such Engineer decisions are neither final nor binding under Indian law and can be challenged through either arbitration or litigation.

Engineer Determination Clauses

Much ink has been spilled on the issue of Engineer determinations.[4] Considerable confusion still persists despite several attempts at international harmonization in this regard. For example, Sub-Clause 3.5 [Determinations] of the FIDIC Red Book 1999,[5] Yellow Book 1999[6] and Silver Book 1999[7] all use virtually identical wording on the subject. Essentially, wherever the Engineer or Employer's Representative is under an obligation to agree or determine any matters under the contract, they need to first consult with the parties to reach an agreement. Where such agreement is not reached, the Engineer or Employer's Representative need to make a "fair determination" in accordance with the contract and having due regard to all relevant circumstances.

Sub-Clause 3.5 [Determinations] was introduced in 1999 because there had been much debate over Sub-Clause 2.6 [Engineer to Act Impartially] in the Red Book 1987,[8] and Sub-Clause 2.4 [Engineer to Act Impartially] of the Yellow Book 1987.[9] Sub-Clause 2.6 [Engineer to Act Impartially] of the Red Book 1987 provided that wherever the Engineer was supposed to exercise their discretion under the contract – by either (i) giving a decision, opinion or consent; or (ii) expressing their satisfaction or approval; or (iii) determining value; or (iv) taking any action which may affect the rights of the Employer/Contractor – the Engineer should do so "impartially" within the terms of the contract and having regard to all the circumstances. This position was also reflected in Sub-Clause 2.4 [Engineer to Act Impartially] of the Yellow Book 1987.

Justifiably, contractors doubted that the Engineer – having been appointed by the Employer – could act in a truly impartial manner. FIDIC made its first attempt to clarify the Engineer's position in Sub-Clause 3.5 [Employer's Representative to Attempt Agreement] of the Yellow Book 1995,[10] which provides that where the Employer's Representative is required to determine value, cost or extension of time, they shall consult with the Contractor in an endeavour to reach agreement. Where such agreement is not reached, the Employer's Representative shall determine the matter "fairly, reasonably and in accordance with the Contract".

From there, it took only a few more years till FIDIC introduced Sub-Clause 3.5 [Determinations] of the Red Book 1999, Yellow Book 1999 and Silver Book 1999. Alongwith Sub-Clause 3.5 [Determinations], FIDIC also introduced Sub-Clause 3.1 [Engineer's Duties and Authority] in the Red Book 1999 and Yellow Book 1999. which provides that wherever the Engineer is carrying out their contractual duties or exercising their contractual authority, they shall be "deemed to act for the Employer". Similarly, Sub-Clause 3.1 [Employer's Representative] in the Silver Book 1999 states that the Employer's Representative "act[s] on [the Employer's] behalf".

FIDIC introduced further changes in the Red Book 2017,[11] Yellow Book 2017[12] and Silver Book 2017.[13] Sub-Clause 3.2 [Engineer's Duties and Authority] in the Red Book 2017 and Yellow Book 2017 continues to provide that wherever the Engineer is carrying out their contractual duties or exercising their contractual authority, they shall be "deemed to act for the Employer". Similarly, Sub-Clause 3.1 [Employer's Representative] in the Silver Book 2017 provides that the Employer's Representative shall be "deemed to act on the Employer's behalf".

However, there were major changes in Sub-Clause 3.7 [Agreement or Determination] of the Red Book 2017 and Yellow Book 2017, which provides that the Engineer shall "not be deemed to act for the Employer" when carrying out their duties under this provision. Under it, the Engineer shall first consult with the parties in an endeavour to reach agreement (Sub-Clause 3.7.1 [Consultation to reach agreement]), failing which they shall make a fair determination in accordance with the contract and taking due regard of all relevant circumstances (Sub-Clause 3.7.2 [Engineer's Determination]). Time limits for the entire process (Sub-Clause 3.7.3 [Time Limits]), the effect of such agreement or Engineer's determination (Sub-Clause 3.7.4 [Effect of the agreement or determination]) and the procedure in case of dissatisfaction with the Engineer's determination (Sub-Clause 3.7.5 [Dissatisfaction with Engineer's determination]) are laid out in significant detail.

Similarly, Sub-Clause 3.5 [Agreement or Determination] of the Silver Book 2017 provides that the Employer's Representative shall "not be deemed to act for the Employer" when carrying out their duties under this provision. Under it, the Employer's Representative shall first consult with the parties in an endeavour to reach agreement (Sub-Clause 3.5.1 [Consultation to reach agreement]), failing which they shall make a fair determination in accordance with the contract and taking due regard of all relevant circumstances (Sub-Clause 3.5.2 [Employer's Representative's Determination]). Time limits for the entire process (Sub-Clause 3.5.3 [Time Limits]), the effect of such agreement or Employer's Representative's determination (Sub-Clause 3.5.4 [Effect of the agreement or determination]) and the procedure in case of dissatisfaction with the Employer's Representative's determination (Sub-Clause 3.5.5 [Dissatisfaction with Employer's Representative's determination]) are laid out in similar level of detail.

Clearly, the question of whether Engineer determinations can truly be fair or impartial lives on. It is not the intent to find an answer to this vexed question here; but move on to the crux of this article – how Indian courts have viewed "final and binding" Engineer determination clauses in construction contracts.

Jurisprudence on "Final and Binding" Engineer Determination Clauses

In State of UP v. Tipper Chand,[14] the Supreme Court interpreted a clause which provided that the decision of the Engineer would be "final, conclusive, and binding" on all questions relating to the meaning of the contract:

> *Except where otherwise specified in the contract the decision of the Superintending Engineer for the time being shall be **final, conclusive and binding** on all parties to the contract upon all **questions** relating to the meaning of the specifications, design, drawing and instructions herein before mentioned. The decision of such Engineer as to the quality of workmanship, or materials used on the work, or as to **any other question, claim, right, matter or things whatsoever**, in any way arising out of or relating to the contract, designs, drawing specifications, estimates, instructions, orders, or these conditions, or otherwise concerning the works, or the execution or failure to execute the same, whether arising during the progress of the work, or after the completion or abandonment of the contract by the contractor, shall also be **final, conclusive and binding** on the contractor (emphasis supplied).*[15]

The SC held that such a clause would not constitute an arbitration agreement since there was no mention of a dispute or any reference thereof to arbitration.[16] As such, the clause in question was held to be for the purposes of administrative control only and not for the purposes of dispute resolution.[17] Accordingly, the SC upheld the rejection of an application for reference to arbitration brought under Section 34 of the Arbitration Act 1996 thus allowing the civil suit for resolution of disputes to proceed.

Similar reasoning was provided to arrive at the same conclusion in Bharat Bhushan Bansal v. UP Small Industries Corporation Ltd.,[18] where the clause provided that the decision of the Engineer would be "final, conclusive, and binding" on all ***questions*** relating to the meaning of the contract:

> *Except where otherwise specified in the contract, the decision of the Executive Engineer shall be **final, conclusive and binding** on both the parties to the contract on all **questions** relating to the meaning, the specification, design, drawings and instructions herein before mentioned, and as to the quality of workmanship or materials used on the work or as to **any other question whatsoever** in any way arising out of or relating to the designs, drawings, specifications, estimates, instructions, orders or otherwise concerning the works or the execution or failure to execute the same whether arising during the progress of the work, or after the completion thereof or abandonment of the contract by the contractor shall be **final and conclusive and binding** on the contractor (emphasis supplied).*
>
> *Except as provided in Clause 23 hereof the decision of the Managing Director of the U.P.S.I.C. shall be **final, conclusive and binding** on both the parties to the contract upon all **questions** relating to any claim, right, matter or thing in any way arising out of or relating to the contract or these conditions or concerning abandonment of the contract by the contractor and in respect of all other matter arising out of this contract and not specifically mentioned herein (emphasis supplied).*[19]

The SC held that such clauses would not constitute an arbitration agreement since there was no mention of a dispute or any reference thereof to arbitration by the Executive Engineer or Managing Director of the Employer since the clause lays down no requirement for taking of evidence or for fair hearing of both parties.[20]

In Mallikarjun v Gulbarga University,[21] the Supreme Court interpreted a clause which provided that the decision of the Engineer would be "final, conclusive, and binding" on all questions relating to the meaning of the contract in case of a dispute arising between the parties:

> *The decision of the Superintending Engineer of the Gulbarga Circle for the time being shall be **final, conclusive, and binding** on all parties to the contract*

*upon all **questions** relating to the meaning of the specifications, designs, drawings and instructions herein before mentioned and as to the quality of workmanship or material used on the work, or as to any other question, claim, right, matter, or thing whatsoever, in any way arising out of, or relating to the contract, designs, drawings, specifications, estimates, instructions, orders or those conditions, or otherwise concerning the works of the execution, or failure to execute the same, whether arising during the progress of the work, or after the completion or abandonment thereof **in case of dispute** arising between the contractor and Gulbarga University (emphasis supplied)."*

The SC held that since the decision of the Engineer was to be final and binding on all parties to the contract in case of a dispute, such a clause would constitute a valid arbitration agreement for reference of disputes to the Engineer as an independent person.[22] The SC distinguished the facts of the present case from the facts in Tipper Chand's case and BB Bansal's case on the basis of the difference in wording of the clauses at issue.[23] Since the clause at issue in this case specifically provided for resolution of a dispute, the SC held that the Engineer would be bound to provide both parties a chance to adduce evidence and give fair hearing to both parties in reaching its decision as this is implicit in the course of arbitration proceedings irrespective of whether this is recorded in the arbitration agreement or not.[24]

Similar reasoning was provided to arrive at the same conclusion in Punjab State v. Dina Nath,[25] on same distinction between the wording of the clauses. Here, the clause read as follows:

*Any **dispute** arising between the department and the contractor/society shall be referred to the Superintending Engineer, Anandpur Sahib, Hydel Construct Circle No. 1, Chandigarh for orders and his **decision will be final and acceptable/binding** on both parties.*

As such, the SC held that this was sufficient to constitute an arbitration agreement.[26] Once again, the SC distinguished the facts of the present case from the facts in Tipper Chand's case and BB Bansal's case,[27] and held that the Superintending Engineer would be bound to provide fair hearing to both parties in reaching a decision.[28]

The SC has also carved out an interesting exception to this line of reasoning. In State of Orissa v. Bhagyadhar Dash,[29] the clause concerned the power of the Superintending Engineer to make alterations and additions to the works and decide the rates on which such works were to be executed. One sentence in the clause provided that provided that the decision of the Superintending Engineer would be final in the event of disputes. The SC held that would not in itself mean that such a clause would constitute an arbitration agreement (especially since a separate clause providing for arbitration had been specifically deleted from the standard contract terms).[30] Similarly, in Karnataka Power Transmission Corporation Limited v. Deepak Cables (India) Ltd.,[31] the clause in question provided that the decision of the Engineer would be "final and binding" on "disputes" only "until the completion of the works" during which time both parties shall continue to perform their respective contractual obligations.[32] Further, other contract clauses provided that disputes would be decided by Bangalore courts.[33] As such, the SC held that parties did not intend that the contract clause in question would constitute a valid arbitration agreement.[34]

Conclusion – Neither Final Nor Infallible

To summarize, it is clear that "final and binding" Engineer determinations are not really considered final or binding under Indian law regardless of whether such clauses would be considered valid arbitration agreements:

1. Contract clauses which provide that the decision of the Engineer would be "final and binding" but do not envision a "dispute" between the parties do not constitute a valid arbitration agreement (ref Tipper Chand and BB Bansal cases). In such cases, the

parties may challenge the decision of the Engineer in a civil litigation and thus, the scope for judicial review over the decision of the Engineer would be wider.

2. Contract clauses which provide that the decision of the Engineer would be "final and binding" in case of a "dispute" between the parties constitute a valid arbitration agreement (ref Mallikarjun and Dina Nath). In such cases, the Engineer is bound to comply with the fair hearing requirements implicit in an arbitration proceeding and decide the matter in an impartial manner failing which the parties may challenge the decision under the provisions of the Arbitration Act 1996. However, there is limited scope for judicial review over the decision of the Engineer (that is, the arbitral award).

3. However, contract clauses which provide that the decision of the Engineer would be "final and binding" in case of a "dispute" but also provide a different dispute resolution procedure do not constitute a valid arbitration agreement (ref Bhagyadhar Dash and Deepak Cables cases). Obviously, the situation here would be similar to (1) above and parties may challenge the decision of the Engineer in accordance with the agreed dispute resolution procedure.

In general, contractors should be fairly pleased with this position of law as it proves conclusively that the SC (who are "infallible only because [they] are final") clearly regard the Engineer in "final and binding" Engineer determinations as neither final nor infallible.

Note: Opinions expressed are those of the author and are not the views of Siemens or Siemens Energy.

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Indian Economy News

Gadkari says his ministry set 5 world records this year, hails hard work of stakeholders

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The Union Ministry of Road Transport and Highways set five world records this year, including constructing a 75-kilometer highway stretch in 105 hours and 33 minutes, and the credit went to a dedicated team of engineers, contractors, consultants, and workers, according to Union Minister for Road Transport and Highways Mr. Nitin Gadkari

He stated that the 75-kilometer continuous single bituminous concrete road was built on National Highway 53 between Amravati and Akola. He emphasised the importance of increasing ethanol production from sugarcane in order to meet the country's fuel demands and turn it into an energy exporter. He stated that if we all work together, India will be the dominant force in the twenty-first century. The country would become a 'vishwaguru' and economic superpower. The minister added at the 'Pandurang Abaji Raut Amrut Mahotsavi Satkar' event here that the credit for all of this goes to the engineers, contractors, consultants, and labourers who worked day and night.

Disclaimer: This information has been collected through secondary research and IBEF is not responsible for any errors in the same.

Source: https://www.ibef.org/news/gadkari-says-his-ministry-set-5-world-records-this-year-hails-hard-work-of-stakeholders

04 Contract Management – Stagewise Risk Assessment & Due Diligence

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Introduction

The increasing complexity of projects have well made it imperative that the Contract be properly and efficiently managed in tandem with the progress of the work so that a deviation, if any, is immediately picked up, brought to the notice of the persons concerned, addressed and resolved.

Management of a Contract is a journey and a major step in that is to identify the type and nature of Risks, which are different at different stages of the project. Risk Assessment is required to be done many times from different perspectives for a project. This article discusses the Risks that a Consulting Engineer needs to address and provide for and also the Due Diligence that must be done at different stages.

Risk Assessment & Due Diligence

Risk Assessment is a review conducted on a wide variety of risks, such as financial, commercial, political, technical in the design, construction and service life periods, safety, quality, environmental, and corruption. Whereas

Due Diligence is one of parameters in Risk Assessment and should be conducted on risks pertaining to specific countries, transactions, projects, or business associates.

Risk Assessment and Due Diligence are separate concepts, but are related and work together. It is in principle possible to undertake a Risk Assessment without undertaking specific Due Diligence.

The journey starts when a request is received from a Client or a response is considered to a Notice Inviting Tender (NIT) or Request for Proposal (RFP) in the newspapers, journals or the website. Once it is decided to look at it, the NIT/ RFP documents need to be studied, queries, if any, raised and response, either received individually or at a Pre-Bid Meeting evaluated. It is essential to clearly understand the Client's brief which should provide all the functional needs, the aspirations and expectations. The brief should also include the period for which the intended facility is to function and the mode and manner in which it would be run, used and maintained.

In the eagerness to bid or join hands for bidding one must not lose sight of, although Risk Assessment and Due Diligence do not figure in the chart above but both are necessary and essential. Due Diligence is required to be done of the project, the project owners/ authority in-charge, and the partners for bidding where required. That is the step that is an extremely crucial step. Once that is done then, or even simultaneously, discussions could be held to understand all the above as well as the Terms and Conditions that are proposed to be in the Contract. A program of execution would need to be drawn up with proper key stages, so as to form the basis for the timelines, the manpower, material, plant & equipment and any other resources that would need to be deployed and of course the cost for the contracted services, works, etc., to be done. These should form a part of the Contract. Finally, when an agreement is reached the document is signed, which becomes the Contract.

In this article the stress is about doing Risk Assessment and Due Diligence by the Consulting Engineer. The first essential assessment for any business relationship related to the project, the project owners/ authority in-charge, and the business partners need to be evaluated vis-à-vis the risks involved with each. The Due Diligence Process needs to be in place to inter alia look at the project, the statutory clearances required, the expectations and aspirations of the client/ authority, the history of the Company, its Partners, its Board of Directors and Senior Management; Debarment by any International Financing Agencies like The World Bank, Asian Development Bank, JICA, PSUs and Governmental Authorities; history of litigation - court cases, arbitrations, etc.

For ensuring that all the above are duly addressed and properly addressed and given due consideration a stage gate process needs to be incorporated in the organization.

Risk Assessment

1. Feasibility of the Project

The first step would be to look at the prima facie feasibility of the project, its impact on the environment and the sustainability aspects so that sustained good of the public at large is assured.

2. Evaluate Obligations

The first step in contract risk assessment would be to evaluate the scope of the contract.

Once the organization's obligations are effectively evaluated, the next step would be to determine how would the organization manage those obligations. For that the schedule must be reviewed.

3. Review of the Schedule

A contract obligates the organization to certain deliverables as per a specified timetable. An organization need to be aware of Penalties involved if the organization miss the dates – that is, the financial risk associated with committing to a schedule and also the risks if organization's contract partners do not adhere to their contracted delivery dates. Reputation going awry is also a risk to be looked at.

4. Review of the Terms

The organization must review the pricing and payment terms to make sure that the terms are fair to both parties. An organization should critically look into an agreement in which the organization ends up being underpaid for delivering products or services to a client.

5. Evaluate Location-Specific Obligations and Risks

Many contracts are entered into with customers or partners or vendors who operate in different locations. In such cases it is necessary to think through all aspects of contracting with them. To assess the risks, it's important to have the ability to check on contracts by organization, location, and even key legal language that may be geographically specific.

6. Assess the Contract Partner

Doing business with some new vendors, customers, partners or other third parties can be riskier than

others. It's important to properly assess the other organization's reputation, reliability, policies, principles, and stability.

7. Determine Mandatory Provisions

An organization should have a list of terms and conditions that need to be included in all of its' contracts. These may inter alia include:

- Payment terms
- Limitation of liability
- Damage waiver
- Non-disclosure

Whatever mandatory provisions the organization entails, one must make sure that they're included in each new contract in which the organization is engaged.

8. Ensure Regulatory Compliance

All of the contracts must comply with all applicable government and industry regulations. Failure to comply puts the organization at risk of hefty fines and other penalties. Also consider the risk of whether delivering on a contractual obligation might result in noncompliance.

9. Track All Changes

Contract discussions might start out with relatively low risks but after negotiations, additions, redlining, and the like, it may end up with a higher degree of risk. One need to track all changes and amendments made to the contract and assess and minimize any new risks introduced during the process.

Due Diligence

1. Preparing DD Checklist/Questionnaire

Prepare a list of questionnaires or checklist pertaining to all the documents and information required in the exercise of due diligence process and get the answers to them

2. Executive Summary

Once answers to all questions in the Due Diligence questionnaire (DD Report) are available, the final step is preparing the DD Report involves preparing an Executive Summary and present it in the beginning of the DD Report. It needs to contain the gist of the entire key findings of the DD transaction, presented in a very concise manner. It should also list the impact of the risk (if any) on the proposed transaction, and the possible way-out.

Due Diligence regarding clients could also be done using a third party software such as LexisNexis for independent checking.

Once the green signal is received the person concerned in the organization could initiate the dialogue with the prospective client.

A requester could be anyone dealing with contacting clients or preparing and submitting bids.

The software contains different hierarchies depending on the function that the requester performs. The Legal function should get involved at an early stage to check the background of a third-party.

The approval should be taken from the respective head, finance, and legal.

The process when done thoroughly helps to eliminate issues that may arise later during execution of the project.

To illustrate the importance, a few case studies are presented.

Due Diligence Case Studies

Case Study A (on a Potential Partner)

In an international tender one of the conditions was that the responding Parties should not be under any debarment by a financial institution (funding agency) as on the date of responding for previous five years to response to the tender.

One internationally reputed Consultant (A) approached an Indian Consultant (B) to partner for responding to the tender. For B, such a Partnership appeared to be beneficial as it would have made the Performance Qualification of B stronger for any similar opportunities in future.

A Due Diligence was conducted on A, only to find that A was under conditional debarment by an international financial institution.

When that matter was taken up by B with A, A shared a letter signed by an official of the international financial institution confirming that the debarment was lifted.

However, as the tender condition of non-debarment for previous five years on tender response date was not fulfilled; B refused to Partner with A.

