

# **INTERNATIONAL JOURNAL OF LEGAL STUDIES AND SOCIAL SCIENCES [IJLSSS]**

ISSN: 2584-1513 (Online)

Volume 3 | Issue 3 [2025] | Page 425 - 432

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# CONSTRUCTION ARBITRATION AND RELEVANCE OF HUDSON FORMULA

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## ABSTRACT

In India, construction arbitration is an essential tool for resolving disputes in the complicated infrastructure environment of today. This article highlights the Hudson Formula's function in determining delay damages and overheads while examining its legal framework under the 1996 Arbitration and Conciliation Act. The study examines judicial viewpoints and a significant case, State of Maharashtra v. Bharat Constructions, which upheld the validity of the formula while weighing the advantages and disadvantages of arbitration. The effectiveness of arbitration and the Hudson Formula's ongoing applicability are highlighted in the article<sup>3</sup>.

**Keywords:** Construction Arbitration, Hudson Formula, Delay Claims, Arbitration and Conciliation Act 1996, Infrastructure Disputes, Alternative Dispute Resolution, Judicial Interpretation.

## INTRODUCTION

### 1. CONSTRUCTION ARBITRATION

#### DEFINITION AND SCOPE

Construction Arbitration is a form of Alternative Dispute Resolution (ADR) that is specifically tailored for the construction industry. It plays a crucial role in resolving disputes within the construction industry. When projects become more complex, arbitration comes in as a swift and efficient means to address the conflicts and issues while maintaining project momentum<sup>4</sup>. The fast

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<sup>3</sup> McDermott Int'l Inc. v. Burn Standard Co. Ltd., (2006) 11 S.C.C. 181 (India).

<sup>4</sup> Krishan Singhania, The Evolving Landscape of Construction Arbitration in India- Key Judicial Pronouncements, Mondaq (19 Jun, 2024) <https://www.mondaq.com/india/arbitration--dispute-resolution/1481038/the-evolving-landscape-of-construction-arbitration-in-india-key-judicial-pronouncements>

growing infrastructural development in India has driven the establishments of legal field to manage the construction contracts efficiently. These contracts consists both India and foreign entities which emphasizes the need for a dispute resolution mechanism<sup>5</sup>. The legal framework is set up in such a way that it aligns with the principles of fairness, reasonableness and legal enforceability under the Indian Contract Act, 1872 and the Arbitration and Conciliation Act, 1996. The legal foundation for arbitration agreements in India is governed by the Arbitration and Conciliation Act, 1996, which aligns with the UNCITRAL Model Law on International Commercial Arbitration.

It is essential to understand the need of such arbitration agreements in construction industry. Disputes may arise due to ambiguous contract terms, technical issues, force majeure events etc. A specialised tribunal is required for dispute resolution in construction projects due to their unique nature, which includes technical specifications, employee/labour codes, and financial considerations like overtime and delay costs. The Supreme Court reflected a strong pro-arbitration stance intended to improve commercial efficacy and dispute resolution within conglomerates in *Chloro Controls India Pvt. Ltd. v. Severn Trent Water Purification Inc.*<sup>6</sup> wherein the court expanded the scope of arbitration to include even non-signatory parties under certain conditions within corporate groups. This interpretation promotes interpreting arbitration clauses broadly and comprehensively, taking into account their relationship to other agreements and the broader goals of business.