Case Study B (on a new Country)

In a case of a tender response to an international opportunity, floated by an EPC contractor; an internationally reputed Consultant (A) approached an Indian Consultant (B) to jointly respond to the Tender.

For B, that was a good opportunity to be able to set foot in a new Country and work with a new Potential end Client with whom a large business was foreseen in the future.

When a Due Diligence was conducted, it was found that the end Client (the EPC Consultant's Client) was based in a Country which was under the sanction list of USA.

As per the corporate guidelines, such remote engagement was also banned.

Accordingly, a decision was taken to decline the opportunity despite a much bigger business potential foreseen.

Case Study C (on a person)

For a reputed group, a decision was almost taken to appoint the COO of one of the wholly owned Subsidiary of the group. Such decision was based on the proven track record and past experience of the person.

Prior the release of official statement disclosing the appointment, a Due Diligence was conducted on the person.

The DD revealed that the Person had a track record of having a close relationship with an anti-social organization. Obviously, such potential appointment was dropped.

Conclusions

Risk Assessment and Due Diligence must be done for every assignment that a Consulting Engineering organization may wish to secure.

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05

Prevention of Disputes and Claims

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Abstract

Disputes arise when there is a difference of opinion among the parties on interpretation of a specific provision in the Contract that has material adverse effect on the ability of a party to discharge its obligations under the Contract. When the parties fail to arrive at a conclusion on the issue, it leads to claims. In addition, claims mostly arise, when there is a time overrun or a cost overrun in the Project. This paper examines the possibility of prevention of time overrun, cost overrun, and ambiguities or omissions, leading to Disputes and Claims. Suggestions are given to resolve the contemporary issues being faced by the Highway Industry.

Introduction

The objective of Contract Administration is different for each party to a Contract. The Employer aims at completion of the Project on time, within the estimated budget, with the highest professional standards and with no disputes and claims at the end of the Contract. The Contractor would undoubtedly want to complete the project on time, to the best possible quality and earn the return on the investment. The Contractor also examines the gaps in the Contract documents and looks for the possibility of leveraging them to advantage through claims. The Consultants are mandated to demonstrate compliance to the specifications, codes & standards, and conditions of the consultancy contracts.

Notwithstanding the above, all the parties should aim at preventing disputes altogether, in the implementation of their Contracts.

Such a mission demands an indomitable will, commitment, focus and untiring effort by every entity, at all levels. The statement itself may seem idealistic and impractical, however, it is worth making an attempt, considering the magnitude of claims being fought in India, especially in the infrastructure sector.

Objective

Generally, all claims have their roots in time and cost overruns. Where there is no cost or time overrun, the claims originate from the ambiguities, omissions and interpretation of contract clauses. In some of the cases the Contractor might not have even suffered any losses on the said account, but still raises claims based on the contract conditions.

Claims could be completely avoided or at least minimised, by

i. focussing on timely completion of the project at any cost;
ii. ensuring a good DPR; and
iii. a thorough review of the contract documents during the bid preparation, processing and finalization.

These aspects would avoid the time, cost and

interpretation related claims by the Contractors. While the parties aim to complete the project on time, it should be ensured that the Quality of the Product or Service should comply with the Codes, Standards and Specifications laid down in the Contract, and the product is fit for use as intended and the customer or user is fully satisfied. This paper discusses three objectives viz., Zero Time Overrun, Zero Cost Overrun, and Zero Interpretational Claims.

Zero Time Overrun

It is observed that the projects, which are completed on time are invariably driven by the Employer to achieve broader Project timelines and connectivity, or by the Contractors to claim Bonus provided in the Contract or early commencement of tolling, where applicable. Irrespective of the provisions made in the Contract, successful Contractors focus on early mobilization of resources i.e., early establishment of camps for personnel, mobilization of plant & equipment, procurement of materials, etc. apart from tying in the financial resources. They aim and ensure that the development period is fully utilized for completing all the pre-construction activities, procurement of statutory clearances, surveys and investigations, designs, drawings and approvals from the competent Authority or the Employer. By deploying adequate resources and the means to perform the contract, they ensure that they are ready to start the work when a clear work front is available, soon upon declaration of the Commencement Date or Appointed Date.

Successful Contractors overcome obstacles of slow clearances and approvals by coordinating and at times, prevailing on the Employer and Consultants, to see that they go ahead with the work as per their programme, so as to complete the works on time or even before time. The Goals of the Contractors, Drive of the Employers, and Pro-active, Cooperative and Bold attitude of Consultants often results in early or on-time completion of the Projects. When a Project is completed on time, there is no question of time overrun. But it is imperative that one uses a good construction programme to achieve the above objective of zero time overrun.

Micro-level Construction Programme

Preparation of a resource-based, micro-level and responsive Construction Programme is mandatory in all the projects but, it is seldom deployed for monitoring and controlling the Project. Most of the times, the activities are not linked properly and fully, to derive the intended benefit of the programme. Once the programme is responsive, and resource-based, one can update the status of hindrances and the progress of individual activities and see if the Project Completion is affected. Any minor change in the date of completion should be immediately addressed by increasing the productivity, accelerating the processes and enhancing the resources, if inevitable. Daily Tracking of the Construction Programme and controlling the resources and processes is the only way to harness the racing time. The Contractor should deploy digital programmes, which could include a digital twin, for enabling better resource management to see that minimum time is consumed in cross-utilization of resources among their projects. The programme would also track progress and throw up alarms.

Although contractually, the onus of completion of the project within the scheduled time may be put on the Contractor, but ultimately it is a team work amongst all the stakeholders, starting with the Employer. The delay could be in providing clearances, approvals, decisions and payments (if applicable) from the Employer and / or the Consultants, and these would then be largely responsible for the delay in project. It is essential that the approving Authorities focus on prompt and expeditious approvals to ensure timely completion. The Contractors should include the activity of 'procurement of approvals' in their programme separately. This is more relevant and necessary in case of approvals required from Government Departments, Bodies, and Authorities.

Use of a digital construction programme also aids in granting of extension of time or justifying claims, when it's prepared religiously in detail and used for tracking and controlling of the completion date. Time and cost overruns could be avoided or minimised.

Government Departments, Bodies, and Authorities should aggressively participate in the process of micro-management to ensure timely completion.

Delay Analysis using Construction Programme

The delays could be concurrent and there may be no provisions for the Contractors to handle them. Concurrent delays may occur simultaneously or at different time during the execution of a Contract. They may be attributable solely to one party or more parties. In all cases, it may be difficult to assess the delay attributable to each party separately. The usual delay analysis carried out mostly gives the relative delay, but not the absolute delay attributable to each party, because of the scale and complexity of the projects.

A Baseline Programme could be effectively used in analysing the delays attributable to each party. The pre-requisites for that are (i) an approved, responsive (fully linked) micro-level baseline programme; and (ii) a mutually agreed status of hindrances. The Baseline Programme should be updated with the status of hindrances, on a monthly basis, so that the delay attributable to each party could be assessed.

In order to assess the delay attributable to each party, the programme should be updated eventwise, in a sequence. Firstly, it should be updated with respect to the impact of force majeure events and third-party delay events. The change in completion date would give the delay neither attributable to the Employer nor the Contractor. This Programme would then be updated by the hindrances or delay events attributable to the Employer. The change in the date of completion would give the delay solely attributable to the Employer. This 'impacted programme', if updated further, by applying the actual progress of each activity as on the date of review, would give the delay attributable solely to the Contractor.

The Contractor is entitled to claim time and cost towards the delay attributable to the Employer, to a third party (as applicable) and the force majeure events, as per the provisions of the Contract Agreement. However, the Contractor would have to indemnify the Employer for the delays caused by the Contractor himself, more specifically if by such Contractor's Delay, the Employer loses toll, premium, etc. Depending on the nature of the delay event, whether compensable or non-compensable, the entitlement of time and/or cost could then be easily determined. Suitable provisions should be made in the Contracts to handle concurrent delays in the manner suggested above.

If the original Baseline Programme is not usable for delay analysis, it could be redone as per the requirements of the Contract, and the same may be used for assessing the absolute delays attributable to each party. It is also essential to maintain all the contemporary records pertaining to the status of removal of hindrances, and the percentage progress of all individual activities considered in the programme, on a monthly basis, to accurately apportion the delays between the parties.

Limitation of Claims

The Contract Agreement stipulates the procedure for notification of claim, maintenance of contemporary records, submission of the impact within a definite period, once the event ceases to exist, etc., in respect of claims. If the procedure is not followed, the claim could be outrightly rejected. The quantum of claims have gone up astronomically and at times are more than the value of the project. It may be advisable to place an upper limit for claims, apart from those due to force majeure conditions.

The claims could be restricted to the foregone Concession Period in case of Build Operate and Transfer (BOT) Toll Model projects, and to the lost annuities in Build Operate and Transfer (BOT) Annuity Model Projects. Engineering, Procurement and Construction (EPC) Model and Hybrid Annuity Model (HAM) Projects are adequately protected against time related claims, if the Employer is vigilant and exercises prompt control on the scope of the project. Maintenance of proper records and analysis, enables the Employer to manage or counter the claims

on loss of overheads due to extended stay. Use of Hudson formula, for the assessment of delay damages in construction claims, could be restricted to the delay attributable solely to the Employer. In any case, no claim should ordinarily be entertained, if the party does not suffer any loss but exploits a contract clause to claim compensation of time or cost.

Zero Cost Overrun

Proper Project Preparation could avoid cost overrun in Projects implemented through any mode. The Employer should commission competent, experienced and committed agencies to prepare the Detailed Project Reports (DPRs), and also be involved in reviewing and driving the preparation so that it is completed on time and to the desired quality, incorporating all data factually and completely, so that it does not leave anything to speculation. The Employer should watch for low bids and also the breakdown of the fee and individual rates, identify the non-workable bids and disqualify them. Adequate time should be given for preparation of the DPRs, depending on the extent of requirement of geo-technical & geological investigations, project clearances, etc. Bids for DPRs could be called under Quality Based Selection (QBS), or Quality Cum Cost Based Selection (QCBS) with 90:10 weightage for technical and financial. With availability of Experts being scarce and expensive, and the need for the DPR to be of a high standard, Employer should not aim at low cost bids. This is the primary reason for poor quality of DPRs, and consequent cost overrun.

Project Preparation

Consultants need to prepare comprehensive proposals fully compliant to codes, standards, manuals, safety requirements and guidelines, and review the proposals jointly with the Employer by conducting detailed site visits and examinations. Any additions or deletions should be documented with reasons for such deviations from the specified standards or guidelines. The Consultants should deploy competent people to decide on the provisions and carry out Quality Assurance (QA) of the proposals made. The Employer's personnel should be fully oriented or trained to review the proposals. The Government of India, Ministry of Road Transport & Highways is planning to organise courses for certification of personnel for reviewing DPRs.

Public Consultation should be done at the level of the District Administration, other user Departments, Public and important local representatives. During the Consultation, the Consultants should present the proposals and respond to the queries of all the stakeholders. The Minutes of Public Consultation should be prepared and signed by all the participants to record that everyone has understood the provisions made, and the reasons for not providing certain facilities, and that they would neither raise any request or demand for a new facility during the construction Period nor would they stop the works while they are being executed. However, if any issue does arise, they agree that the Employer could take it up after the Completion of the works, during the Operation & Maintenance (O&M) Period or some other suitable time. A video record of the Public Consultation should be maintained by the Employer.

Bidding

The Employer should organize a reconnaissance site visit for the Bidders along with the DPR Consultants. All the Bidders should compulsorily attend the site visit, take time and review the DPR with respect to the works to be performed, the time and other schedules at the site itself. A drone video of the entire site with a commentary of the provisions may also be provided to the bidders, for a fee, so that they could vet the proposals, ask queries, if necessary, and make a more informed bid. The Employer should respect the gravity of the queries being asked and provide proper replies so that there won't be any gaps for future claims. Clarifications should not change the nature of the provision in the contract and affect the scope. An Addendum must be issued for the part of the document, where the scope is changed consequent to the clarifications provided by the Employer.

Award of Contract

The successful Bidder should re-review the documents for their adequacy and consistency in consonance with the Scope of Work, before signing the Agreement and undertake that he

i. has seen the site;

ii. has reviewed the documents and satisfied himself on the adequacy and consistency of the documents;

iii. has understood and agrees to the scope of work; and

iv. shall not raise any claims on account of the scope of work included in the Contract.

The Parties should also agree on the availability of the front by preparing a true Inventory & Memorandum of the available and non-available fronts at the beginning of the Project and review them at the end of a specific period and decide on the following.

i. to delete certain hindered works from the scope of work, agree on their cost and any revision required in the time for completion due to such deletion;

ii. to delink those hindered works from the completion schedule, if they are essential for Safety of the works, and also agree on the time and conditions for their completion including any escalation in costs, etc. and

iii. not to entertain any Public Representations or Change of Scope on such account during the Construction Period, and if the parties agree to provide such facilities, delink them from the completion schedule.

Such an initiative would freeze the scope and duration of the Contract, before signing the Contract, which in turn would avoid any cost or time overrun in completion of the original scope of work.

Zero Document Related Claims

Any resolution of Disputes and redressal of Claims requires the engagement of Advocates, Arbitrators, Conciliators, Mediators, etc., whereas for the parties, it means time and additional costs in prolonged litigation. It is suggested that all the stakeholders should decide that there should not be any document related claims.

The entities or committees preparing/ approving the standards, specifications, and contract conditions should ensure that there is no scope for ambiguities, omissions and interpretations. More claims are on account of ambiguities and more so in the absence of priority of one over the other, of individual documents. Once the priority is specified, it becomes easy to interpret the conditions of contract. The Employer should prima facie check that there are no ambiguities in the Tender documents per se and also vis-à-vis the documents they refer to.

Hence, before the documents are put to bidding, they should be reviewed by a Trained Peer Review Consultant for identifying and resolving the ambiguities and omissions. The Bidders should voluntarily bring out the ambiguities and omissions to the attention of the Employer for clarifications, instead of planning their bidding strategy around the gaps in the documents, which would pave way for claims. The Employer should make all efforts to understand the queries related to the ambiguities and resolve them positively instead of overlooking them, at the bid stage itself. Most of the claims would then be prevented at that stage.

After release of Letter of Acceptance (LOA), the parties should make a full review of the documents once again, before signing the agreement, and the Contractor should undertake that there would not be any claim on account of interpretation of clauses. Such an undertaking should become a part of and be bound into the Agreement.

Delays & Deemed Approvals

The Contract Documents normally provide that a design or drawing submitted by the Contractor is deemed approved, if the Engineer does not give his observations within the stated period of 15 days or such other period specified in the contract. The Contract also normally states that by submission of a drawing for the approval of the Engineer, the Contractor shall ensure that the submission complies with the scope, specifications, codes and standards. Further, irrespective of the approvals conveyed by the Employer or the Engineer,

the Contractor is fully responsible for the quality and safety of the structure. Under such circumstances, the Contractor may not be able to attribute any time related delays to the Employer or the Engineer, on account of delay in design reviews or consequent modifications suggested by the Employer or the Engineer. Clarity about this aspect can be brought in the contract conditions so that claims are minimised on this account. One way would be to build in each activity into the Project schedule so that delays could then be assigned to the party concerned with the activity.

Revisions in Standards & Circulars

Codes, standards, guidelines and circulars existing 28 days prior to the Bid Date are normally applicable for a Contract. Any revision of these, if adopted in the contract, should be treated as a change of scope of work. Any new circular issued by the Employer, if it affects the time or cost of completion should be treated as a change in the scope of work by the Employer.

Undertakings and Supplementary Agreements

Any undertaking, amendment or supplementary agreement that modifies the existing conditions of contract and imposes additional financial implications may not be valid even by mutual agreement, as these could be challenged later. All issues should be dealt with within the provisions of the original contract to avoid claims.

Awards for Zero Claim Projects

At times, there are provisions in some Contracts to pay Bonus for early completion of the Project. In general, it is payable only if the Project is completed before the Scheduled Date of Completion. However, some Contracts allow Bonus if the Project is completed earlier to the extended date of completion also, provided all the activities are completed within the time allowed individually. It may be worth including "Zero Claim Bonus" or "Zero Litigation Bonus" clauses in the Contract.

Construction Industry Development Council (CIDC), Confederation of Indian Industries (CII) and others have introduced annual awards for Best Projects considering On-time Completion, Construction Safety and Conservation of Environment. It is suggested that there be an award for "Claim-Free Projects".

Conclusions

If all the parties single-mindedly work on freezing the scope of work at the time of commencement, and completing the works on time, as agreed, most of the time related claims would be avoided. If the Employer, DPR Consultants, Bidders and finally the successful bidder in that order, focus on achieving absolute clarity in the scope of work, bereft of ambiguities and omissions in the contract documents before signing the Contract, cost related claims could also be avoided. If the parties decide not to exploit the gaps in the documents more so when they do not suffer any loss, interpretation claims could also be minimised. The aim of all stakeholders should be to work as a team and put the national interest ahead of personal priorities.

Note: The views expressed are those of the author and do not represent those of Aarvee Associates.

06

Dispute Resolution Mechanism in FIDIC based Construction Contracts in India

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Abstract

Infrastructure demand and the need to keep abreast with emerging technology have necessitated execution of large infrastructure projects based on the FIDIC contract form. Multilateral funding agencies also mandate use of the FIDIC contract for global acceptance and competitiveness.

The use of FIDIC Contract Form is significantly different than the General Conditions of Contract in use in Government departments in India, so is the dispute handling mechanism. It has been noticed that neither parties nor the professionals, including judicial persons, involved in the dispute resolution process are well conversant with the concept and purport of FIDIC clauses not because of complexity but due to their pre-conceived experience with other contract forms which are primarily inclined in favour of the Employer.

This paper examines the dispute resolution mechanism set out in FIDIC contract form, brings out the issues where it comes to loggerhead with Indian Laws and then discusses the way forward. It has been brought out that FIDIC has a very transparent and robust dispute resolution mechanism with emphasis on dispute avoidance which must be fully explored and utilised by the parties in dispute to avoid costly and time-consuming litigation process.

Keywords: FIDIC 1999, FIDIC 2017, Role of Engineer, Claims, Dispute Resolution, Dispute Avoidance

Introduction

FIDIC General Conditions (GCs) are based on fair and balanced risk/ reward allocation between the Employer and the Contractor and are widely recognised as striking an appropriate balance between the reasonable expectations of these contracting Parties. Accordingly, a contract recognised as a FIDIC Contract has real commercial value to both the Employer and the Contractor, both at the tendering stage, and during execution of the Contract.[1]

The paper focusses on the FIDIC Rainbow Suite of Contracts comprising of Red, Silver and Yellow Books due to their wider acceptability and since they have been of a consistent structure. For brevity, the other FIDIC Contract forms viz. Gold Book, Pink Book, Orange Book and Emerald Book are not included in this discussion.

Comparison of Contractor's and Employer's Claims

The FIDIC 1999 GCs does not define what a claim is. A claim is simply an assertion of a party's right under the terms of a contract or under law[2]. This definition

has been formally included in the FIDIC 2017 edition which describes that 'claim means a request or assertion by one Party to the other Party for an entitlement or relief under any clause of these Conditions or otherwise in connection with, or arising out of, the Contract or the execution of Works.'[3]

In FIDIC 1999 GC, the Contractor's claims were deliberated in detail in an exclusive clause while the Employer's claims were derived through different clauses as entitlements. The current FIDIC 2017 edition clearly defines both, the Contractor's as well as the Employer's claims. The FIDIC 2017 GC also make a clear distinction between '*claims*' (as a request for an entitlement under the Contract) and '*disputes*' (which arise if a claim is rejected or ignored), and addresses them in two separate clauses: Clause 20 (Employer's and Contractor's Claims) and Clause 21 (Disputes and Arbitration).[4]

Dispute Resolution Mechanism in FIDIC

In FIDIC administered contracts, an elaborate multi-tier dispute redressal mechanism has been envisaged to take care of the disputes arising between the Employer and the Contractor. FIDIC stresses avoidance of disputes at an early stage. The multi-tier dispute resolution consists of:

- Determination by Engineer
- Dispute Avoidance and Adjudication Board (DAAB)
- Amicable Settlement
- Arbitration

The litigation through Court of Law comes at a very belated stage and primarily when parties are not, in the best of interest, able to settle or the adjudicators play an unsatisfactory role in the dispute resolution.

Determination by Engineer

The Engineer is an Employer's Personnel and thus owes a contractual duty of professional care to the Employer, but the parties would still ordinarily contract on the basis that in certain circumstances the Engineer would be required act in a manner which is fair and unbiased to both the parties.[5]

The new version of FIDIC has brought in changes which would enhance the certainty and transparency of the standard provisions. One of the key changes is the new obligation of the Engineer to act 'neutrally' when looking at as to how to reach an Agreement or make a Determination under Sub-Clause 3.7 (formerly Sub-Clause 3.5). Guidance issued by FIDIC in relation to the Yellow Book states, with regard to Sub-Clause 3.7, that *"...when acting under this Sub-Clause the Engineer treats both Parties even-handedly, in a fair-minded and unbiased manner".*

The Engineer is not simply required to make 'a fair determination in accordance with the Contract, taking due regard of all relevant circumstances' when the Engineer is exercising the duties in accordance with Sub-Clause 3.7. The Engineer shall ensure not to act solely in the interests of the Employer, despite the nature of the relationship between the two.

Dispute Avoidance and Adjudication Board (DAAB)

The Dispute Adjudication Board (DAB) was first introduced in 1995 into FIDIC work contracts (the 1995 FIDIC Red Book). In 1999, FIDIC then introduced the DAB as a permanent and mandatory feature prior to resorting to arbitration.[6] More generally, there are two types of DAB's: (1) the Standing Board, which is appointed at the beginning of the contract and remains in place until its end; and (2) the *ad hoc* DAB, which is constituted only once a dispute has arisen (included in 1999 only in the Yellow and Silver FIDIC Contracts).

Adjudication of disputes through a Dispute Adjudication Board (DAB) is the first step in this process with an option of Amicable Settlement thereafter and further going in for Arbitration, if the dispute persists. Constitution of a Standing DAB in a timely manner right at the commencement of contract is more appreciated and helpful to parties. It is in the interest of the parties to provide a Standing DAB in the Contract,

especially in large contracts where multiples disputes are expected, to avoid time loss in appointment of *ad hoc* DAB for each dispute.

The purpose of having a DAB in contracts is that all disputes arising out of a difference in opinion between the Employer and the Contractor are sorted out amicably and impartially through the DAB in a time bound manner.

It would be worthwhile to mention that the DAB plays an important role in contract implementation as their decision on disputes carry high financial repercussions to Parties. Hence, the conduct of the DAB should not only look impartial and neutral but their decision should also bear the test of due diligence and high level of integrity. DABs are contract specific which may involve high degree of technical complexity. The DABs have a huge responsibility of deliberating and deciding the claims through an unbiased and professional approach with ample due diligence so that further arbitration or litigation is avoided. It also imperative that the decisions rendered by the DAB are diligently checked and proof read by the DAB for factual and arithmetical errors.

The FIDIC 2017 GC based Contracts retain the same core structure of the DAB as a mandatory pre-condition to arbitration, even though the name 'DAB' has been changed to the 'Dispute Avoidance and Adjudication Board (DAAB).

The Party who has to implement the DAB/ DAAB decision, if dissatisfied with the decision, is required to give a Notice of Dissatisfaction (NOD) to the other Party within 28 days after receiving the decision.

That maintains the Party's right is reserved for initiating a process of amicable settlement or approaching a competent Arbitral Tribunal for review of the decision of the DAAB, if so required. Once a Party has given "Notice of Dissatisfaction" within the time limit of 28 days after receiving the decision, the dispute in respect of such a DAAB decision does not become final and binding and it would be finally settled by arbitration. The DAAB's decisions are binding on both the parties unless or until it gets revised in an amicable settlement or an arbitral award.

Avoidance of Disputes and Amicable Settlement

Once the DAB decision is issued, the other Party should promptly give effect to the DAB decision otherwise it would tantamount to breach of contract and consequent implications come in effect. Under FIDIC 1999 (Yellow Book) GC Sub-Clause 20.5, both the parties are permitted to attempt to settle the dispute amicably. Therefore, amicable settlement needs be initiated by both the parties promptly within 56 days of the NOD. Unless both parties agree otherwise, arbitration may be commenced on or after the 56 day after the day on which NOD was given even if no attempt at an amicable settlement has been made.

The FIDIC 2017 Contracts, in addition also introduced a new optional feature, the so-called '*Avoidance of disputes*' provision, allowing the parties, upon mutual agreement, to jointly request the DAAB to provide assistance and/or informally discuss and attempt to resolve any issue or disagreement that may have arisen during the performance of the Contract. The joint request may be made at any time except where the process is under determination by the Engineer. That really affirms the real intent of the Parties to settle the disputes as early as possible.

Arbitration

The next stage of dispute redressal is Arbitration. FIDIC clearly stipulates the precursors before resorting to Arbitration. These precursors are-unless settled amicably and subject to dissatisfaction with Engineer's decision, dissatisfaction with DAAB decision, failure to comply with DAAB decision and no DAAB in place, any dispute in respect of which DAAB decision has not become final and binding. Such disputes should be finally settled by international arbitration. To avoid confusion, FIDIC also suggests the rules of arbitration being the Rules of Arbitration of International Chamber of Commerce (ICC). This is subject to the Particular

Conditions or consent of the Parties, but a clear mention of Arbitration Rules does obviate confusion from the minds of the stakeholders. The Law and Language of the arbitration should also be as per consent of the Parties.

In international arbitration, due to involvement of Parties from different nationalities, interpretations on arbitration rules, substantive laws and laws at seat of arbitration raises complexity in the process resulting into high cost and prolonged process.

According to the Dispute Resolution Board Foundation, the cost of employing Dispute Boards is between 0.05% of the construction cost on dispute-free projects and 0.25% for more difficult projects. These figures are quite small when compared with the cost of Arbitration, as assessed by FIDIC, which may be as much as 10-15% of the project value[7].

Pitfalls to Effective Dispute Redressal

In practice, there are various impediments in effective implementation of DAAB and Amicable Settlement mechanism by the Parties involved. Time is essence in a Contract. There is a time limit of 84 days prescribed in the GC for DAB/DAAB to deliberate and give decision in the dispute. This broadly allots about 28 days each to the two Parties in dispute and 28 days for the DAB to conclude. In order to meet with the aforesaid timeline, as soon as a dispute is referred by the Party, the Chairperson of DAB should call for a preliminary meeting with both the parties and set the ball rolling by fixing up a firm timetable for making written submissions by both the parties, payment to DAB and sittings to be held after consulting both the parties. The delay primarily occurs due to bulky and conflicting Claims, avoidable references and frequent adjournments.

Sometimes, a Party issues notice to the DAAB referring some ill-prepared dispute with a view to exert pressure on the other party but not seriously pursue the rigmarole of the proceedings. Such tendencies should be arrested by the DAAB in the preliminary sitting itself or though mechanism of Dispute Avoidance under Sub-Clause 21.3.

It is noticed that in some of the DAABs, on being referred about a dispute by a Party, it held several meetings internally and finally called both the Parties towards the end and disposed of the dispute without giving any reasoned decision. Some DAAB tend to proliferate number of sittings with a view to increase their fee and perks. Such actions raise questions of sincerity of the Adjudicators and the Parties could object to such abuse of time and money.

Mischief played by any stakeholder acts as an impediment in the effective dispute redressal. However, it has been also noticed that Parties, do counter the other Party's default emphatically but when the DAAB is acting in a sleight manner, Parties refrain from raising objection to avoid annoying the DAAB.

At times, after the proceedings have been concluded by the DAB/DAAB consuming considerable time and cost, it is a pity to find that the decisions have minor discrepancies which could have been easily avoided.

It may so happen that the same members get nominated in the DABs of different Contracts. However, in such cases, the DABs while giving decisions in different contracts have to be careful in exercising proper scrutiny of the provisions in the respective contracts so that they don't commit mistakes while deliberating their decisions in different contracts. If it occurs, the decisions quoting erroneous provisions from the Contract are liable to be rejected by the other party (Respondent) plainly on this ground. The above can't be termed as minor omissions. In fact, it reflects the manner in which important issues are dealt by the concerned DAB, keeping in mind that same DAB has been nominated in other contracts. These can't be construed merely as typographical errors. That reflects a callous approach on part of the DAB in deciding important contractual matters which entail huge financial implications.

Many a times, the decisions of the DAAB are not unanimous. In such cases, the majority members of the

DAB don't comment on the findings and decision of the minority member. It happens after the conclusion of the proceedings of the DAB when Parties are unable to do much to avoid such a split decision. The decision of the majority members is liable to be rejected by the other Party taking clue from the dissent note of the minority member. However, Parties with positive intention can take it as an opportunity for early amicable settlement by weighing out the reasoning and arguments presented by the dissenting Adjudicators, as they know the strength and weaknesses of their pleadings.

Reconstitution of Dispute Adjudication Board

FIDIC provides for appointment of a suitably qualified person or persons to replace any one or more members of the DAB/DAAB, if the parties so agree. Also, the appointment of any member may be terminated by mutual agreement of both the parties. There are certain exigencies, for example, repeated instances of inconsistent decisions due to which a Party may suggest to the other Party to reconstitute DAAB by appointing new members. However, this clause does not provide solution to this sort of situation until and unless the other party agrees to the replacement. If such a situation arises, the entire process of DAB/DAAB fails and leads to Arbitration.

Role of the Engineer in the DAB proceedings

As per the structure of the Contract between a Contractor and Employer, the dispute is between the Contractor and the Employer. Therefore, the Engineer is not a party to the dispute between the Employer and the Contractor. A dispute between the Employer and the Engineer is to be handled as per the dispute resolution mechanism provided in the Contract between the Employer and the Engineer.

In the Silver Book, there is no provision of an Engineer, thus the Employer replaces the Engineer in all of the roles regarding evaluation of both the Contractor's and the Employer's own claims. That means that the Contractor has protection due to the absence of a third-party Engineer in the process. His notice of dissatisfaction effectively suspends the effect of an Employer's determination, requiring the Dispute Board to hear the matter.

In the Yellow Book, the Engineer is recognised as a separate independent entity in DAB/DAAB proceedings. That may give an opportunity to the Contractor to raise objections before the DAAB not to allow the Engineer to participate in the DAB proceedings. That creates a peculiar situation for Contracts as per the Yellow Book where the Engineer plays a very significant and controlling role in contract administration. The DAAB needs to find a working solution to such objection in an acceptable manner.

Timebound Action by Parties in Dispute Resolution

The FIDIC GC provides for a firm timeline for action to be taken by the parties in case of a potential claim to being converted into a dispute. So much so that the entire claim, irrespective of cost or any other significance, can be refuted if the stipulated time limits are not adhered to.

For example, Sub-Clause 20.2 (FIDIC 2017 Yellow Book) reads as:

> *20.2.1 … If the claiming Party fails to give a Notice of Claim within this period of 28 days, the claiming Party shall not be entitled to any additional payment… and the other Party shall be discharged of any liability in connection with the event or circumstances giving rise to the Claim.*
>
> *20.2.2 If the Engineer considers that the claiming Party has failed to give the Notice of Claim within the period of 28 days under Sub-Clause 20.2.1 [Notice of Claim] the Engineer shall, within 14 days after the receiving Notice of Claim, give a Notice to the claiming Party accordingly. If the Engineer does not give such a Notice within this period of 14 Days, the Notice of Claim shall be a valid Notice.* [Emphasis supplied]

Here it must be appreciated that FIDIC provides equality of Parties while adhering to time limits by both Parties. While Claim by a Party can be refused due to delayed submission, such delayed submission, if not objected timely, may be substantiated for a detailed Claim.

Indian Legal Framework

Firm timeline with clear mandate of further course of action as provided in the FIDIC GC do help in managing the disputes well till it is within the ambit of Parties and Engineer, such consent of Parties is paramount. The moment the dispute escalates and comes before Arbitral Tribunal or Court of Law, the substantial and procedural law come in to action.

The Indian Contract Act, 1872 and The Limitation Act, 1963 are the governing Acts for commercial disputes in India which have undergone very little modifications since enactment and speaks of an era when means of communication were not so developed.

Section 28 of Indian Contract Act, 1872 is an interesting read in context of such specific time limits under FIDIC. Section 28 of the Contract Act renders void any clause in a contract which may restrict absolutely the right of any party to enforce his rights under or in respect of a contract by the usual legal proceedings or which limits the time to enforce his rights. This Section also renders void any clause in a contract which extinguishes the right of any part or discharges any party from liability upon expiry of any specified period. This Section does not in any way affect the right of a party to prescribe a time period within which a claim should be made before it *per se* but this exception has been applicable for Bank and Financial Institution for providing a limit on the Guarantee and provisions such as those mentioned in the FIDIC GC and are not covered as an exception to the Act.

The period of Notices and period of limitations for raising a Claim are mentioned in months and years. In this fast-paced electronic era, when messages are exchanged instantly, such longer limitation periods are not relevant. Even then, the Courts going by the Act, rule the time frames provided in FIDIC as restrictive and completely ignore their existence.

Time for Completion which is time of completion of the Works in Contract is also misconstrued as currency of the Contract in the Indian context. A FIDIC Contract on the other hand remains valid until the obligations of the Parties mentioned in the Contract are completed. Completion of Works is one of the interim obligations to be satisfied. However, in Indian context, an undue emphasis is given on Time of Completion considering it as currency of a Contract. In absence of such extension, the interim payments are also stopped. In some of the cases, the extensions are granted due to such misconceived notion of currency of contract which subsequently give rise to avoidable claims.

DAB, the most important mechanism of dispute resolution in FIDIC contract does not find a place in the Indian Act. The relevant Arbitration and Conciliation Act, deals with 'conciliation' process as pre-arbitration stage not DAB. Nonetheless, the DAB process itself is not invalid as it has satisfied the most important aspect in commercial contract- the *consent of parties*.

To contain the frivolous litigation, lingering of disputes and to address cashflow issues, a mechanism of payment of 75% of the total pay-out (i.e., Arbitral Award amount including the interest payable as per such Award, if any) to Claimant against Bank Guarantee before challenging the Arbitral Award in Court of Law has been implemented by the Indian Government as a policy directive in 2016 [8]. In several countries, the concept of 'pay now argue later' principle is in vogue. However, no such directive from Indian Government exists for DAB decisions culminating into Arbitration. The FIDIC 2017 GC has addressed this issue in Sub-Clause 21.4.3 where DAAB may (as part of decision), at the request of a Party, but only if reasonable grounds are available, require the payee to provide an appropriate security for the amount.

The FIDIC GCs are based on concept of law rooted in the Common Law system[9]. Thus, the stakeholders involved in construction projects in the World need

to understand the interpretations of FIDIC provisions against a background of Civil Law. Fortunately, India being a Common Law country is well aligned in this aspect with FIDIC principles.

Avoidance of Litigation

In India, there is huge pendency of cases before courts at each level. The time and cost involved in getting a decision through a court's decision is exorbitant and uncertain. A party may have a fool-proof and strong case; however, if the same were to be exercised before a court or arbitration tribunal or any other forum, the time to get a decision (*due to extremely slow processes and multiple levels of appellate options*) and the cost (*especially arbitration*) often dis-incentivise a Party to invoke a matter before court or arbitration for resolution[10].

One of the important things to decide is as to which course of dispute redressal in a dispute is to be exercised. The FIDIC contracts do not give a liberty to jump to Arbitration without resorting to sequential process of dispute resolution mechanism. Even the Courts in India do not entertain a litigation direction when alternative remedy is available in the contract. The decision to resort to litigation depends, inter alia, on the value of contract, amount under dispute, involvement of Parties-Government or Regulator, corporate philosophy of Party.

Conclusion

The FIDIC GCs are based on balanced sharing of risks and equal opportunity to parties, it is expected that disputes are much less as compared to other contract forms in practice in India. It is incumbent on the Parties in dispute and the Engineer in FIDIC governed contracts to ensure that the mechanism of the dispute is effectively implemented through proper appreciation and application of the provisions in the GCs.

In international contracts and also in highly technical contracts, it is in the interest of the parties to settle the dispute at an early stage. At later stages, specially after Arbitration, involvement of legal professionals increases which, inter alia, brings legal issues to the fore and creates discomfort to parties where conflicting legal provisions of parties' nationality take long time in arriving at a judgement. It is also noted that the Projects and Organisations where effective dispute resolution mechanism have been enforced would result in potentially lower bids for the Projects.

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07

Multiple Arbitrations in Construction Contracts – A Perspective

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Introduction

Arbitration is preferred over litigation due to its obvious advantage of being an expeditious and effective quasi-judicial method of dispute resolution. Construction contracts would generally have an arbitration clause, which essentially forms an agreement between the parties to refer all or certain disputes arising from a contract. Since, arbitration is governed by party autonomy, various aspects of arbitration such as method of invocation, number of arbitrators, rules, *lex arbitri,* etc. are usually considered for construction of an arbitration clause. There is no general prescribed limit as to how many times a party to a contract can refer disputes to arbitration. In construction projects, multifarious disputes may arise during the project life cycle at various stages of the project. There is no embargo on invocation of multiple arbitrations for disputes arising from a single contract, however, multiple arbitration may prove counter-productive adding uncertainty and confusion to the process of dispute resolution. This article endeavours to analyze certain issues related to multiple arbitrations.

Dispute Resolution Process

Standard forms of contracts published by widely accepted International consulting associations such as FIDIC encourage expeditious settlement of disputes between parties to a contract in a contemporaneous manner. A multi-tiered process is adopted in construction contracts based on standard forms. Claims are first referred to the Engineer/ Employer, as the case may be, for a fair determination. Thereafter, the parties are at liberty to negotiate a mutually acceptable proposition. In case, the negotiation does not succeed due to disagreement between the parties, any party may refer such dispute to a Dispute Adjudication Board (DAB). DAB can be understood as a board or committee of adjudicators appointed by the parties for adjudication of disputes. DAB derives its powers from the terms of contract agreed between the parties.

Once a DAB gives its decision, then unless a Notice of dissatisfaction is served by either of the parties within the stipulated time limit, the decision of DAB becomes final and binding on the parties. A major challenge faced by DABs is that the time available at their disposal to complete the adjudication process and render its decision is too short as compared to the statutory time limit for rendering an award under the provisions of the Arbitration and Conciliation Act, 1996 (the "Act")[1]

Within the short time frame, a DAB is entrusted with a huge responsibility to peruse all the documents placed on record by the parties, hear each side equally and render its decision in an equitable and fair manner. More often than not, it is difficult for a DAB to devote sufficient time required to appreciate voluminous claims involving delays and disruption, prolongation, variations, etc., which otherwise is necessary to arrive at fact-based

findings on merits in disputes of complex nature and scale. Moreover, to understand the technicalities and go to the root of the disputes, it is incumbent on a DAB to weigh each claim against evidence led by the parties and seek assistance from Experts, wherever necessary. If the terms of reference for a DAB are not well-defined right from the beginning, there are bound to be lapses due to lack of clarity in the scope and orientation of DAB. Any decision given by a DAB without fully appreciating the facts and material placed before it due to shortage of time or otherwise, would once again become a bone of contention between the parties and is likely to be challenged by them in arbitration.

Interestingly, reference of disputes to arbitration is preceded by a mandatory "waiting period" for the parties so that the parties can use their best endeavours to settle the disputes amicably and invocation of the arbitration clause could be avoided. Despite such sincere intentions reflected from the conditions of contract, there are hardly any realistic and meaningful attempts made towards amicable settlement during the so-called waiting period since by then the parties would already have made up their minds to go for arbitration.

Truly speaking, there are a lot of incentives for the parties for avoiding disputes through negotiations and/ or resolution through adjudication by DAB, without the need for the parties to go for arbitration. However, the success of these in-built contractual mechanisms for dispute avoidance/ resolution is contingent upon a conducive environment, trust, open and healthy dialogue between the parties. Such contractual mechanisms including determination by the Engineer/ Employer, negotiations, adjudication by DAB, etc. are considered to be non-adversarial methods of dispute resolution in contrast to arbitration proceedings. To avail these contractual options, one should have the right intent, commercial sense, interpersonal skills and attributes such as cooperation, trust, good gesture and more importantly willingness to 'give and take'.

As the relationship between the parties moves from non-adversarial to adversarial, these virtues take a back seat and the tendency to settle disputes amicably deteriorates. Thus, knowingly or unknowingly, an undesirable situation emerges where even a slightest disagreement between the parties can potentially end up in dispute for which the arbitration clause would be invoked by the parties. This undesirable situation is perhaps the starting point of all problems related to Multiple Arbitrations.

Position of Law on Multiplicity of Arbitrations

Multiple arbitrations are a necessary evil and often inevitable in long term construction contracts. The dispute resolution clause under FIDIC enables the parties to initiate and carry out more than one arbitration proceedings simultaneously. In other words, for each dispute referred to arbitration, a separate arbitral tribunal would be appointed and the proceedings would be conducted as per the Act.