## **2. ARBITRATION IN THE CONSTRUCTION INDUSTRY**

The Construction Industry Arbitration Council (CIAC) is a specialized institution in India that administers construction arbitrations and provides facilities for alternative dispute resolutions. The Supreme Court have played a notable and important role in shaping the jurisprudence around such arbitration agreements. Such is the case of *Lombardi Engineering Limited V. Uttarakhand Jal Vidyut Nugam Ltd*<sup>7</sup>, the court ruled that it was unconstitutional to enforce an arbitration agreement that contravened fundamental constitutional rights, particularly Article 14's guarantee of equality. This decision emphasises how arbitration agreements must abide by both constitutional requirements and statutory requirements in order to be deemed legitimate and enforceable. A pre-deposit clause requiring the petitioner to deposit 7% of the arbitration claim as

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<sup>5</sup> Shubham Agarwal, *Enforceable Arbitration Agreements in Construction Contracts in India*, ACM Legal (Apr 25, 2024) <https://www.acmlegal.org/blog/enforceable-arbitration-agreements-in-construction-contracts-indian-legal-framework/>

<sup>6</sup> *Chloro Controls India Pvt. Ltd. v. Severn Trent Water Purification Inc.*, 2012 SCC ONLINE SC 809 (India)

<sup>7</sup> *Lombardi Engineering Limited V. Uttarakhand Jal Vidyut Nugam Ltd*, 2023 INSC 976 (India)

security was examined by the court in this ruling. There was a challenge to this clause, arguing that it violated Article 14 of the Constitution<sup>8</sup> by being discriminatory.

## **ADVANTAGES AND DISADVANTAGES**

Every lawsuit is expensive and time-consuming. However, due to the fact-sensitive nature of construction and the sheer volume of documents involved, construction cases frequently take longer and cost more to litigate than other commercial cases.

As an alternative, arbitration offers both time and cost savings<sup>9</sup>. Some of them are-

1. **Time:** Construction arbitration is far more convenient to schedule than litigation, which depends on the court's schedule, the availability of juries and judges, and the need for several months of discovery before a trial. Conversely, the parties to the arbitration are free to choose the arbitrator whose availability matches their own, as well as the time of the hearing.
2. **Confidentiality:** Unlike litigation, arbitration takes place in private and allows the parties to avoid airing their dirty work in public. Sensitive and confidential data is maintained.
3. **Cost Effective-** Limited discovery is used in most Arbitrations. Important documents are shared, and the need for additional document exchanges is discussed. On the other hand, a litigation calls for a lot of discovery. Specifically, the intricate nature of the construction process results in expensive and time-consuming pretrial motions, depositions, and document exchanges. Resolution of a dispute is also postponed by discovery.

### **The Probable disadvantages could be-**

1. Parties to arbitration should be aware of certain possible drawbacks as well. Arbitration is a creature of contracts, as previously mentioned, and it is difficult to escape an obligation to arbitrate if the parties so stipulate in their contract.
2. Arbitrators may restrict or forbid discovery in order to minimise expenses and expedite the resolution process (such as witness depositions).
3. Furthermore, arbitration is not appealable, unless there are exceptional, restricted circumstances. The arbitrator's decision is usually binding on the parties in arbitration.

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<sup>8</sup> INDIA CONST. Art. 14

<sup>9</sup> Jacqueline Greenberg Vogt, 5 Benefits of arbitration for construction disputes, Construction Dive (Jan 26, 2024)<https://www.constructiondive.com/news/benefits-arbitration-construction-disputes/705803/>

4. There may be notice and timing requirements in the arbitration clause that must be properly adhered to. If one is unintentionally missed, a party may forfeit their right to continue.

## **UNDERSTANDING HUDSON FORMULA- ORIGINS**

The Hudson formula was first formally set down in the 10th edition of Hudson's "Building and Engineering Contracts, Sweet & Maxwell, 10<sup>th</sup> Edition in 1970, page 599 where Mr. Duncan Wallace described it as the formula usually used by contractors for the purposes of assessing the loss due to delay in completion<sup>10</sup>.