In *Gammon India v. National Highways Authority of India*[2], the Hon'ble Delhi High Court relying upon another judgement of the Supreme Court in *Dolphin Drilling Ltd. v. ONGC*[3], observed as follows:

> *The endeavour of Courts in the domain of civil litigation is always to ensure that claims of parties are adjudicated together, or if they involve overlapping issues, the subsequent suit is stayed until the decision in the first suit. It is with the intention of avoiding multiplicity that the principles enshrined in Order 2 Rule 2 CPC, Section 10 CPC and Res Judicata are part of the Code of Civil Procedure from times immemorial. However, since arbitral proceedings are strictly not governed by the Code of Civil Procedure, 1908, it is possible for parties to invoke arbitration as and when the disputes arise, but should the same be permissible without any limitation and ignoring the principles of public policy as enshrined in these provisions.*

Res Judicata is a principle of law enshrined in Order 2 Rule 2[4], which essentially states that every suit shall include the whole of the claim which the plaintiff is entitled to make in respect of the cause of action. Thus, once an award has been made, a party cannot be permitted

to raise more disputes which the party could and ought to have raised earlier.[5]

The Hon'ble Delhi High Court in *Gammon India (Supra)*, also observed that multiple arbitrations can cause enormous uncertainty and confusion, if the principles of *Res Judicata* are ignored. The prevention of multiplicity of arbitration proceedings has been recognised by Courts as a part of public policy of India.

The Hon'ble Delhi High Court in a recent judgement in *Panipat Jalandhar NH 1 Tollway Private Limited v. National Highways Authority of India*[6], affirming its view in *Gammon India (Supra)*, has opined that multiple arbitrations can exist if the cause of action continues or arises after constitution of a tribunal.

Way Forward

It is not uncommon for construction projects to have multiple arbitrations with overlapping claims and issues. Considering the time and efforts that go into arbitration and keeping in mind the side effects on the overall performance by the parties, one must sparingly and judiciously resort to arbitration as a method of dispute resolution. Reforms at policy levels are necessary to review whether the existing forms of contract have adequate safeguards to prevent multiplicity of arbitrations which are against public policy and whether this can be achieved without intervention of courts. One way is to encourage best practices to avoid/ settle disputes and promote good governance. That would go a long way in minimizing delays in settlement of enormous claims plaguing the construction sector and impacting its future growth.

Note: The opinions expressed in this article are those of the author.

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08 Contractual Treatment of Unforeseen Site Conditions in EPC Projects

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Introduction

In this world, uncertainty is a norm rather than an exception. In construction projects also, an increasingly accepted notion is that the projects are inherently prone to uncertainties[1]. Challenging physical conditions at construction sites and the involvement of multiple stakeholders with frequently diverging requirements and incentives are typical of a project. Combined with their capital-intensive nature and the hazards associated with the sites, construction projects often experience time and cost overruns[2]. Contracts provide the essential framework to identify such project risks and help in transferring risks to parties best capable of handling them [3]. Contracts become the fundamental instruments that help projects tackle uncertainties when designed and framed correctly. One such uncertainty-related contractual clause is the "unforeseen site conditions" (USC) clause [4].

An unforeseen event is a condition that is materially different from what is given in the contract documentation or different from what is usually expected in that project location [4]. In case of an unforeseen event, a USC clause transfers associated cost and time impact to one of the parties to the contract. Such unforeseen circumstances are commonplace in subsurface construction activities [4]. In construction projects that involve deep excavation, underground surprises impact project progress and result in cost and time extension claims and disputes [5]. Such surprises include hard rock (thus requiring blasting), old underground structures, artefacts, archaeological findings, pipelines, underground utilities, etc. that often adversely impact the project's time and cost. The USC clauses typically describe how the cost and time impact due to unforeseen circumstances would be handled between the parties. A common manifestation of unforeseen site conditions are the ground conditions encountered on the site. The particular instance of ground conditions would be taken in this article to illustrate the associated contractual treatment.

EPC Contracts and Unforeseen Site Conditions

In most cases, the risk of unforeseen conditions is allotted to contractors. However, complications arise when a contractor claims that any prudent contractor would not foresee a given situation and therefore argues that it is not fair to expect the contractor to bear the financial impact. This article contrasts the contractual treatment of unforeseen conditions when such risks are wholly transferred to contractors vis-à-vis the procedure followed in the International Federation for Consulting Engineers (FIDIC) contract forms. The article concludes

with a note on suggested improvements enabling fair risk allocation when drafting USC clauses.

The basic philosophy of any risk allotment is that the party that is best capable of handling a risk event would be allotted that particular risk[3]. However, in the case of unforeseen ground conditions, it is impossible to predict the subsurface problems with unwavering accuracy in the project bidding stage. The problem is even more pronounced where the design responsibility is on the contractor. Such is the case with Engineering, Procurement, and Construction (EPC) projects. The bidder typically quotes a lump sum amount with certain assumptions based on site visits and data provided by the employers in the bidding documents. However, the tender data in the form of a Detailed Project Report (DPR) or Site Investigation Report (SIR) that contains details on subsurface conditions often come with disclaimers absolving employers from the possible financial impact in case of different/ conflicting site conditions[5]. Disclaimers are used because the pre-tender tests are typically based on "bore log" samples, and there is every possibility that certain underground features may remain elusive to such tests. Undetected conditions end up as a 'geological surprise.' In fact, 'geological surprises' are one of the causes of time and cost overruns as per the Ministry of Statistics and Programme Implementation (MoSPI), Government of India (GoI).

In the many EPC contract documents, the risk of unforeseen ground conditions is often transferred to contractors with a provision that in the event of such issues, the contractor will neither be compensated nor provided with an extension of time. Therefore, it becomes essential for the bidders to consider contingencies to tackle unforeseen ground conditions during bidding for EPC projects. However, contingencies make bids costlier, and in the event of competitive bidding processes, costlier proposals seldom stand a chance. Therefore, it is problematic for bidders looking to participate in an EPC project tendering processes.

A Hypothetical Situation

Before delving further into the possible equitable solutions, it is essential to understand the unforeseen circumstances from the legal viewpoint. Consider a hypothetical EPC project scenario where a contractor has encountered hard rock while excavating. The project location was such that hard rock was not expected at the foundation depth envisaged in the project. Moreover, as per the DPR/SIR given by the client, it was seen that the bore-log sample reports do not indicate the presence of hard rock. Considering the presence of the hard rock as a differing site condition, the contractor approaches the Employer for compensation. When such requests arise, it is natural for the Employer to deny such requests as unforeseeable site condition risks which are typically allotted to contractors in EPC projects. With DPR/SIR not indicating the presence of sub-surface anomalies, the contractor may accuse the client of misrepresenting the facts and invokes a legal angle. Whether the circumstances discussed above would qualify for "misrepresentation of facts" would, according to Section 19 (Exception) of the Indian Contract Act, 1872, depend on whether the so-called "misrepresentation" was something that could be discovered by the bidder with "ordinary diligence" while inspecting the project site. The presence of hard rock would be considered 'predictable' through ordinary diligence if there was sufficient clue in the bidding stage for the presence of hard rock. Conditions like the presence of hard rocks in the site surroundings, rock outcrops within the site, and (or) surroundings provide sufficient clues about the possibility of hard rock presence. In the instant case, considering the project location and the site visit records, according to the contractor, hard rock was not something that could have been detected through ordinary diligence. However, in typical employer-friendly USC clauses, it may not be possible for the contractor to seek compensation, and even if requested by contractors, such claims are summarily denied. The employer's contract representatives often hesitate to deviate from the contractual terms [6,7]. In such cases, the issues go to arbitration or litigation[5], delaying the dispute resolution process.

In the case above, a counter-argument from the client may be that the contractors should have 'foreseen' the scenario based on their prior experience. This counter-view is a major point to deny the 'misrepresentation'

accusation of the contractor, provided it can be established that the contractor has prior experience in executing similar works under similar conditions in the vicinity of the project in question. While most of the technical qualification requirements mandate the bidders to declare their previous similar experience (like underground metro construction experience for a new underground metro construction tender), in the event of the project being unique or executed for the first time, it may not be possible for a bidder to have a similar experience, at least on a similar scale. For example, if a tender is invited to construct the world's tallest building in a remote location, it may not be possible to expect the bidder to have an experience on that scale. The bidder may declare the details of another building project on a smaller scale or any other 'similar' work as defined in the tender requirements. However, the challenges in constructing the tallest building are different from those in constructing a 'similar' work. It may not be practical to expect the contractor to foresee 'all' the subsurface difficulties and consider them in their bid pricing just because they have executed a 'similar' work. In some other cases, even if the proposed construction work is not unique, the location may be unique where such large-scale construction is being done for the first time. Even under such circumstances, it may not be practically possible for the bidders to foresee all uncertain scenarios during the time-constrained bidding process. Therefore, a USC clause that flatly transfers the risks of the unforeseen condition to the contractor without considering the risk predictability, in our opinion, needs a relook based on the project execution conditions.

The situation described above may be dealt with in two ways. Firstly, the DPR and SIR may be based on the latest non-destructive technology. The accuracy and reliability of the findings can be increased [4], and disclaimers can be minimized. A good example here is where The National Highways Authority of India (NHAI) insists that consultants use Ground Penetration Radars for reliable detection of underground utilities. While advanced technologies can help reduce conflicts during execution, technology adoption may need time. On the other hand, a certain degree of error is unavoidable when predicting the subsurface soil profile, and therefore disclaimers will continue to exist. Thus, the alternate option would be to contractually treat the ground conditions problem.

Unforeseen Condition in FIDIC Contracts

In FIDIC 2017 edition, the Yellow Book (Plant Design-Build)[8] and the Silver Book (EPC Turnkey Projects) [9] deal with projects where the contractor supplies the central part of the designs and engineering inputs. However, the treatment of Unforeseeable Difficulties in these standard forms is different and is based on the project conditions. According to the FIDIC Golden Principles [10], in the case of the FIDIC Silver Book, the unforeseeable risk is transferred to the contractor (similar to the practice followed in typical EPC contract forms). However, in the case of the FIDIC Yellow Book, if the contractor can prove that a given physical condition was unforeseeable, subject to fulfilment of other contract requirements, the contractor would be compensated. While the differences in the two approaches seem baffling, on a more profound examination, FIDIC does not recommend Silver Book for, among other things, projects containing substantial underground works or the works in areas that tenderers cannot inspect [9–11]. The Silver Book is also not recommended in cases where the bidder does not get sufficient time to check the Employer's requirements and carry out the detailed design. FIDIC recommends using the Yellow Book [9–11] in all such cases. The clause on the interpretation of site data is accordingly drafted differently in the Silver and Yellow Books. The discussion above, in effect, provides that when risks are easily foreseeable, then the all-risk transfer USC clause is justified. In projects where it may not be possible to foresee risks due to the very nature of the project or the lack of availability of detailed site and geotechnical data or lack of sufficient time in the tender stage, USC clauses should be equitably drafted.

Conclusions

In many EPC contract forms, USC clauses are drafted without considering the practicality of risk foreseeability, leaving the contractor with no other option but to approach arbitration or litigation to resolve disputes arising out of such unforeseen circumstances. The use of

arbitration and litigation prolongs the dispute resolution process, ultimately affecting both parties (claimant and the defendant). Therefore, while drafting the contracts, employers can choose between all risk transfer and balanced USC clauses based on the extent of risk foreseeability. The key considerations for the decision rest on the twin dimensions of the quantum of underground work involved and the time available for the contractor to verify the underground data. Even when time is given to contractors during the bidding stage itself, the scope of underground work would really be ascertained only in the conceptualization or even in the design phases. Hence, pre-execution investigations and efforts are required to address the challenges associated with unforeseen conditions. Efforts to codify and standardize the use of the alternate clauses contingent on the project conditions would go a long way in reducing disputes related to this domain on our construction projects.

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09

Force Majeure clause and COVID-19

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The term "force majeure," conjures images in the minds of professionals of an "Act Of God" with visions of lightning strikes or an earthquake or floods etc. However, force majeure can mean so much more. A well-drafted contract or agreement would define exactly what a force majeure is and what would happen if unforeseen or uncontrollable circumstances arise.

Force Majeure is "Superior or Irresistible Force", or in other words a force that is out of the hands of any party to the contract to counter or mollify. Typically, the clauses are such circumstances are inserted into contracts to excuse a party from liability if an event which could not be foreseen prevents that party from fulfilling its contractual obligations. Examples of typical force majeure events include natural disasters, insurrections, war or "Acts of God".

Force Majeure is those unforeseen events with are beyond a contractor's control, for which the contractor is deemed excusable in his failure to perform within the required time limits. Force Majeure schedule impacts are commonly known as unforeseen events, causes beyond the contractor's control and even the employer's, and due to no fault or negligence of the parties to the contract. The most common examples of delays that are beyond the control and due to no fault of the contractor or employer include but are not limited to:

- Acts of God or of the public enemy
- Acts of the Government in either its sovereign or contractual capacity
- Fires
- Epidemics
- Quarantine restrictions
- Strikes
- Freight embargoes
- Unusually severe weather.

Under such provisions, the contractor is entitled to an extension of time to complete the work if the delay is deemed excusable. An Act of God typically refers to a natural occurrence caused directly and exclusively by natural forces without any human intervention, which could not have been reasonably foreseen or prevented by the contractor or any other party to the contract. This category includes earthquakes, landslides, tornadoes, hurricanes, lightning, and floods. Liquidated damages are not to be assessed during the extended performance period, provided the delay is not directly or indirectly the fault of the contractor.

Not all unexpected events or conditions, however, are situations that would excuse performance of a contractual obligation. To obtain relief under a force majeure clause generally clear criteria must be met:

1. something unexpected must occur,
2. the risk of the unexpected occurrence must not have been allocated to either party by the agreement, and
3. the unexpected occurrence must render performance commercially impracticable.

If a contractor fails to protect itself from a foreseeable contingency, it is considered that the contractor has assumed and provided for that risk. Furthermore, a contractor is expected to take measures to prevent the harmful effects of uncontrollable events whenever reasonable - known as "mitigation" measures. Reasonable weather protection measures should be employed even if the contractor has no advance notice of a "freak" storm brewing.

Force-majeure under the Indian Contract Law[1]

As regards the Indian contract jurisprudence, the term 'Force-Majeure' is not defined in the Indian Contract Act, 1872 (ICA). However, the Hon'ble Supreme Court of India had explained the term force-majeure as follows: "*where reference is made to "force majeure", the intention is to save the performing party from the consequences of anything over which he has no control*"[2].

Though the ICA does not expressly refer to the term 'Force-Majeure', the 150 year old law governing contracts in India contains two Sections (Sec. 32 and Sec. 56) which deal with situations of force majeure. While, Section 32 deals with "contingent contracts", in which performance of contractual obligations is contingent on the happening or non-happening of an event with a provision that the contracts will be void if the event becomes "impossible", Section 56 embodies the "doctrine of frustration" based on the maxim "lex non cogit ad impossibilia" which means that the law will not compel a man to do what he cannot possibly perform.

The scheme of things under the ICA is in such a way that when there is an express or implied force-majeure clause in a contract, it is governed by Chapter III of the Contract Act dealing with the contingent contracts, and more particularly, Section 32 thereof and when a force majeure event occurs dehors the contract, it is dealt by a rule of positive law under Section 56 of the Contract Act[3]. Hence, in the event of a force-majeure situation which makes performance of a contract by any of the parties impossible, such party may invoke the force-majeure clause in the contract, if such clause is there in the contract and in case such clause is not there, he may make use of the principle of frustration under Sec. 56 of the Act.

Force Majeure: Evolution of Jurisprudence in India Post COVID-19[4]

In the Indian judicial scenario, the court would rely on the terms of force majeure clause in the contracts or on principles of frustration under Section 56 of the Contract Act. That means, that unless there is compelling evidence for non-performance of contract the courts do not favor parties resorting to frustration or termination of contract. On account of the enormous devastative effects the Pandemic created on the commercial and economic environment in the country, different Courts had to come forward and grant relief to different contracting parties who were severely affected by the Pandemic.

The Hon'ble Delhi High Court considered the matter in June 2020 in the case of **MEP Infrastructure Developers Ltd vs. South Delhi Municipal Corporation and Ors.**[5] The Hon'ble Court essentially relied on the Ministry of Roads Transport and Highways (MORTH) circular and observed that:

> "*27(i) The respondent Corporation itself referred to Circular dated 19.02.2020 which notified that the COVID-19 pandemic was a force majeure occurrence. In effect, the force majeure clause under the agreement immediately becomes applicable and the notice for the same would not be necessary. That being the position, a strict timeline under the agreement would be put in abeyance as the ground realities had substantially altered and performance of the contract would not be feasible till restoration of the pre-force majeure conditions*."

The court also expounded on the continuous nature of the force majeure event and held that the subsequent lockdown relaxations given by the central government and the state government would not amount to abatement of the force majeure event, at least in respect to major contracts such as road construction projects. The court also identified the distinct effects of the lockdown, independent of the effects of the pandemic and its implications on various contracts which many be affected by the force majeure conditions.

In the case of **Standard Retail vs G.S Global Corp Pvt. Ltd.,**[6] steel importers had approached the Hon'ble Bombay High Court seeking restraint on encashment of letters of credit provided to Korean exporters in view of the COVID-19 pandemic and the lockdown declared by the Central/ State Government citing that the contracts between the parties were unenforceable on account of frustration, impossibility, and impracticability. The Hon'ble Bombay High Court by its order dated 8th April 2020 rejected the plea inter-alia on the grounds:

The Letters of Credit are an independent transaction with the Bank and the Bank is not concerned with underlying disputes between the buyers and the sellers.

The Force Majeure clause in the present contracts is applicable only to one respondent and cannot come to the aid of the Petitioners.

The contract terms are on Cost and Freight basis (CFR) and the respondent had complied with its obligations and performed its part of the contracts and the goods had already been shipped from South Korea. The fact that the Petitioners would not be able to perform its obligations so far as its own purchasers are concerned and/or it would suffer damages, is not a factor which can be considered and held against the Respondent.

The court also observed that:

> *"The Notifications/Advisories relied upon by the respondent suggested that the distribution of steel has been declared as an essential service. There are no restrictions on its movement and all ports and port related activities including the movement of vehicles and manpower, operations of Container Freight Station and warehouses and offices of Custom Houses Agents have also been declared as essential services. The Notification of the Director General of Shipping, Mumbai, states that there would be no container detention charges on import and export shipments during the lockdown period.*
>
> *In any event, the lockdown would be for a limited period and the lockdown cannot come to the rescue of the Petitioners so as to resile from its contractual obligations with the Respondent No. 1 of making payments".*

Therefore, even if the event is a force majeure, contracts may not be avoided if the event does not affect performance of the entire contract or affect every aspect of any contract. The event has to be specific to the failure.

In the **Halliburton case**[7], decided on May 29, 2020, the Hon'ble Delhi High Court was of an unequivocal opinion that:

> *"62. The question as to whether COVID-19 would justify non-performance or breach of a contract has to be examined on the facts and circumstances of each case. Every breach or non-performance cannot be justified or excused merely on the invocation of COVID-19 as a Force Majeure condition. The Court would have to assess the conduct of the parties prior to the outbreak, the deadlines that were imposed in the contract, the steps that were to be taken, the various compliances that were required to be made and only then assess as to whether, genuinely, a party was prevented or is able to justify its non- performance due to the epidemic/pandemic".*

Further, while discussing the scope of the force majeure clause in contracts it was observed by the Hon'ble Court that:

> *"Para 63. It is the settled position in law that a Force Majeure clause is to be interpreted narrowly and not broadly. Parties ought to be compelled to adhere to contractual terms and conditions and excusing non-performance would be only in exceptional*

situations. As observed in Energy Watchdog it is not in the domain of Courts to absolve parties from performing their part of the contract. It is also not the duty of Courts to provide a shelter for justifying non-performance. There has to be a 'real reason' and a 'real justification' which the Court would consider in order to invoke a Force Majeure clause".

The Hon'ble Madras High Court in the case of **Tuticorin Stevedores' Association vs The Government of India**[8], dated 14th September 2020, observed that the question as to whether on account of the pandemic outbreak of Covid-19, the parties can invoke the principle of force majeure need not detain us. The calamitous impact and disruption caused by Covid-19 on the economic front has been recognized by the Government itself.

In **Confederation for Concessionaire Welfare & Ors. vs Airports Authority of India & Anr**[9] the Hon'ble Delhi High Court observed on 17 February 2021 inter-alia that the court has perused the clauses relating to Force Majeure. There can be no doubt that the pandemic is a force majeure event. Since the Petitioners wish to terminate/ exit from their respective agreements, while directing completion of pleadings and while the issues are under examination by this Court, there is a need to reduce the risk to both parties as simply postponing the exit by the Petitioners would also make it impossible for the AAI to re-allot the spaces to willing concessionaires and the outstanding against the Petitioners would continue to mount. Accordingly, as an interim measure the Hon'ble Court directed certain processes to be followed.