### **3 DEVELOPMENTS MADE IN THE FORMULA**

There were further developments made in the formulae after the 10<sup>th</sup> Edition. The editors of Hudson, Building and Engineering did however move to the position to be found in the 14<sup>th</sup> Edition, 2020 which was, "The head office overheads and profit percentage applied to the Hudson formula were originally those deductible from the Contractor's tender. A more modern assumption is to use the head office and profit contribution deductible from the Contractor's annual accounts sometime referred to as "a fair annual average"<sup>11</sup>

The Hudson formula has been criticised because it uses the head office overhead percentage of the contract as the basis for calculating lost profits, which may not have much of an impact on the contractor's actual head office costs even though it has garnered some judicial support. The Hudson formula is based on the observation that a single percentage is usually included in project bids to cover both profit and overhead. But unless stated clearly, this combined percentage frequently includes other elements in addition to profit, such as risk, contingency, head office, and site overheads. As such, the Hudson formula does not account for a specific allocation made only for head office overheads.

## **APPLICATION OF HUDSON FORMULA IN CONSTRUCTION DISPUTES**

In order to cover head office overhead, contractors usually include a markup on their direct costs in their bids. Although at first this markup might be adequate, issues occur when projects are delayed without a substantial alteration in scope. In these kinds of situations, contractors find themselves having to pay for the unabsorbed or increased head office overheads, which is a missed

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<sup>10</sup> The formula:  $\text{HO \% in Contract Sum} / 100 \times \text{Contract Sum} / \text{Contract Period} \times \text{Period of (Compensable) Delay}$ .

<sup>11</sup> Hudson, *Building and Engineering Contracts*, Sweet & Maxwell, 14<sup>th</sup> Edition, 2020, paragraph 6-071, footnote 494.

chance to quickly replace the work that has been delayed with new projects. These claims underscore the complex financial dynamics inherent in construction contracts and essentially represent the loss of potential income. Loss of profit is a common remedy used to compensate the party who has been wronged when a project is delayed or terminated early. The viability of such a claim is determined by whether the damages naturally result from the breach or were anticipated at the time of contracting, as guided by Section 73 of the Contract Act, 1872<sup>12</sup>. It is crucial to remember that, aside from indirect or distant losses, the amounts granted are often restricted to those damages that are directly caused by the breach<sup>13</sup>.

The Supreme Court stated that, generally speaking, each case's unique facts and circumstances will determine the approach taken to calculate damages<sup>14</sup>. Supreme Court ruled in the McDermott International Inc. Vs. Burn Standard Co. Ltd case that strict legal obligations must be taken into account.

The contractor must demonstrate that there was other work available that they would have secured if the delay hadn't occurred, according to the Supreme Court, by presenting invitations to tender that were turned down because they lacked the capacity to take on additional work. The books of accounts can also be used to support the idea that the specific delay, rather than unrelated factors, is to blame for the decline in turnover. If the loss of turnover due to the delay is not proven, it is just a payment delay, and as such, the contractor is only eligible for interest on the capital used, not the profit.

## CASE STUDY

The Bombay High Court upheld **The State of Maharashtra and Anr. v. Bharat Constructions**<sup>15</sup> the Hudson Formula for calculating overheads in constructions contracts.

## FACTS

The arbitration process involved a disagreement regarding a project to build a road. At first, the respondent had until December 1, 1990, to finish the work within 30 months; however, due to delays, the petitioners extended the deadline. Conflicts emerged regarding the sums owed to the

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<sup>12</sup> The India Contract Act, 1872

<sup>13</sup> Vasanth Rajasekaran & Harshvardhan Korada, Damages in Construction Contracts: Legal Issues Surrounding Use of Standard Formulae, 2024 SCC OnLine Blog Exp 22 (Feb 29, 2024), <https://www.sconline.com/blog/post/2024/02/29/damages-in-construction-contracts-legal-issues-surrounding-use-of-standard-formulae/>

<sup>14</sup> M.N. Gangappa V. Atmakur Nagabhushan Setty & Co., (1973) 3 SCC 406

<sup>15</sup> The State of Maharashtra and Anr. v. Bharat Constructions, (2022 SCC ONLINE BOM 6501 )

respondent for work completed over this prolonged period. The Arbitral Tribunal rendered an award on March 29, 2002, with the majority of arbitrators partially supporting the respondent's claims and one arbitrator dissenting. Under Section 342 of the Arbitration and Conciliation Act of 1996, the petitioners contested this award. On November 18, 2002, the petition was accepted. It specifically contested the majority decision on claim no. 2, which dealt with damages for the delay in finishing the work.