In another case of **Ramanand vs. Dr. Girish Soni RC**.[10], an application came under consideration of the Hon'ble Delhi High Court which raised various issues relating to suspension of payment of rent by tenants owing to the COVID-19 lockdown crisis and the legal questions surrounding the same. By an order dated 21th May 2020, the Hon'ble Delhi High Court while determining whether lease agreements are covered under the ambit of Section 32 and Section 56 of the Act and even though it was held that suspension of rent on the grounds of force majeure is not permissible under the circumstances, the Hon'ble Court allowed relaxation in the schedule of payment of the outstanding rent owing to the lockdown.

The Hon'ble Supreme Court in the case of **Parvasi Legal Cell and Ors. Vs Union of India and Ors**., observed that the pandemic was an 'unusual' situation, that had impacted the economy globally. The case revolved around the liability of the airlines to compensate passengers who faced cancellation of flights due to government-imposed lockdowns and restrictions on inter-state and international travels. The Hon'ble Court relied on the office memorandum issued by the Ministry of Civil Aviation dated 16th April 2020 to dispose of the petition.

In the case of **Transcon Iconia Pvt. Ltd v ICICI Bank**[11], the Hon'ble Bombay High Court while determining whether the moratorium period would be excluded for non-performing assets (NPA) classification observed inter alia as under:

'38… *the period of the moratorium during which there is a lockdown will not be reckoned by ICICI Bank for the purposes of computation of the 90-day NPA declaration period. As currently advised, therefore, the period of 1 March 2020 until 31 May 2020 during which there is a lockdown will stand excluded from the 90-day NPA declaration computation until — and this is the condition — the lockdown is lifted'.*

In yet another judgment passed in **R. Narayan v. State of Tamil Nadu & Ors.**[12] the Hon'ble Madras High Court directed the Municipal Corporation to waive the license fee for running a shop at a bus stand, and observed that:

"...this Court would be justified in treating the "lock down" as a force majeure event which will relieve the licensee from performing his obligation to the corresponding extent." The Court also observed that ... "The respondents (The Government of Tamil Nadu & Ors.) themselves have chosen to treat the lock down restrictions as a force majeure event. But they have relieved the licensees from the obligation to pay the fees only for two months. The reason for granting waiver for the months of April and May would equally hold good for the entire "total lockdown" period."

Therefore, as it appears, most of the High Court's relied on the government orders that classified pandemic as force majeure, although the relief granted in each case has been subjected to restraint based on the accompanying facts and circumstances. The common observation however remained that the Covid-19 pandemic is a force majeure event.

Key Outcomes

To summarize, the commercial hardship would not be a just and reasonable ground to support frustration of contract and excuse performance. The Courts have no general inclination to absolve a party from the performance of its part of the contract merely because its performance has become onerous on account of an unforeseen turn of events. Parties are at an obligation to complete their part of the contract against all odds, within a reasonable and practical limit. However, where the contract itself either impliedly or expressly contains a term according to which performance would stand discharged under certain circumstances, the dissolution of the contract would take place under the terms of the contract itself and such cases would be dealt with under Section 32 of the Act. If, however, frustration is to take place dehors the contract, it will be governed by Section 56.

Different Courts in India have upheld the defense of frustration of contract and the defense of force majeure sparingly in every case. Even though the Covid 19 pandemic and its consequent lockdown can be generally covered under the ambit of force majeure, but there can't be any straitjacket formula and its invocation strictly and solely shall depend upon the facts of each case, previous conduct of the parties and the prevailing circumstances in the specific scenario. If there are alternate modes of performing contractual obligations, the liable party shall not have the luxury to hide behind the comfort of doctrine of frustration or the doctrine of force majeure and absolve themselves of their duties. Accordingly, it would need a very careful examination of the whole situation before any ground is taken for avoidance of obligations under a concluded contract.

If there is no Force Majeure Clause, then the Contractor bears the Risk

When there is no force majeure clause in the contract, the risk of loss for any unexpected or unforeseen event generally falls on the contractor. Since force majeure events are generally acts of nature (or God), it is said "because the same rain falls on the owner's head as on the contractor's" both parties share the risk; therefore, the contractor is entitled to a time extension, but not compensation.

Therefore, if the event causes a delay in performance, a contractor could be allowed to raise the doctrine of force majeure to obtain an extension of time without penalty and as a defense against assessment of liquidated damages. Nevertheless, the contractor will not normally be permitted to recover losses or damages resulting from that delay. Moreover, contractors typically bear the costs to demobilize and remobilize, or repair work caused by an "Act of God" event.

It is not uncommon, therefore, for parties to include a force majeure clause in their contracts to limit the risk that a future event will prevent them from performing and subject them to liability. Force majeure provisions serve two purposes: allocating risk and providing notice to the parties of events that may suspend or excuse performance. If an event that triggers a force majeure clause occurs, theoretically, the burden would be borne by the party that assumed the risk.

Even if a force majeure clause properly and adequately describes the types of incidents that are covered by the clause, problems could still exist if the clause is not completely clear. For example, if a contractor is laying a building's foundation, and a flood would be considered a force majeure, and if a flood occurs, then what is the course of action for the contractor to take? And what happens to the contract? Does it terminate, or does the contractor have the ability to continue work? If additional work is needed how much compensation is due to the contractor? These provisions should also address important questions, such as: What are all the events or conditions that are considered as force majeure? Who is

allowed to invoke the clause? What is the appropriate remedy where the clause is invoked? Which contractual obligations are covered by the clause? How should the parties determine whether the event creates an inability to perform?

A properly written force majeure clause would address these questions and more to protect the contractor from exposure to unexpected liability. It also protects the Employer.

Note: The views expressed in this article belong solely to the Author and not to the Author's Employer's organization.

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10

Impact of Force Majeure on Lease Agreement in the context of Covid-19

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Introduction

The need for appropriate Force Majeure clauses in civil contracts is as important as for construction or service contracts. This has been borne out by the litigation that arose on account of the COVID-19 pandemic. To illustrate, a civil case is presented in this article.

The Delhi High Court held that a Force Majeure clause in a rental agreement cannot only benefit one party and held that the loss has to be borne by both the lessor and lessee equally. It was the case of *Mehra Jewel Palace Pvt. Ltd. v. Miniso Life Style Pvt. Ltd. & Ors.*[1]

Facts

Mehra Jewel Palace Pvt. Ltd. ("Jewel Palace") entered into a lease deed for its property ("demised premises") situated in Connaught Place with Miniso Life Style Pvt. Ltd. ("Miniso") for a term of ten years. On 30 March 2020, Miniso informed Jewel Palace of the closure of the demised premises due to the pandemic. Subsequently on 3 April 2020, Miniso invoked the Force Majeure clause of the lease deed, seeking a waiver of rent until the demised premises was operational. Miniso also did not pay the rent for the month of April and May 2020. In response Jewel Palace took the position that the Force Majeure clause only provided for a deferment and not the waiver of the rental dues. Jewel Palace even proposed a plan for the payment of Rs 48,00,000/- towards the rent for April and May 2020, however Miniso only paid a sum of Rs 12,50,000/- while continuing to enjoy possession of the demised premises.

After multiple failed negotiations, Jewel Palace sent a legal notice demanding payment with interest to which Miniso once again took shelter under the Force Majeure clause. On 19 August 2020, Jewel Palace sent a notice of termination of the lease to Miniso and called upon them to hand over the peaceful possession of the demised premises. Miniso did not respond to the termination of the lease and on 4 September 2020, they filed a suit before the Delhi High Court seeking recovery of possession, arrears of rent and mese profit and interest in respect of the demised premises.

Decision

The Delhi High Court observed that a Force Majeure clause in a contract must be interpreted on a case-to-case basis. It relied on the decision of this Court in the case of *Halliburton Offshore Service Inc. v. Vedanta Limited* [2], where it was held that "The Court would have to assess the conduct of the parties prior to the outbreak, the deadlines that were imposed in the contract, the steps that were to be taken, the various compliances that were required to be made and only then assess as to whether, genuinely, a party was prevented or is able to justify its non-performance due to the epidemic/pandemic."

The Court held that the lessee suffered a loss due to shut down of his shop on account of the COVID-19 pandemic and the lessor as well would have continued to incur various financial obligations, such as maintenance and upkeep of the demised premises, which the lessor would have normally fulfilled from the lease rentals being received by him. The Court ordered that both Jewel Palace and Miniso must equally bear the impact of the COVID-19 pandemic and directed Miniso to pay 50% of the monthly rental for the months of April and May 2020.

Conclusions

A Force Majeure clause must be read on the basis of the facts of a particular case. In case both the parties were suffering from loss due to the same force majeure event, they would have to bear the consequence of the same equally.

In general, the Force Majeure clause needs to be carefully drafted and incorporated so that it serves as a clear guide to manage and operate the lease agreement.

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IBEF
INDIA BRAND EQUITY FOUNDATION
Indian Economy News

Govt launches revamped Zero Effect Zero Defect Scheme for MSMEs

IBEF April 29, 2022

The Ministry of Micro, Small, and Medium Enterprises (MSME) inaugurated a new Zero Defect Zero Effect (ZED) Certification Scheme, with the goal of making Indian businesses more globally competitive and facilitating capital access.

The Scheme is designed to help MSMEs implement Zero Defect Zero Effect practices while also motivating and incentivizing them to pursue ZED certification. Minister of Micro, Small and Medium Enterprises, Mr. Narayan Rane said that the Zero Defect Zero Effect (ZED) Certification Scheme will improve the productivity and performance of MSMEs, it has the potential to shift manufacturers' mindsets and make them more environmentally conscious. The redesigned scheme's first phase would target manufacturing MSMEs, while the second will target MSMEs in the services sector.

The certification's number of parameters, which are divided into bronze, silver, and gold, has also been reduced from 50. For participating in business exhibitions and fairs overseas, ZED-certified MSME players will be provided subsidies on stall fees, airfares, and freight charges. Certified MSMEs would also be eligible for reduced bank processing fees and interest rates, as well as lending priority. Certified MSMEs are also more likely to have a higher credit rating.

Disclaimer: This information has been collected through secondary research and IBEF is not responsible for any errors in the same.

Source: https://www.ibef.org/news/govt-launches-revamped-zero-effect-zero-defect-scheme-for-msmes

11

Contract Management as practiced in the Indian Banking Industry

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Introduction

Recently for one or three years, the Indemnity contract clause has been getting highlighted in Banking contracts, in most parts of India. That requirement results in consuming many working hours and paperwork of Valuers on indemnity issues which could otherwise be utilized more fruitfully in other ways. A Lucknow Bench of Allahabad High Court on hearing the pleas from both Bankers and Valuers on the indemnity issues have issued a Stay Order. The Dehradun Zonal office of PNB has also issued a circular stating that the members of the All-India Valuers Association (AIVA) are not required to abide by the indemnity clause. The question that arises is as to why do these indemnity issues crop up suddenly and in what way are they related to Banking financial services such as Valuation?

To delve deeper into the issue it would be best to start with the definition of the term 'Contract'. A contract is an agreement enforced or recognized by law. An agreement comes into existence when one party has made an offer that the other party has accepted. An agreement becomes a contract when the parties are competent to contract; their consent is free; a lawful consideration is present; its object is lawful; the certainty of the terms and possibility of performance is present. All the aforesaid elements exist in an agreement with Banks so it is a valid contract. The primary duty of the contracting parties is to perform their respective contractual obligations and a contract subsists until it is discharged when the rights and obligations created by it come to an end. Undertaking valuation for Banks is a contract and submission of a Valuation report by a Valuer is part-performance because under an indemnity clause Banks have the right to recover compensation in case of loss due to negligence or other causes attributed to the Valuer.

The definition of the American Restatement of Contracts is accepted as the most appropriate which says that "A contract is a promise or a set of promises for the breach of which the law gives a remedy or the performance of which the law in some way recognizes as a duty". of The Indian Contract Act,1872 is a statute safeguarding the term 'Contract'. Its function is "……to define and amend parts of the law relating to contracts." The Definition of a Contract {Section 2(h)}- …. "an agreement enforceable by law is a contract" whereas an agreement is defined by Section 2(e) "as every promise and every set of promises forming the consideration for each other". Though contracts may be differentiated by means of various ways, for this paper differentiation of contracts is between a Works Contract v/s a Financial Service Contract. A Works' contract which also includes a construction services contract is an agreement that is a mixture of service or labour and transfer of goods - it is a contract for building, construction, completion, erection, installation, fitting out, improvement, modification, repair, maintenance,

renovation, alteration, or commissioning of any immovable property wherein transfer of property in goods is involved.

Brief Discussion

For any Works Contract, the main performance criteria are the General Conditions of Contract (GCC) and Special Conditions of Contract (SCC) but for a Banking Valuation Contract, the performance criteria are Indemnity and Tort. An indemnity is a contract covered under sections 124 and 125 under the Indian Contract Act,1872. Under the indemnity clause, Banks have the right to recover compensation in case of loss due to negligence or other causes attributed to the valuer as these losses would be known to the Bank after the respective incumbent account becomes a Non-Performing Asset (NPA) and the amount recovered under sale is less than the value estimated by the valuer at the stage of loan sanction or disbursal. In view of the above, the Contract and the Indemnity would remain alive till the sale of the NPA.

GCC is applicable for all types of contracts in an organization but SCC should be read in conjunction with the GCC and is referred to as General Terms & Conditions of a Works Contract, Schedule of Quantities, Specifications of Work, Drawings, and any other document forming part of the contract wherever the context so requires. Where any portion of the GCC is repugnant to or at variance with any provisions of the SCC, then unless a different intention appears the provision(s) of the SCC shall be deemed to override the provision(s) of GCC only to the extent that such repugnancy or variations in the SCCs are not possible of being reconciled with the provisions of GCC.

The essential element of indemnity is an absolute promise to reimburse for defined loss or injury made to ensure that an aggrieved party has a precise remedy to correct defects in goods or services delivered under the said contract. It is also an assurance to make restitution for or safeguard against damage, loss, or injury. It's a tool for the indemnified to assign responsibility for contingent risks.

A contract of indemnity can be invoked according to its terms like the express condition of a promise u/s 9 of the Indian Contract Act provides that in so far, the proposal or acceptance of a promise is made in words the promise is said to be express. Express contracts can be made by words spoken or written. Damages, legal costs of suit, and the amount paid under the terms of the agreement are some of the claims that the indemnity holder can include in its claims.

Many may be already aware that the Banks already had another tool or route too for compensation under the Law of Torts. When a party suffers a loss due to the actions of another party, they can still pursue damages under the "Law of Torts" even if there was no agreement or contract, or immunity. Now, tort means a breach of some duty independent of contract giving rise to a civil cause of action for which compensation is recoverable.

A Bombay High Court judgment whereby during hearing a petition of the Professional Valuers Association of India (PVAI)'s against SBI, observed that the 'indemnity clause doesn't hold the valuer to a higher standard of care'. But at the same time, it says SBI's interest may be secured by way of express contract rather than SBI having to base any action only on a tortuous or civil action of professional negligence or fraud. It may be noted that the SBI candidly admitted in its affidavit statement in Paragraph 12 that indemnity would be rarely invoked and it is intended for cases where it suffers huge losses on account of an erroneous or fraudulent valuation report.

There is a clear distinction between a contract and a tort as for the latter there is no privity between parties. So, in the case of tort, there is some duty imposed by the law and is owned to the community at large, like suppose 'A' assaults without lawful cause – it is a tort. Duty violated here is a duty imposed by law and it is the duty not to do unlawful harm to any person or property of another. Compensation is awarded under tort to prevent such breaches in the future.

A Stay Order Copy of Indemnity issued by Allahabad High Court vide case No. CIVL MISC. Writ Petition

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HIGH COURT AT ALLAHABAD

Computerized Copying Section, High Court of Judicature at Allahabad, Lucknow Bench

Requisition Information

Folio No.	Application Date	Case Type	Case No.	Year	Case filed at	Date of Judgment/Order	Court Fee	No.of Pages
6743 of 2021	3.2.2021	MISC	5228	2021	Lucknow	2.2.2021	15.0	2

Printed/Prepared by	Authenticated by	Date of Issuance
Signature :- 03.2.24	Signature :- 03.02.2021	03/2/21
Name :- OM HARSH YADAV Designation :- Section Officer Employee No. :- E7269 Date of Printing :- 3.2.2021	Name :- Rahul Maurya Designation :- Section Officer Employee No. :- 7233 Authenticated Copy ready on :- 03.02.2021	

No. 13107 of 2020 is shown. The relevant extract from *the interim order is "Accordingly it is provided that in the meantime, if any decision for empanelment is taken, the members of the petitioners association shall not be insisted upon for giving such Indemnity Certificate. This arrangement under this order shall, however, be subject to the final outcome of this writ petition."*

Conclusions

An estimated 50,000 individuals practice the valuation profession and as per AIVA, 16 Indemnity stays have been issued by various High Courts - the Hon'ble High Court of Judicature at Patna, Hon'ble High Court of Madhya Pradesh, Hon'ble High Court of State of Telangana at Hyderabad, Hon'ble High Court of Kerala at Ernakulum, Hon'ble High Court of Orissa and Hon'ble High Court of Jharkhand at Ranchi. Hence, there is a need to reconsider as to why indemnity clauses are being inserted in Banking contracts when valuation is teamwork involving both Bankers and Valuers. When a particular account turns into an NPA it should not be the culture to hold only the valuers responsible. Many Banks like the Union Bank of India, Punjab & Sind Bank, etc. have done away with such draconian clauses.

The Valuers as professionals need to be safeguarded, otherwise, the country's basic infrastructural needs would remain unfulfilled. It's regrettable that although more than seven decades have passed but the legislation for the profession of Engineering is still in a state of limbo.

The Valuers are paid very little fees and even then, there are instances where fees are reduced for every new assignment but the Bankers remunerations increase every year.

The Valuers are asked to follow the International Standards of Valuation while the prescribed Banking valuation fees do not match even the local standards. Hence, there still remains the task to institutionalize the valuation profession as a whole taking into consideration all the issues by also effecting a legislation for the profession of the Valuers'.

12

Contract Management Automation

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Abstract

Organisations utilise techniques like common Hard drives or shared folders for data storage and retrieval; Electronic mails to streamline workflow like document review and approvals; Spreadsheets with built in formulae or manual calculations and enabled links for tracking and management of Contract obligations and agreements.

However, Digital transformation is now being adopted across most industries ranging from retail outlets to multifunctional organisations and engineering contracts. The latter involve numerous documents and are thus far more complex, detailed and with numerous variations. The current trend in contract management requires expert insight to comprehend the requirements, assess the risks and how to mitigate them. For all that, well harmonised language and communication skills are necessary so that constructive discussions and negotiation can take place leading to contract finalisation. Post entering into a contract, its management necessitates that the persons concerned be fully aware of all its requirement and the various related issues. Leading organisations are in the process of implementing digitally automated contract management systems which are helping to transform all aspects of governance including but not limited to Legal and Techno commercial agreements in a simplified manner. Automation enables a comprehensive integrated contract management system with customised workflow for the complete contract lifecycle.

Introduction

A Contract which is an Agreement enforceable by Law, is the backbone of a commercial transaction. During the rendition of the contract, large number of problems ensue resulting in loss of money, goodwill, time, etc. Most of the issues could be reduced or eliminated if the Contract is transcribed following certain basic principles. All the terms or clauses in a "Good Commercial Contract" needs to be Unambiguous, Explicit and Simple. There should be no tacit understanding of any kind.

Figure 1: Typical Contract lifecycle

Contract Management as shown in Figure-1, is **"the process of management of contract or agreement in terms of its conception, progression, execution,**

amendment or reformation, and analysis with the objective of improving system effective performance and productivity while abating financial risk. It "provides a streamlined approach and enables reduction or management of cost and time schedule, also reducing errors and inherent losses".

Contract management includes a host of activities such as contract management planning, initiation of "Request for Quotation", Proposal or offer receipt from Bidders, Offer acceptance, consideration and finalisation of Offers based on negotiations followed by an "Agreement" or "Contract document", execution, post execution management and generation of As built documentation, relationship maintenance with vendors or contractors and subcontractors, management of routine transactions and associated contract change orders or variations. Pivotal activities also involve performance analysis of the chosen party with reference to contract terms to step up financial and operational performance, identification and mitigation of associated risks, may it be - legal, financial, reputational, etc. due to non-compliance of contractual obligations.

All the activities mentioned above can be better performed and controlled by Contract management automation which could be performed by a standalone software platform integrated with other applications like E mails and utilised for generation of contracts, review, updation, distribution, signature, storage, retrieval and renewals.

Automation Workflow

The traditional contract management process is disconnected and fragmented and could lead to suspension or block of new deals attributable to damaged brand value due to time delays/ lost opportunities/ overlooked penalties or vague clauses, etc. and thus obstruct business growth of an organisation. Automation of the contract management process is thus gaining high priority in the business world. Digitalisation of contract management effectively streamline tasks, reduce cost, save time and ensure that critical information is included, alarms are raised and concerns get addressed.

Figure 2: Symbolic representation of key parameters for Contract management

Key Automation steps of contract management program include:

i. Seamless automated contract formats

Documents generation in manual mode could be time consuming and prone to errors. Seamless merging of common data used in several documents and extracting information from the common database ensures data correctness in lesser time. Data is Auto filled based on content requirement in relevant formats of multiple documents. The entire contract drafting process is automated with templates being filled with relevant latest contract details. Time spent could be further reduced by use of pre-approved templates with already filled in legal and commercial, General terms and conditions. Templates could also be customised based on specific requirements.

ii. Signature

Signatures can be physical or electronic. Physical

signatures sometimes referred to as "wet" signatures are generally executed in person, with the presence of all parties, or executed remotely by routing the contract document between each of the party's premises sequentially. E-signatures, on the other hand can be realised simultaneously by all parties involved in a shared Word or PDF file or by using an electronically enabled contract management software either from Desktop PC or mobile phones. Electronic signatures also present an exceedingly mercurial and superior experience to users since contract documents are signed from anywhere in the world or from any of their choicest device without prints, manual signature, scans and multiple E mail correspondence. To supplement, with advancement in technology - E signatures are secure and legally valid since the E-SIGN Act, 2000. E signatures hasten the approval process facilitating dramatically shorter cycle times and furthering cost reduction.

The signed and finalised contract could then be circulated to applicable department individuals of the organization(s) as required. The signed contract embodies all the commitments and obligations required to be met by each of the parties involved.

iii. Centralised repository for review and clearance

Customised workflows ensure proper planning and full control of contract agreement schedule compliance. The order, internal organisation document check and issue for End user's approval, Notification to End user indicating pending document review, End user review and finalisation of documents, document availability in required format by End user (Word/pdf, etc.) are configured in a central database thus ensuring smooth workflow. Review and updation of the same document simultaneously along the same timeline by numerous people or organisation(s) are also made possible followed by "Auto save" wherein all updations are saved and compiled into a single version document. Reputed automations are backed by E mail or Mobile status alerts and trigger concerned managers regarding important deadlines ensuring that all review steps follow the predefined schedule, mitigating possible risk.

Further, conditional content could be configured which empowers selective data visibility to configured users using password protection. Besides, Automation program System administrators need to maintain a single template/ workflow for several variations. However, customisation could also be done as per requirements.

iv. Automated change management

Document updations are automatically tracked and recorded since automated solutions can be paired with any selected document versions to show changes made ensuring transparency.

v. Monitoring and Tracking milestones:

Contract management includes important deadline dates and predefined milestones which need to be monitored closely to prevent agreement derail. Automated alerts eliminate the need for manual follow up and tracking of critical milestone dates or deadlines.

Tracking of documentation automatically provides for accountability and mitigates bottlenecks to optimise the process, A clear understanding and transparent auditing is possible since history of changes including date and time, comments and version comparisons, current document status view are possible with automation. In addition, Digitalisation allows document filing as an opportunity to maintain all stake holders on the same page by giving access and history at any given point of time.

vi. Reporting

Significance of Automatic Reporting: Reveals information like clauses detrimental or risky requiring special attention in future contract, recognition of shortfalls, impact of current contract under execution and other factors contributing to cost impact and schedule impact. Automation provides better visibility in terms of data

availability and also, allows disparate visibility for different people/ roles in the organisation.

Further, once documents are saved in a central repository, documents could be shared and managed using "Search" option.

Another salient feature of comprehensive reporting is that it gives the stakeholder's an insight into the contracting process. With analysis and review built-in into the automation system, it is possible to determine improvement requirements of workflow, tackle challenges and augment favourable outcomes.

Benefits of Automation

Contracts form a crucial part of any business and with the aid of automation, duplication of efforts can be reduced by using standardised templates and routine details. It would enhance process flow visibility and enable real time teamwork, provide renew or renegotiating opportunities on time thus improving business prospectus, plus track and monitor implementation.

The time spent on searching and storing contract documents manually is reduced. It's easier and faster to browse through for information like obligations, party involved, critical dates, workflow, etc. It is possible to search and obtain specific data required within few seconds by means of keyword searches. In addition, customised document labelling evolves and aids in the development of an organised comprehensive approach.

Contracts are maintained in a central repository and accessible to all concerned from anywhere in the world with an internet connection which makes information accessibility easier and faster in comparison to paper-based hardcopy.

Alerts can be customised as a crucial part of automation. Reminders regarding Audit dates, compliances, contract expiry or renewal dates, etc. are configured to increase awareness among various organisational roles. The complete work process can be linked to various contract clauses and monitored for compliance, fulfilment, delays and the cause for delay can also be recorded, tracked and linked to time and cost overrun workings.

With automation, it is also possible to effortlessly merge data with an organisation's internal procedures or other platforms and manage documentation with a simple authentication. Thus, Customised Integration allows knowledge sharing across teams while having independent Ownership for assigned portion of the contract and promoting independent operation of multiple teams of the same contract. Progress with automatic status updates would also be available to all stakeholders.

Conclusions

The Contract Management procedure is long drawn and laborious. Though a dedicated contract management software requires human conciliation in terms of knowledge upgrade and data entry, automation of contracting experience helps manage the system better during all stages of the contract lifecycle. The human error element gets eliminated apart from reduction in the time taken.

Automation of contract management plays a vital role in an organisation's business landscape. This necessary investment enables optimum return on investment even in the short run for large complex dealings. Automation is more important since present day contracts include many variables like mutating agreement needs, cost escalation, funding alliances between public private partnerships and/or government or multiple payers, business partnership, service agreements, etc. Intricacy of variants and issuing deliverables on the scheduled dates as per agreements are feasible by adoption of contract management tools for lifecycle management facilitating automatic progression.

With adequate cybersecurity checks and security measures, contract related sensitive information is safely stored in the Cloud with multi-level authentication and partial/ complete data access depending on User levels.

To conclude, there are innumerable advantages of automation. Few of them include utilisation of common up to date contract templates for multiple contracts, auto filled data reducing errors, uniformity in legal language by applying pre-approved templates, auto tracking of updations during negotiations or review, quick and parallel distribution of documents and auto- regulated follow-up of contractual deadlines like review and approvals, Electronic signatures, Audit trail with date and time stamping enabling removal of bottlenecks at all levels of lifecycle of the contract. Automated contract management with optimum search facility, central repository and state of the art security minimises errors and delays, speeds up contract life cycle time starting from "Invitation to Bid/ Request for Quotation" stage through negotiations, contract document generation and execution to contract expiration. Automation thus increases efficiency and output, optimises resources and time, reduces errors, provides improved work flow transparency, empowers collaboration and increased profits enhancing Customer contract value and experience. Automation function also makes it possible to surf through various stages of contract management with the click of a button.

Furthermore, customised automation creates efficient processes leading to happier and more efficient employees. In line with the quote ***"Perfection has to do with the end product, but excellence has to do with the process",*** contract management automation process is a reality magic with positive focus on the end product and process; engineering contract success in the long term with a commitment and laying the foundation for great accomplishments and is used and advocated by commercial business entities.

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CEAI NEWS

WORKSHOP ON "CITY ROAD USER CONCERNS: PRIORITIES AND SOLUTIONS", KOLKATA

After a long time gap, CEAI (East and North-East Regional Centre) [E&NERC] initiated a Workshop in the City of Joy on ***"City Road User Concerns: Priorities and Solutions"*** on 7th May 2022 at The Park Hotel, Kolkata. It was dedicated to the concerns of city road users in major urban centres. The discerning community is aware that not only in Kolkata but also in most Indian cities, the road-users lack basic facilities and safety features. To highlight the issues and to resolve them with a positive note, CEAI (E&NERC) had organised it jointly along with the Transport Department Government of West Bengal and the Kolkata Police, The World Bank, Indian Institute of Technology Kharagpur (IITKh) and the Indian Institute of Engineering Science and Technology, (Shibpur) [IIEST, Shibpur] were Institutional Partners and the Rotary Club of Calcutta was the Social and Environmental Partner for the workshop which was in the hybrid mode. The venue was The Park Hotel and arrangement for virtual participation through Zoom was made with the help of a professional agency and the CEAI Secretariat, New Delhi for a glitch-free engagement across the country and the world.

More than 140 participants from various sections of the society were physically present, much beyond expectations. Various road user groups, road asset owners, Environmental & Social focus group, the faculty and the post-graduate students of engineering/ planning institutions and Global and pan-India panelists and participants took part in the brainstorming session as well. Representatives from diverse segments of road-users such as the Blind Welfare Society, specially-abled groups, two-wheeler riders, cyclists' society (Cycle Samaj), pedestrians, a Corporation Councilor, Engineers from PWD, KMC, research scholars and faculty members from IITKh and IIEST, senior professionals in the field of traffic & transportation, et al. The day long programme comprised an Inaugural Session followed by three Technical Sessions.

In the **Inaugural Session**, **CEAI's President Dr. Ajay Pradhan**, who was online from Delhi, welcomed everyone to the Workshop, an event being held after a long gap of over two years, and set the tone for the day. **CEAI's Immediate Past President Mr. Amitabha Ghoshal**, thereafter took the stage and physically welcomed all at the venue and online.

The Inaugural Session was also addressed by Mr. Samiran Sen, Chairman CEAI-E&NERC, Mr. Amitabha Ghoshal, Immediate Past President, CEAI, Mr. Gautam Gupta, OSD & Ex-Officio DC, Kolkata Police, a person, highly knowledgeable regarding the complexities of Kolkata city traffic and Mr. Anup Kumar Chattopadhyay, Principal Traffic and Transportation Engineer, Transport Department, Government of West Bengal. Mr. Amitabha Datta, Immediate Past Chairman, CEAI-E&NERC proposed the Vote of Thanks at the end of the Inaugural Session.

Technical Session I saw presentations by experts for setting the stage for the discussions and brain-storming in the afternoon. The topics covered were:

In the **Technical Session I** eminent experts in different fields addressed and made presentations on different related areas of the workshop theme and setting the stage for the discussions and brain-storming for a later session.

Mr. Samiran Sen kicked off the session for explaining **"Capacity Management of Urban Roads"** and dealt extensively on the provisions in various guidelines and standards particularly mentioning the share of various modes of urban traffic and their approach towards road use.

Prof. Bhargab Maitra of IITKh spoke on **"Sustainable Urban Transport".** He explained in detail the effect of factors like congestion, delays, vehicular emission, safety, health and environmental degradation, etc. to be addressed for bringing in sustainability in urban transport. He mentioned about the findings of various studies done by him and his team from IITKh and also the results of implementation of many of the recommendations. He mentioned about some areas which needed close intervention. He also suggested that solutions must not be prescribed in isolated way, there should be a holistic approach. He also stressed on appropriate construction management considering road user's requirements and stressed on improving tram services. According to him the Transport Department was on the right track in respect of planning for bus transport.

Prof Sudip Ray and Dr Pritam Saha of IIEST, Shibpur presented a study report on the **"Impact of E-Rickshaws in City Traffic".** They mentioned that the finding was that E-Rickshaws were leading to greater traffic congestion

It has been a usual practice to think of fast-moving traffic only while planning operational requirements of urban roads. However, **Mr. Suvendu Seth, Consultant**, who had studied in detail the mobility requirements of all sections of road users made a presentation on **"Mobility for All"** showing various systems and arrangements in different places around the world along with the implementable options in the Indian situation.

Mr. Jahar Ranjan Sarkar, Consultant in the highway sector with expertise in highway safety and an Adjunct Professor at IITKh, made presentations on **"Pedestrian Facilities and Preferences"** to address the need of the most vulnerable section of road users. He made practical implementable suggestions from his in-depth studies of various situations including preferences of road users. He also showed possible arrangements to relocate road side hawkers.

Dr. Mihir Lal Rai Choudhury, Consultant, explained in detail the requirements of **"Automatic Signal Control"** to improve safe and speedier operation of city traffic. He also said that signals must not confuse drivers and drivers must be made aware of the message communicated through signals particularly amber signal. He suggested providing three seconds duration in amber signal.

Mr. Alok Sanyal, Assistant Commissioner, Kolkata Police made an excellent presentation on **"Managing City Traffic"** which brought out that substantial computerization had been done for managing the city traffic and many user-friendly Apps had been introduced for convenience of users. There had been perceptible improvement in traffic movements and safety but much was still to be done. With the new arrangements complaints could be immediately addressed. He also mentioned about the various limitations under which the city police had to work. He mentioned about further improvements which were on the cards and also invited suggestions to improve upon the situation.

Technical Session I was followed by a **Technical Presentation by Google**, the organization entrusted with making all the arrangements for computerization of operation and control of traffic in the city of Kolkata including developing user friendly Apps. After the initial introductory remarks by **Mr. Joydeep Choudhury, MD Panorama**, the implementation agency of Google solutions for Kolkata Police, **Mr. Aninda Biswas, India representative of Google** highlighted the large amount of data available on city traffic plus CCTV coverage and the potential of use of AI for analysing the same. He explained in detail what had been done and what all was still in the process of being done. He also agreed to work with the useful suggestions put forward by the participants.

There was close interaction among participants and speakers during the lunch break.

Technical Session II was a **Panel Discussion** on **"Appropriate Traffic Management".** The Panelists were Dr. Sandip Chakraborty of IIEST, Shibpur, Mr. Debashis Ghosh, Assistant Commissioner, Kolkata Police, Mr. Srikumar Bhattacharya, Former Engineer-in-Chief, PWD, West Bengal, Dr. Swati Maitra of IITKh. The Session was moderated by Mr. Jahar Ranjan Sarkar and Mr. Samiran Sen. There was animated floor

participation when actual road users availing different modes of transport exchanged views with the panelists and among themselves

During the course of the proceedings, **Dr. Shantanu Sen, MP (Rajya Sabha) & Chief Medical Avisor to Government of West Bengal**, joined the workshop, much to the pleasant surprise of everyone, and made a very meaningful talk of the health issues of the road users. He particularly highlighted the need for self-discipline, problems of hawkers and making suitable arrangements during road repair.

Technical Session III was also a **Panel Discussion**. The Panelists who deliberated on various aspects of **"Enhancing Road Safety"** were Mr. K K Kapila, Emeritus Chairman, International Road Federation (IRF), who participated online from Delhi, Dr. D K Jha, an eminent Orthopedic and Trauma Expert, Mr. Biswarup Dey, Councilor & Sports Administrator and a Social Worker, Smt. Shatabisha Chatterjee, Clinical Psychologist, Smt. Mitali Chaudhuri, Transport Economist and Prof. (Dr.) Sudeshna Mitra, Road Safety Expert, The World Bank, who participated online from Washington. The Panel discussion was moderated by Prof. Bhargab Maitra.

The participants interacted closely and made many useful suggestions. Among those was Prof. P K Sikdar, who participated online from Delhi, representatives of Cyclists Association, representatives of Visually Challenged, representatives of Physically Handicapped Persons and others. The discussions pertained to road safety issues, some unexplored areas of concerns in city road usage such as accident trauma, driver psychology and accident costs. In this session also, audience interaction was extensive and revealing. Prof. Bhargab Maitra moderated the panel discussion.

In the **Valedictory Session**, **Mr. Pandey Santosh, IPS, Jt CP (Traffic) Kolkata Police** spoke on his perceptions about the problems faced by the city road users and also the advancements made on several fronts to manage and solve the issues. Prof. Bhargab Maitra, Dr. Sudeshna Mitra, Mr. J R Sarkar, Mr. Samiran Sen, and Mr. S P Datta summed up the discussions of the day in a lucid and succinct manner.

The main suggestions given in the workshop were:

1. Provision for Multilayer facilities,
2. Coordination among multi modal facilities,
3. More one way system,
4. GIS mapping of utilities,
5. Informing bus availability through GPS,
6. Safe road crossing facility for visually challenged persons,
7. Improving Patha Disha App,
8. Integration of parking facility in the App,
9. Providing separate corridor for slow moving vehicles,
10. Synchronizing signals to improve traffic speed – already being worked out,
11. Adopting multi-sector approach to address road safety particularly crashes with focus on people,
12. More awareness programmes on Enforcement and Education,
13. Awareness programmes for humane approach to deal with accident victims, and
14. Phase wise white-topping for durability to avoid recurring maintenance.

It was decided that CEAI-E&NERC would consider and analyse the suggestions in detail and interact with various bodies to work out the steps to be taken.

The Workshop ended thanking all the speakers, panelists and participants for the extensive and very meaningful interactions. It was a grand success and the wide media coverage that followed added to the effectiveness of the workshop. A direct and immediate positive outcome of the workshop was the decision of Kolkata Police, within a few days, to standardize the amber time of all automatic signals in Kolkata to 3 seconds, an issue which was debated widely during the event.

YouTube Link: https://www.youtube.com/watch?v=VbAeOatNxXs


REDUCE TRAVEL TIME
AVG SPEED HAS INCREASED

SEMINAR ON "MULTI MODAL INTEGRATION FOR TRANSPORT NETWORK"

27th May 2022 was a day of illuminating panel discussions and thought-invoking addresses by eminent leaders at the ***"Multi-Modal Integration of Transport Network"*** seminar in New Delhi. It was focused on the **PM Gati Shakti – National Master Plan for Multi-modal Connectivity**. The seminar focused on how the 16 Ministries have come together under a single window of PM Gati Shakti digital platform, for integrated planning and synchronized implementation of the infrastructure projects.

The seminar was to provide a better perception and appreciation of India's future logistics plan and PM Gati Shakti since a well-functioning logistics ecosystem is seen to be a catalyst for improving the competitiveness of all sectors of the economy. As a result, improving supply chain efficiencies and lowering logistics costs are critical for India to capitalize on this strategic shift and achieve its well-defined goal of becoming a US$ 5 trillion economy by 2025.

In the **Inaugural Session**, **Mr. Vishwas Jain**, **Chairman, CEAI Northern Regional Centre,** expressed his gratitude to all the speakers and emphasized on the need for innovative, efficient, affordable, and sustainable solutions for improved connectivity.

Mr. Ajay Pradhan, **President, CEAI** spoke about the urgent need to facilitate the time and cost component of cargo movement while forming an appropriate transport committee to look after the logistics needs.

The Chief Guest, Mr. Amrit Lal Meena, **IAS, Secretary Logistics, Ministry of Commerce, Government of India** in his address he gave a detailed outlook of how the PM Gati-Shakti (PMG) master plan was shaping the logistics sector. A major push had been given to the digital portal of PMG where the GIS-based platform has multiple layers of data which can be used for visualization and meticulous planning of the infrastructure connectivity projects. Of the 35 States & Union Territories, 25 of them have been implementing the institutional framework laid under the PMG for infrastructure planning. The major issues were highlighted which largely revolved around the land acquisition, forest/ wildlife-related clearances, utilities, and administration in the land-based sectors, while the port/ water sector had major issues related to inadequate infrastructure and capacity constraints.

The first **Keynote Address** was delivered by **Mr. Vinay Kumar Singh**, **Managing Director, National Capital Region Transport Corporation** (NCRTC). He shared examples from the Regional Rapid Transit System (RRTS) project implementation and how it was a true manifestation of the Hon'ble Prime Minister's vision of Gatishakti National Masterplan (NMP). Mr. Singh added that 'Public servants … even public authorities will change but these capital-intensive projects will serve the public for 50-100 years, therefore it is imperative to give due focus on the long-term relevance of these projects by initiatives like efficient multi-modal-integration". With a design speed of 180 km/hr, the RRTS system would be three times faster than the functional metros in the NCR region. The transformational RRTS project would significantly reduce pollution and traffic congestion in the region and forms a part of the long-term strategic involvement of Governments toward environmentally sustainable development.

Mr. Suman Prasad Singh, Joint Secretary (Logistics), Ministry of Road Transportation and Highways, Government of India, the **second Keynote** speaker talked about the delivery of quality infrastructure and how the method had shifted from package-based to corridor development approach, which was also being implemented in the Bharatmala Pariyojana. Mr. Suman Singh also highlighted the measures taken by different ministries to cater to the numerous challenges like high cost of logistics, unfavorable modal mix, and under-developed material handling infrastructure using a unified logistics platform giving real-time data on different modes and outlining the best route for shipment of the package.