## **CONTENTIONS OF THE PARTIES**

Now, because the Respondent was informed in the tender notice that it was responsible for knowing the site conditions and could not claim extra charges, the Petitioners contended that the majority award incorrectly upheld claim no. 2. The Petitioners argued that the Respondent's claim that delays resulted from a lack of clearances from State departments was invalid under the terms of the agreement. Furthermore, the Petitioners claimed that the Respondent had not provided the Tribunal with adequate proof. They stressed that the dissenting opinion could be taken into account by the court when reviewing the award, as allowed by Section 34 of the Arbitration and Conciliation Act. According to the Respondent, the court's power to overturn an arbitral award under Section 34<sup>16</sup>, is restricted and only applicable in cases of "patent illegality" that are essentially unfair. They argued that the Tribunal's majority had computed claim no. 2's compensation in a reasonable manner, negating the need for court intervention.

## **FINDINGS OF THE COURT**

- First, the High Court observed that the controversy's scope is restricted to whether the majority opinion's partial allowance of Claim No. 2 is correct. The High Court worked under the presumption that a court may take into account the opinions of the minority member of the Tribunal who dissents under Section 34 of the aforementioned Act.
- The High Court noted that after reviewing the evidence, the majority of the Tribunal concluded that the Petitioners did not hold the Respondent accountable for the work's completion delay, and the Respondent was not fined. Rather, the Petitioners issued further extensions. It was determined, therefore, that the Respondent had nothing to do with the project's completion delay. The respondent provided additional evidence regarding the rate analysis of overheads incurred as a result of the work delay.

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<sup>16</sup> The Arbitration & Conciliation Act, 1996, Section 34

- The Ministry of Irrigation and Power's guidelines regarding overheads were taken into account by the majority opinion, the High Court found, using a particular formula to calculate losses. The majority estimated the losses associated with claim no. 2 to be 15% after using the Hudson Formula to determine that the losses exceeded 10%. They went into detail about how these losses would be compensated. After eliminating specific time periods, the majority applied the Hudson Formula—which is commonly used in construction contracts and has the support of the Supreme Court—to determine Respondent's overhead loss compensation, setting it at 15%. As a result, claim number two was partially granted to the respondent.

## **ANALYSIS**

As a result, the High Court held that the majority members of the Tribunal applied the Hudson Formula in a reasonable manner, and as a result, the Petitioners could not have established a case for interference under Section 34 of the Act. According to the law, the arbitrator is the only person who can judge the amount and quality of the evidence presented to him, thus the High Court further claimed that no intervention was necessary. Because the Petitioners did not establish a valid reason for interfering with the contested award, the High Court dismissed the Petition, finding it to be without merit.

## **CONCLUSION**

Construction arbitration, with its tailored approach to addressing disputes in the construction industry, provides an efficient and effective alternative to litigation. As seen in the case of *The State of Maharashtra and Anr. v. Bharat Constructions*, the application of the Hudson Formula was upheld by the Bombay High Court, reinforcing its judicial support. The Hudson Formula, despite its criticisms, remains a valuable tool in construction disputes, providing a systematic approach to calculating losses. Its adoption and endorsement by various courts, including the Supreme Court, highlight its credibility and reliability.

In summary, construction arbitration, supported by methodologies like the Hudson Formula, plays a crucial role in maintaining the momentum of construction projects while ensuring fair and reasonable dispute resolution. The legal framework in India, aligned with international standards, further strengthens the efficacy of arbitration in the construction industry. As infrastructure development continues to grow, the importance of such specialized dispute resolution



mechanisms will only increase, ensuring that construction projects can proceed smoothly, with conflicts resolved efficiently and equitably.

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