The **last Keynote Address** speaker **Mr. Prakash Gaur, CEO, National Highways Logistics Management Limited** (NHLML), focused primarily on multi-modal parks and the work going on both, the passenger and the cargo aspects. The former comprised the wayside amenities, EV charging stations, motels, and ropeways for better passenger commute while the latter focused on development of multi-modal logistic parks for cargo movement. He explained that the scope of multi-modal encompasses the integration of multiple stakeholders and not just multiple modes of commute and NHLML would contribute to the development of the parks by delivering master plans.

The **Technical Session** began with in-depth dive into the NMP and geospatial context being delivered by **Mr. T.P. Singh, Director, BISAG - N (MeitY - Bhaskar Acharya Institute of Space Applications & Geo-Informatics, Ahmedabad)**. He explained the intricacies of the PM Gatishakti digital platform along with the uniqueness of developing the platform with all in-house technologies. The digital platform system would be further enhanced as a Digital Master Planning Tool with features like dynamic dashboards, Project Management tools, and MIS report generation among others. Currently, the identification of gaps in infrastructure and economic zones was carried out through the Network Planning Group (NPG) by amalgamating the updated data of existing and proposed infrastructure with updated data of economic zones in the country. The identified gaps would then be taken up on priority by the respective ministries to bring in logistics efficiency.

The session went on the fire-mode during the **Panel Discussion** where stakeholders from the logistics realm gave individual perspectives on the logistics sector opportunities and challenges.

The opening remarks were given by **Mr. Abhishek Chaudhary, Vice President-Corporate Affairs, Human Resources & Company Secretary, NICDC Ltd.** and he also moderated the session. He primarily elaborated on all the aspects related to when, how, why, and where of PM Gatishakti National Master Plan (NMP) while also emphasizing on the importance of logistics in the national development. The number of challenges that the team faced right from the inception of the NMP along with the progress which has been made in integrating the different governance layers, thus, ensuring a better synchronization in the activities of each department across ministries were highlighted.

Mr. Bharat Joshi, **Director (Business Development), Associated Container Terminals Limited** spoke about the logistics landscape in India.

Mr. Devank Mankodi, Director DP World emphasized on how India could improve its position vis-à-vis other Asian countries/cities, namely, Dubai, Singapore, Hong Kong, Sri Lanka, etc.

Mr. Sachin Bhanushali, CEO, Gateway Freight Pvt. Ltd. dwelt on the domestic rail logistics and the importance of connected logistics infrastructure.

Mr. Vivek Agarwal, Partner, KPMG explained the association of KPMG in developing the PM Gatishakti National Master Plan as a new approach to infrastructure planning and delivery.

Dr. Seema Joshi, Vice President, Strategic Initiatives, ESRI India focused on the applications of GIS across the infrastructure sector.

Mr. Rohan Verma, CEO & Executive Director, Map My India spoke about how initiatives like ULIP would help in reducing logistics costs and increase the visibility and transparency.

In the **Valedictory Address, Mr. Manoj Joshi, IAS, Secretary Ministry of Urban Affairs & Housing, Government of India** in which he mentioned about the inclusion of PM Gatishakti with not only the goods movement, but

also the passenger movement in city areas. Furthermore, he focused on the issues of using the National Common Mobility Cards (NCMC) in multimodal connectivity (across modes like railways, metros, and buses). The issue with metros majorly lies in the adoption of closed-loop cards instead of open-loop systems which are not compliant with NCMC, whereas, in railways, the issue lies with the absence of an automated fare collection (AFC) system at stations.

Way Forward

The current health crisis and geopolitical situations have clearly led to a grim situation by disrupting the global supply chain. The piling of empty containers over the last two years due to persistent delays in the supply chain, and now aggravated by the Russia-Ukraine crisis and shutdowns in China, all adding to the supply-demand gap and trade imbalance.

Mr. Meena informed that the "Freight movement of the country is going to be analyzed in the next phase of Gatishakti where redundant means of transportation will be studied and focus will be pushed to green energy." The Indian government's move to improve the logistics sector is clearly seen in its properly laid out infrastructure plan via the National Infrastructure Pipeline; a significant push to introduce National Logistics Policy; reforms in the GST norms; and e-way bills. With a major push on developing infrastructure facilities across different modes while also working on certain trade policy modifications, the Indian logistics sector is expected to steer with a CAGR of 10-12%, reaching $380 billion by 2025. Mr. Prakash Gaur said that "There is a need to focus on developing infrastructure for a minimum of 45 years' timespan (with a standard size of 400-500 hectares)."

YouTube Link: https://www.youtube.com/watch?v=CZPEJnRgxgU


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WEBINAR ON "ETHICS AND INTEGRITY – STEPPING STONES TO SUCCESS AND SUSTAINABILITY"

CEAI's catchphrase is ***"Creating Value Ethically for Engineers".*** In keeping with that, on **3rd June 2022**, a webinar was held on '***Ethics and Integrity – Stepping Stones to Success and Sustainability'*** to advocate ethical practices amongst the consulting fraternity, and stress on the indispensability of adopting and abiding by them for the success and longevity of their practice.

The Ethics & Quality Committee of the Consulting Engineers Association of India organised the webinar with the support of all the speakers.

Ms. Sayona Philip, Chairperson, Ethics & Quality Committee, and Past President CEAI was the Moderator and introduced the topic of the webinar. She reiterated its objective and mentioned that in the long run, Ethics and Integrity pays off and enhances one's credibility in the profession. She said that one would invariably find that the biggest and best brands and the longest lasting successful companies are those that have been ethical in their practices and earned the trust of their customers. For the webinar, CEAI had invited Experts in the Ethics arena as the Key Note Speaker and Panel Discussants.

Dr. Ajay Pradhan, President CEAI warmly welcomed all the dignitaries viz. the Keynote and Panel Speakers and the participants. In his opening remarks, Dr Pradhan said that top priority should be given to ethics and integrity before starting a business. He emphasised that it was necessary to uphold and advance integrity in the engineering profession, hence organisations and engineering professionals around the globe need to adopt the code of ethics in their day-to-day functioning. Dr. Pradhan also stressed that today environmental issues have created a divergence between self-interest and those of the employer, professional, and public interest but in all that "engineers should hold paramount the health and safety of the public or community."

Ms. Philip thanked Dr Pradhan for his remarks and introduced the Keynote Speaker - Justice Gita Mittal (R), Former Chief Justice, J&K High Court and Former Acting Chief Justice Delhi High Court and invited her to deliver her address.

Hon. Justice Ms. Gita Mittal began her **Keynote Address** by thanking Ms. Sayona Philip, for inviting her to share her views and experiences of having been a lawyer for 23 years and a Judge for 16 years. She began by saying that 'Ethics' and 'Integrity' had been her "guiding principles to a successful career". Ethics provides the framework, and integrity was a personal value - the quality of being honest, the very fabric one is made of. In tandem, they are the reason why society can still subsist and survive with a large amount of predictability.

She added that she felt "specially privileged to speak at this forum of the Consulting Engineers Association of India, which has taken upon itself to create value by driving for ethics and integrity in the profession of engineers in India. It is heartening to see 'ethics' and 'integrity' at the forefront of the conversation and deliberations. Spending time as a group, to even hear a panel speak, does indicate, the importance of ethics and integrity in building success for a profession and a country, and the world by itself."

She then moved on to say that as "a lawyer I advocated for the legal rights of the aggrieved- while as judge I adjudicated between conflicting rights of disputing parties. Either way, the guiding light was the '**Rule of Law**'."

Thereafter, she reflected that she learnt to stand by the choices even if they were frowned upon as being "***too ethically correct***". She added that she was fearless and went on to add that "It is not only my belief but my experience that being ingrained in a value system, personal, social and professional, is the single most empowering factor."

Hon. Justice Mittal then explained that "A Constitutional position as that of a judge of the High Court by itself distances" one from reality. However, status and position have never mattered to her. She had grown "up in a middle-class academic family which was so fertile in incredible values and rich in ethics." She never ever used a PSO believing that a police constable was best deployed on police duties" She "never used the court protocol facilities for friends and relatives. To cut a long story short, I lived a very "ordinary" existence, following the Rule Book." She quoted how Mahatma Gandhi would poignantly profess and practise – "***be the change you want to wish in the world***".

She added that "If we look around, start observing, we will find, that there are lots of people around us, who are breaking the system to be ethical. … there are very small – but unethical actions, that we do not even notice. Like using the office phone to make personal calls." She shared the example of "what the father of Late ASG Kirit Rawal would do. He was a Government Officer and would buy postage stamps. Each time, he was compelled to make a personal call from the official phone, he would tear up a stamp."

Continuing, she emphasised that "I am sharing all these personal stories with you – ***as I made choices as a professional, even in the smallest of seemingly inconsequential decision; I want to highlight, that you too have the power of choice in you, each time, you are faced with a decision, however small it is; To me ethics starts with self."***

Hon. Justice Mittal said that "The engineering profession is one of the most stellar professions in the world, forming the bulwark of the world around us. Almost everything that we see, touch, hold, use, live in is a result of an engineer's design and execution. Engineering is that silent force that creates the magnificent world around us. Therefore, it is inextricably intertwined with the lives of people, their convenience, utility and their safety. It is, therefore, critical that ethics and integrity, besides skill and quality are the four pillars on which this profession rests. Public safety has been a paramount issue that arises when we live in a world imbued with technological complexity – both in the physical and the virtual world. And the seed of that public safety lies in the hands of the engineer who is deputed with design and supervision of execution."

Continuing on that note she talked of Heinz C. Luegenbiehl, a philosopher engineering ethicist, who proposed six foundational principles of engineering ethics which are independent of any cultural context: *The principles of public safety; human rights; environmental and animal preservation; engineering competence; scientifically founded judgment; and openness and honesty.* She felt, "that to my mind, provides a useful basis for creating a framework.

She further clarified, "Take a classic case of conflict between a lower cost design of infrastructure as opposed to an environmentally friendly option which costs more. The moot issue for the engineers would be whether to follow the desire of the Project owner to minimize costs or be true to the demand of the ethical framework. No easy answers. But at the very least a deep, meditative awareness of the ethical demand," of an ethically driven engineering mind - not profit driven, would go a long way in innovating to the benefit of the environment.

She went on to say that she always believed that charity begins at home and urged to look within. "Do we comport to the labour laws?"….All considerations which were essential part of ethical corporate conduct.

She then gave the example of the Bhopal Gas Tragedy. "Let us assume that the disaster could not have been reasonably foreseen. But look at the irresponsible conduct of Union Carbide and its taskforce post the gas leak. Even today you can see the pools of the toxic waste percolating into the ground water."

Hon. Justice Mittal then expressed that "Our ancient

Indian culture was based not upon competition but upon collaboration and co-existence. Competition was a creature nurtured by capitalism bringing in its wake, corrupt practices, unethical acts, acrimony, *mala fides* of all sorts. The guiding post was always maximizing profits." She advocated that the guiding post to maximise profit needs to be tempered and "Imbue it with sensitivity to the planet and the living race, a perspective on sustainability, to preserve the treasures of this world for future generations and to use resources humbly not as plunder. The engineer is a master of his craft which no other can replicate and therefore is indispensable. That position ought to be empowering, not passive. (retain)The engineer as creator of the material world has the power to assert and thus transmit ethics and integrity into his/her creation."

Moving on, she cited the example of a jurist who, was the textbook definition of the words, 'integrity' and 'ethics'- the Late Justice Hans Raj Khanna**.** "The period of Emergency saw widespread human rights violations by the government and its authorities. The government had detained prominent opposition leaders all across the country. These detainees approached the courts and finally the Supreme Court. The matter was heard by a Constitution Bench consisting of 5 Judges in the case known as the *ADM Jabalpur v. Shivkant Shukla* (1976) 2 SCC 521. Majority of the judges (4:1) infamously held that in situation of an Emergency, citizens had no right to approach the Courts for violation of their fundamental rights. However, the lone dissenter, Justice H.R. Khanna, held that life and liberty cannot be at the mercy of the Executive and the rule of law does not allow the government to detain an individual without a trial. Justice Khanna ultimately held that a citizen's right to approach the Courts could not be suspended even during an Emergency."

"After nine months of this decision, despite being the senior-most judge, Justice Khanna was very unceremoniously superseded to the office of the Chief Justice of India. Needless to state, Justice Khanna resigned from the court. He did not become the Chief Justice of India but his decision in *ADM Jabalpur* immortalised him. This was ethics in its highest avatar."

She said that "We humans have an incredible talent for blaming others for our behaviour and actions. Our list of excuses is rather endless. She went on to add that "We live in a Machiavellian society wherein no one trusts anyone; where no one cares for anyone; and where treachery can pay. However, everything changes at the very moment the tables are turned and we find ourselves at the receiving end. And, that is when we start blaming, instead of introspecting ourselves. Therefore, as Marcus Aurelius, Roman Emperor, Stoic Philosopher and author of 'Meditations' said:

> *"Live a good life. If there are gods and they are just, then they will not care how devout you have been, but will welcome you based on the virtues you have lived by. If there are gods, but unjust, then you should not want to worship them. If there are no gods, then you will be gone, but will have lived a noble life that will live on in the memories of your loved ones."*

She went on to say that Mahatma Gandhi, "proposed the idea of TRUSTEESHIP vs CHARITY, a concept where he said, - God is the master of all wealth and material universe." A concept "which was adopted by industrialists of that era - the Birlas, Tatas, Lohias, who have not only built organizations that have lasted generations but also driven change in society, created impact. In foreign territories, we can see organizations like Cadbury, Toyota, Sony, Samsung, Nokia, Rowntree's Hyundai, Boots, Rockefeller, Beecham, General Electric, amongst various others, which have anchored the economies of those countries to make them sustainable."

She added that "The percentage of Indian corporations making valuable contributions to CSR is more than anywhere else in the world." She gave the example –of Infosys, which "conducted its carbon footprint analysis in 2007, found that 49% of its energy demand came from air-conditioning and started working towards the goal of carbon neutrality. … In Oct 2020, Infosys announced that it is now carbon neutral, earning it a place in the prestigious DOW JONES SUSTAINABILITY INDICES."

She then mentioned that "In recent times, we are seeing

a rise in the ESG- Economic-Social and Governance investments. In the US, a study done looking at the data for 30 years for investment funds- investments done by SOVERIGN WEALTH FUNDS, into companies which are considered strong in ETHICS and INTEGRITY vs those which make massive profits, have shown that Sovereign Wealth Funds do better – in a period of 30 years."

Hon. Justice Mittal then gave examples from India. "The Tata Trusts holds 60% of the wealth of the Tata Group which flows back into community projects demonstrating a unique global model that makes it possible to generate profits while doing social good. … as is evident from their motto "Leadership with Trust". She gave examples of work done by other foundations - Tata Steel Rural Development Society; Wipro Cares; Infosys Foundation; Reliance Foundation; and Aditya Birla Centre for Community Foundation and Rural Development. She added that ***"Thus doing good for society also delivers profits and vice versa! There are enough proof points to prove that being ethical and working with integrity, is a good strategy, for long term success."***

She then gave the example of "Sridhar Vemu, living in Mathalamparai, a small village in Tamil Nadu, riding on a bicycle and while living in a humble cottage has built ZOHO and exemplified that it does not take fancy offices or resources to take over the world. …. There are enough and more examples from the world, which have exhibited, that ethics and integrity are key to success and sustainability. … The professional community and the consulting engineers sitting right at this cusp, can drive change, not just within their own practice, but society at large."

She stressed that working with ethics and integrity may be systemic- but she "believed that there are two features of any value for nation building – one which relates to the idea of creating something of national importance- i.e. ***national institution building and second, the emphasis on individual obligations. We just cannot escape, the individual obligation we have towards, our self, our colleagues, our employees and our society."***

Summing up Hon. Justice Mittal further said that "In conclusion, I will ask my esteemed friends, to introspect, step back and think – about their own codes of ethics and integrity. We know, it delivers long term success, but to act with ethics and integrity is a choice, you make at every step of your profession. **It is YOUR CHOICE and yours alone.**

O.W. Holmes rightly said:

> *"What lies behind us and what lies before us are small matters compared to what lies within us."*

Leading and delivering with integrity, following the code of ethics in the areas of responsibility towards society, responsibility towards profession, competence, integrity, impartiality, relationship with other consultants, relationship with clients and relationship with employees, is the bedrock of ethics, and it takes me great pleasure that organizations like CEAI, have taken it on themselves, to champion this value system."

Ms. Philip thanked Hon. Justice Mittal for her captivating and inspiring talk and especially emphasising the need for engineers to adopt ethics and integrity. She next invited Prof. Madhu Bhalla to make her presentation.

Prof. Madhu Bhalla, Chairperson, Transparency International (TI) India was the first Panel speaker. She talked of **"Transparency International India"** and what they do. She informed that TI is a global movement with the objective of ending the injustice of corruption by promoting transparency, accountability and integrity. Prof Bhalla explained the integrity framework involving the rule of law, the role of education, legislature, judiciary, etc. She elucidated how TI works towards zero tolerance of corruption in society and in governance. She said that fighting against corruption is not the responsibility of a single institution but it requires collective action for systemic change. Prof. Bhalla informed that TI developed a tool in 1998 called Integrity Pact, to help Government, business and civil society to fight corruption in public contracting and procurement. The Integrity Pact is

mandatory in all Government procurement tenders above a certain threshold.

She mentioned India's ranking in the Corruption Perception Index and the need for ethics and anti-corruption measures and explained how they provide free legal advice to witnesses and victims of corruption.

Prof. Bhalla said that the Strategy for the way forward was to promote a culture of transparency - Identify corruption hot spots; Adopt preventive measures to improve systems/ procedures; Limit, reduce and eliminate discretion in decision making/abuse of power; Encourage a higher order of ethics and integrity amongst public officials; and, Insist on disclosure of Conflict of Interest in public office.

It was an informative talk and quite a revelation to most participants who did not know about TI and its activities.

Mr. Lyndon White, Member of FIDIC IMC and ADR, Practitioner/ Contract Director, Australia articulating **'A Systematic Approach to Integrity'** defined Ethics as moral principles for the rules of conduct for a particular class of humans. Morals per se being the customs or conventions of a group as to what is right and wrong. Moving on to Integrity he explained that it is the practice of being honest and showing a consistent and uncompromising adherence to strong moral and ethical principles and values and gave examples for acting with Integrity. They were - Refraining from sharing secrets and confidential information with others; Being and remaining honest at the workplace and elsewhere; Avoiding relying on unsubstantiated information about others; Following through with promises and commitments; Returning confidential information to the true owner(s) and, Admitting one's mistakes.

Mr. White advised that engineers should be honest and truthful while delivering their services. A systemic approach is required for planning and delivering services with integrity which includes Leadership that commits to a robust code of conduct, Involvement as integrity representatives, Documentation done truly and Monitoring to improve the system sustainably.

Mr. Umesh Shrivastava, Chairperson Ethics Sub-committee, and Past President CEAI, speaking on **'Ethics and Integrity – Game Changers in Engineering Consultancy'** defined 'Engineering Consultancy' as expertise in Planning, Design and Construction of Public and Private Infrastructure and various facilities and described how Engineering Services aimed to benefit society through safer, cleaner, ethical design and engineering practices.

Integrity in engineering includes design, assurance and verification under stated operating conditions. Sustainability was concern for profitability in harmony with the environment and social commitment. He said that it was important to focus on present needs without compromising on needs of the future generation.

He described game changers as a person, event, idea or procedure that effects a significant shift in the current way of performing an activity while maintaining ethics and integrity and said that the consulting engineers have to play the role of game changers.

Unethical practices would include covering up defects, unethical accounting/ management practices, poor working conditions, discriminatory practices, trade secret misappropriation, receiving or paying illegal considerations.

Mr Umesh Shrivastava suggested that a task force of energetic, motivated and resourceful engineers have to obtain consensus on various sensitive issues. With the support of FIDIC and other global associations make representations where needed and follow them through. He also suggested that if all major consulting companies unite and have the courage of conviction, the concerned agencies would have to finally agree to modify rules and procedures for carrying out consultancy work.

He acknowledged that it would be a long tough journey

with gigantic challenges but with motivated, honest and unbiased efforts, they would be crowned with success and long-term sustainability of the consulting profession.

Ms. Tara Hoke, General Counsel, American Society of Civil Engineers, made her presentation on the topic **'Building an Ethical Workplace Culture'**. She explained how an ethical workplace needs to be built in an organisation. She gave some noteworthy examples of engineering ethics failures as happened with GM, 737 Max, Volkswagen, SIEMENS, BP and so on. The failures that occurred were regulatory, safety or technical failures with corruption and procurement frauds. What all the organisations had in common was lack of an ethical work place. Violations like those don't happen in a vacuum – it is usually a systemic institutional failure. In most cases, people have the opportunity to correct a problem and avert failure, but they don't take timely appropriate action.

She spoke of the steps to be taken against unethical practices by top level executives, middle level and bottom level employees. She said that top level Management should be the role model of ethical behaviour, communicate ethical expectations, offer ethics training, punish unethical acts and provide protective mechanisms.

The middle level management should disseminate the ethical values and commitment of the organization, that apply to their groups. They should anticipate ethical dilemmas which typically arise in their area of responsibility and recognize ethical issues as they come up and make ethical decisions consistent with organizational values and ethics. They should report concerns about ethical and unethical actions to top managers

Those at the bottom level should not be a negative influence and should be supportive of peers and colleagues on matters of ethics; make use of internal or external resources, seek clarification if they have questions or concerns, and above all make a personal commitment to ethics and understand that ethics is everyone's responsibility.

Panel Discussion & Interaction with Participants

After the presentations, there was a panel discussion and interaction with participants. To recap briefly, some of the important points made during the interaction and lively discussions are given below:

- All panellists agreed that ethics and integrity should be a way of life – that by itself was extremely rewarding and satisfying.
- On how the judiciary, which has a huge pendency of cases, could enable making society more accountable and corruption free, Justice Mittal said that the functioning of the judiciary was being monitored to prevent frivolous filing of cases; digitalisation was being encouraged not only in documentation, but in filing of cases; and hybrid mode was being encouraged in hearings and live streaming of court procedures for better transparency, etc.
- Regarding the usefulness of Corruption Perception scores, ranking and such indices Prof. Bhalla made the point that such information provides very useful basis to put in place vital legislation.
- Mr. White emphasised that every organisation should have a Code of Ethics of its own or companies could take guidance from the CEAI Code of Ethics and of the FIDIC- IMC.
- Regarding how companies fail, despite having well defined ethics policies by the top management, Ms. Hoke said that it could be due to a disconnect - communication especially at the mid management level is very important. Ultimately, it is an institutional failure.
- In response to a query, Justice Mittal said there was no Whistle blower or Witness Protection Act in India. Having one was desirable. There was also no formal communication made to complainant regarding status of action taken on a complaint.

- Prof Bhalla added that due to the lack of legislation regarding protection of 'whistle blowers' there was sometimes, a very real risk to the life of a whistle blower. Regarding corruption, she mentioned that not enough FIRs were being registered, maybe due to lack of protection of those reporting the cases. There was also whittling away of the RTI Act and the rights of civil society to complain. Those need to be addressed.

- In response to a query, Mr. Shrivastava mentioned how companies' lack of a code of ethics could spell disaster for the consulting profession – as could be seen from the collapse of bridges and buildings; safety norms in design and execution being compromised; codes and standards not being adhered to; and poor maintenance of various assets. The Consulting industry needs to take cognisance of and address the issue in all seriousness.

- On being asked if CEAI could enforce ethical behaviour, Dr. Pradhan said that CEAI does not have enforcement rights and at the most could only advise members and provide training.

- Regarding the efficacy of the whistle blower policy in the west, Ms. Hoke said that the US has a legal framework but it was not entirely perfect. When it does work, it works very well. Sometimes, financial incentives are provided to whistle-blowers.

- In response to a query, Mr. White mentioned that there was a lot of anti-corruption legislation in South America, but there were gaps and hence there was a tendency, sometimes, for compromises in ethical practices. Penalties for unethical behaviour could only be imposed by courts and not by engineering bodies unless legislation was in place.

- Dr. Pradhan made a comment that after retirement or VRS, a number of Government officials join the private sector. That could be a conflict of interest and suggested the Government constitute a panel of experts to support the private sector and make available their expertise. Justice Mittal agreed that the said practice raises questions about the fairness and objectivity of the officials when serving and appreciated the suggestion given.

- On whether CEAI could investigate failures that occurred, Ms Philip said that there could be conflict of interest issues that came up, as the Consultants may even be members of CEAI. Hence, there would need to be a consensus among members about CEAI getting involved.

Mr AP Mull, former Managing Director, TATA Consulting Engineers and Past President CEAI in his **Concluding Remarks** appreciated the speakers, panellists and the professionals who had interacted and given a very strong shot to ethics and integrity, which MUST be brought into the main stream and be a part and parcel of everybody's work repertoire.

He said that in each organisation the professionals and even the fresh graduates need to evaluate their own working vis-à-vis the professional work practices and responsibilities to the public, the client, the employees and the organisation itself. The requirements of the profession and the aspirations of all concerned need to be interwoven in a seamless manner so that the ultimate product is wholesome and meets everyone's expectations albeit in an ethical manner. He reminded that the concerns have now moved on with ethics having to look at and consider the public good as the ultimate aim and ensure that whatever engineering is done, is all sustainable.

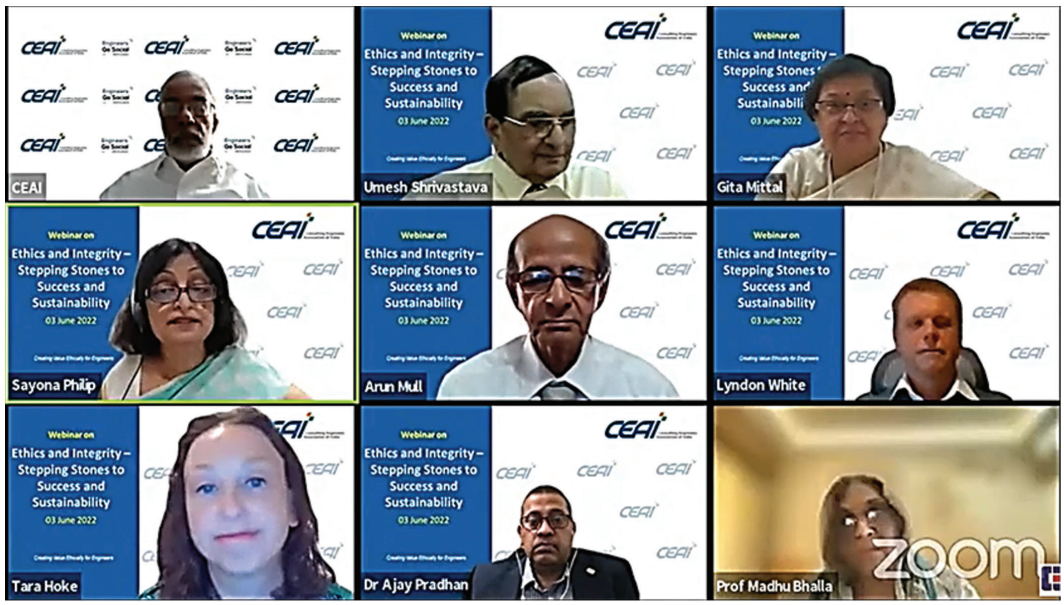
Striking a note of caution, he reminded that Professionals should at no point of time adopt the '*chalta hai*' i.e., anything goes attitude, and be satisfied with mediocracy or even less; which happens quite often and that's why there are failures. Professionals must be determined to be the best, develop, strive to do better and reach the top. For that long term quality, one should aspire to a zero defects culture and practice and goal of delivering every project defect-free.

He reiterated that Ethics & Integrity have to be the backbone. They must be practised at all levels for which dedication to the profession, fair working, openness,

disclosure and transparency in all operations would go a long way.

Ms. Sayona Philip gave a Vote of Thanks to all dignitaries, participants and CEAI Secretariat. The webinar was very well attended and the feedback was extremely encouraging and positive

You Tube Link : https://www.youtube.com/ watch?v=SMHpqY5sO7M



MOU SIGNED WITH SEPC

The Services Export Promotion Council (SEPC), was setup under the Ministry of Commerce, Government of India in 2006 and is an apex trade body which facilitates service exporters of India.

SEPC has been instrumental in promoting the efforts of Indian service exporting community, and in projecting India's image abroad as a reliable supplier of high-quality services and confirmed that it has the potential, resources and capabilities for delivering the required services, and has agreed to provide the services to the CEAI.

With an aim to enhance the business opportunities and competitiveness of Indian companies across construction, engineering consulting, and environmental services through the implementation of a focused and monitored Action Plan, both the parties have agreed to enter into an MOU.

(L to R) Dr. Abhay Sinha, DG SEPC, Dr. S Chatterjee, Past President CEAI, Dr. Ajay Pradhan, President CEAI, Ms. Sayona Philip, Past President CEAI, Mr. Rajiv Maini, Director CEAI.

CEAI and SEPC have identified the need to work together for the benefit of construction, engineering consulting, and environmental services sectors in order to promote Knowledge sharing, Training, Skilling, conducting awareness programs, Regional/ National/ International events/ exhibitions, etc. CEAI and SEPC have arrived at a mutual understanding and signed an MoU on 14th May 2022 at Vigyan Bhawan, New Delhi.

MEMBER NEWS

FIDIC GLOBAL LEADERSHIP FORUM

FIDIC has inducted Dr Ajay Pradhan, President CEAI and Mr. Amit Sharma, Governing Council Member CEAI in the **FIDIC Global Leadership Forum.**

The exclusive Global Leadership Forum brings together some 100 leaders from across the globe to play a key role in helping to address global challenges and creating a united, influential, international voice for the infrastructure industry.

FIDIC announced the formation of the Global Leadership Forum in September 2021 to bring senior influencers and decision makers together from the construction and infrastructure sectors to help address the critical issues we face as a society and an industry and to develop workable solutions to solve them.

The forum provides a powerful global network for leaders to discuss these issues. Through their discussions, deliberations and actions, we will be able to build a solid coalition of support and buy-in for what needs to be done to address the key global challenges we face and, crucially, how we collaborate to solve them.

Participants of FIDIC's Global Leadership Forum are selected based on their prominent knowledge and expertise across the sector.

FIDIC AMBASSADORS

FIDIC has appointed Mr. K K Kapila Past President CEAI and Governing Council Member as a **FIDIC Ambassador**.

At the General Assembly Meeting (GAM) on 14 September 2021, the FIDIC Board announced the approval of a new federation initiative, the FIDIC Ambassadors.

FIDIC has now launched the first phase of the FIDIC Ambassadors programme with the appointment of key FIDIC volunteers who are well positioned for this important role.

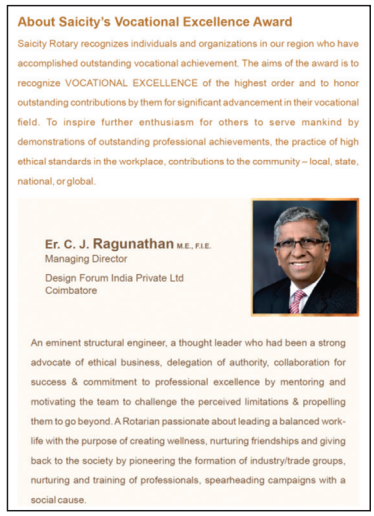
FIDIC Ambassadors programme has been created to expand FIDIC's footprint across the globe and to achieve the federation's objectives more efficiently. This programme will provide FIDIC members with a list of dedicated professionals working within the engineering, construction and infrastructure industry that will help you advocate for FIDIC principles and objectives and facilitate the development of more high added-value services to members.

Specifically, in consultation with the FIDIC President and CEO, the Ambassadors will seek to influence decision makers in governments, the construction industry, multilateral development banks and contracting authorities with regard to popularising and adopting FIDIC best business practices.

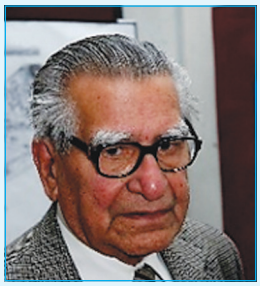
This engagement will also assist in maintaining a prestigious and consistent image of the federation, help to attract new members as well as promote FIDIC training programmes in various parts of the world.

AWARD TO MR C J RAGUNATHAN

Mr. C J Ragunathan, Managing Director, Design Forum India Pvt. Ltd. and Member Governing Council, CEAI was awarded the Vocational Excellence Award by the Rotary Club of Coimbatore for his contributions and assistance to the society in keeping with the nature of the engineering profession.



OBITUARY



Mr. Mahendra Raj, Founder Member and Chairman Emeritus of CEAI passed away on 8th May 2022. He participated in all deliberations right to a few days before his soul departed.

He was born in 1924 and graduated in Civil Engineering in 1946 from Lahore. He started his career as an Assistant Engineer in 1946with the Punjab Public Works Department, worked on the Chandigarh project from its inception, and later on did the Structural Design of the High Court and Secretariat Buildings in Chandigarh whose architectural designed were done by Le-Corbusier. Mr. Mahendra Raj was promoted as an Executive Engineer in 1953. He went to USA for further studies and work experience from 1955 to 1959, where he did his MS in Structures in 1956 from Minnesota, and CE in Structures from Columbia, New York in 1959. On his return to India, he resigned from the Government service and started his independent practice as a civil engineer in 1960.

Mr. Mahendra Raj's 60 years' service to the building profession show an uncommon inventiveness and willingness to experiment with new concepts. He had worked with some of the leading Architects of the World and of the Country such as Le-Corbusier, Minoru Yamasaki, Louis Kahn, A P Kanvinde, Charles Correa, B V Doshi, J A Stein and Raj Rewal.

Some of his projects in the country:

The first large span space frame in reinforced concrete in the world, the Hall of Nations and Halls of Industries in Pragati Maidan, New Delhi

The first skyscraper in Bombay, Usha Kiran

The first large span folded plate structure, Tagore Memorial in Ahmedabad

The first large span pace frame with precast concrete members and in situ joints for the Sports Stadium in Srinagar

The first large span industrial structure comprising post tensioned tied arches with precast concrete flooring units to create a 48mx250m column free space for the Hindon River Mills in Ghaziabad.

We pray to the Almighty to rest his soul in peace.

Mr. Samiran Sen, Chairperson CEAI, Eastern and North Eastern Regional Centre, passed away on 16th June 2022 at the age of 67 years.

Mr. Sen was Managing Director of End-to-End Consulting Services Pvt. Ltd., Kolkata, and lately started his firm Senstraits Group. He had done his BE Civil from the Indian Institute of Technology Kharagpur in 1979 and later did his Masters in Transportation.

A keen professional, Mr. Sen used to be involved in various engineering and social activities. He was Chairman of the Infrastructure Committee of the MA & UD Department, Government of West Bengal and the nominated President of the Rotary Club of Kolkata.

He had recently organized a very successful physical Workshop on *"City Road User Concerns: Priorities & Solutions" on* 7th May 2022 at Kolkata for the CEAI

CEAI conveys its deepest condolences to his family members and prays that Mr. Samiran Sen's soul rests in peace.

OTHER NEWS, VIEWS & NOTES

VIEW POINT

The urban population in the world is expected to grow to 67% by 2050 and the number of skyscrapers is expected to grow to 6800 (from the current 800) per billion of population. There is a zero percent chance that the current tallest building will remain so and further the tallest building is expected to be around 1150m by 2050.

The theme for the September 2022 issue is ***"Tall Buildings in India"*** and the intent is to cover all aspects from conceptualisation to end of design life for existing, under construction or planned tall buildings in the country.

Papers are invited regarding the latest or projected systems, methods, technologies, etc. regarding different aspects encompassing Architectural, Civil, Geotechnical, Structural, Electrical, Instrumentation & Control, Communications i/c Information Technology, Mechanical engineering systems to cover all aspects for Tall Buildings in India.

Professionals are invited to share case studies of how they addressed the challenges faced, practical issues experienced and the solutions to those, etc. Photographs, charts, diagrams, drawings, etc. would benefit readers for better appreciation of the issues encountered and the manner in which they were addressed.

The themes for the issues of ViewPoint for September and December 2022 are given below.

Sl. No.	Theme	ViewPoint issue
1	Tall Buildings in India (to cover all aspects from conceptualisation to end of design life)	September 2022
2	Technology/ Engineering for Sustainability and Circular Economy	December 2022

The articles for an issue need to reach CEAI at least 3 weeks prior to the end of the month of the View Point issue.

Articles need to be in Times New Roman 12 with single line spacing with before and after 6 pt and normal margin, on A4 size. A recent clear and bright passport size photograph of the author(s) is to be sent along with the article. For details of formatting please refer to *"Format for Articles for CEAI Viewpoint"* on CEAI's website, under *'Publications'*.

Advertisement in View Point

VIEWPOINT is circulated to all CEAI Members, FIDIC, Ministries of the Government of India, Public & Private Sector Undertakings, Construction Firms, Contractors, Consultants, Foreign Missions and Funding Institutions in India and other organisations related to or dealing with the engineering profession. Thus, all stakeholders partnering development and progress are its readers.

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Improve Visibility

Support from CEAI members and stakeholders are sought for increasing the number of advertisements, so that View Point gains in its stature as a unique Technical Publication for the fraternity and the public at large to spread information of how consulting engineers are helping society for improving the quality of life and doing so sustainably.

The rates for advertisements in VIEWPOINT are given below.

Item	Rate Per issue* (Rs)	Discounted rate at 20% for 4 consecutive issues* (Rs)
Back Cover	25,000/-	80,000/-
Inside Front Cover	15,000/-	48,000/-
Inside Back Cover	15,000/-	48,000/-
Full Page	10,000/-	32,000/-

**GST @ 5% or as prescribed will be added to the above rates.*

Tech & Contract Quiz

1. **When was the Indian Contract Act originally drafted?**
   a. 1872
   b. 1850
   c. 1870
   d. 1861
   e. 1871

2. **Who enacted the Indian Contract Act?**
   a. Viceroy of India
   b. Imperial Legislative Council
   c. The Privy Council
   d. Indian Law Commission
   e. King of England

3. **What governed the code of contract in Vedic and Ancient India?**
   a. Acharas
   b. Dhramshatras
   c. Smritis
   d. Shrutis
   e. All of above

4. **Which FIDIC contract is the riskiest for contractors**
   a. Red Book
   b. Yellow Book
   c. Silver Book
   d. Orange Book
   e. All the above

5. **Which contracts are the riskiest?**
   a. Government & Public Sector Contracts
   b. FIDIC Contracts
   c. NEC Contracts
   d. Private Sector Contracts
   e. All the above

6. **Which party(s) to a contract should have responsibility for correctness and completeness of site investigation data?**
   a. Owner & Contractor
   b. Investigation Agency(s) & Contractor
   c. Owner & Investigation Agency(s)
   d. Owner, Consulting Engineer & Investigation Agency(s)
   e. Consulting Engineer & Investigation Agency(s)

7. **What is the money that a tenderer needs to deposit** as a guarantee of the tender known?
   a. Bank Guarantee
   b. Earnest Money
   c. Security Deposit
   d. Retention Money
   e. Caution Money

8. **What helps a project?**
   a. Integrated working
   b. Considering the project as a production process
   c. Collective efforts of all stakeholders
   d. Good Coordination
   e. Pushing the workers

9. **Which is a significant risk in an international project?**
   a. Enforceability of Contractual Rights
   b. Corruption
   c. Uncertainty
   d. Unknown market
   e. All of above

10. **What is the arrangement to support an existing structure known as?**
    a. Piling
    b. Shoring
    c. Diaphragm Walling
    d. Jacking
    e. Underpinning

The first person who mails the correct answers to CEAI ***info@ceai.org.in*** will get a congratulatory mail and will be acknowledged by publishing the persons photograph in the next issue.

Contributed by A P Mull

Answers to Tech Quiz March 2022 issue
1. (c), 2. (d), 3. (e), 4. (a), 5. (e), 6. (b), 7. (c), 8. (d), 9. (a), 10. (e)

TATA

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One of the foremost construction companies in India having expertise in design and construction of Long Span Bridges such as Cable Stayed Bridges, Extradosed Bridges, Cantilever Bridges, Steel Superstructure Bridges across mighty rivers / creeks / water bodies and Elevated Metro Rail Corridors, BRTS, ROBs, RUBs in densely populated areas of cities. In last 25 years we have successfully completed over 300 projects in India, some of which includes:

- India's Longest Multi Span Extradosed Bridge across the Ganges between Ara and Chhapra in the state of Bihar .
- India's second Longest Multi Span Extradosed Bridge across the Ganges at Balia in the state of Uttar Pradesh .
- India's 2nd Longest Cable Stayed span of 350m across River Ravi at Basoli in the state of J&K.
- Building India's widest Bridge across the Ganges in the state of Bihar.
- The foundation for most of long span bridges are either large dia or Double-D shaped caisson foundations with depth as much as 60m or large dia piles with length upto 65m.

As on date SPSCPL is the only company in India to build 7 Cable Stayed / Extradosed Bridges and building another 10 Cable Stayed / Extradosed Bridges concurrently.

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