

ADR adaptations in Indian Highways EPC Construction Projects: Safeguarding Mutual Interests¹

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Abstract

Time, Cost & Quality for the scope for projects to be completed and delivered successfully. EPC Projects in specific to the construction industry often face delays due to issues arising from contractual disputes. This can eventually lead to adverse issues for on-going projects such as, Time Lost, High Costs & Low Quality of Work. Alternative Dispute Resolution is an efficient means to address all of these contractual disputes effectively and efficiently. The main aim of this study was to identify and analyze contractual clauses on a sample NHAI EPC contract and evaluate, how best using the ADR approach could help contracting parties (Principal & Contractor) address disputes swiftly. The findings of this study provide a basis for using ADR effectively for NHAI in EPC construction projects and are of value for the Indian Construction Industry, Contractors and Consultants.

Keywords: *ADR, Disputes, Resolution, Mediation, Conciliation, Arbitration, Dispute Resolution Board, Med-Arb, Amicable Settlement, Construction, Projects, India*

1. Introduction

ADR, as defined, stands for Alternative Dispute Resolution.² With over 20 million cases pending in the local courts, of which 2.25 million cases are anticipating closure since the past decade. This represents 10% of over the total pending cases in the courts. It clearly represents a serious problem, that the Indian Judicial System has severely failed to resolve disputes and is heavily overburdened with a pile of pending cases². In such a situation, there is a need for an alternative solution to resolve existing and potential future disputes in a more organized and efficient fashion. ADR provides an opportunity and scope for amicably resolving contracting party disputes. The process involved to settle disputes fall into two categories, i.e., those who provide a decision to abide by, and those who persuade parties to reach a settlement. There are several methods to adopting the ADR process by means of namely, i.e., Mediation, Arbitration, Conciliation, Med-Arb (a hybrid combination of Mediation & Arbitration) etc. The ADR approach is most well-suited for the Construction Industry, wherein contracting parties

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² See Abraham, M. <https://pxvlaw.files.wordpress.com/2012/12/mohit-abraham-epcs-dispute-resolution-blog.pptx>.

have to deal with a host of dispute issues on a day-to-day basis. Construction Projects in India are mostly of the EPC [Engineering, Procurement & Construction] tender format. Mega-Projects like the National Highways construction are released on a Turnkey Format by the NHAI [National Highways Authority of India, a Public-Sector Undertaking Company] and the Ministry of Road Transport and Highways for eligible contractors to participate.³ For projects of such complex nature, it is essential for an effective dispute resolution measure to be in place to quickly resolve issues and prevent from prolonging.

Therefore, to draw attention, “Is ADR the better option for NHAI (India). An EPC case study?”. In this case using the ADR approach, it can certainly be endorsed that using ADR would certainly be beneficial for both NHAI and its contractors. Firstly, evaluating whether ADR practices are incorporated and properly executed by the Principal Party. Secondly, whether the contractors are given enough ADR clauses to properly participate and execute the contract. Thirdly, by incorporating the ADR practices appropriately, assessing the realized benefits for both parties. Therefore, using the ADR mechanism, this paper seeks to analyze, whether ADR practices prove to be the better option in resolving highway EPC project disputes.

1.1. Thesis objective statement

Is using ADR the better option for NHAI (India). An EPC project case study?

- I. Firstly, evaluating whether ADR practices are incorporated and properly executed by the Principal Party.
- II. Secondly, whether the contractors are given enough ADR clauses to properly participate and execute the contract.
- III. Thirdly, by incorporating the ADR practices appropriately, assessing the realized benefits for both parties.

2. Problem definition

Dispute resolution processes, organized for public sector organizations/units (PSU) in India are generally governed by the Ministry of Statistics and Programme Implementation (MSPI), Government of India and the respective PSU's independently. MSPI has set up its model EPC Contract based on global industry standards of FIDIC, World Bank and ICC. As per MSPI's model code of EPC contract, the Alternative Dispute Resolution procedure to be applied by PSU's constitutes two options. As per the Standard clauses of contracts for all domestic bidders/bidding contracts, the first option as given in Clause 11 of Part 1 recommends Conciliation as the first step to resolving a dispute. Should this step fail, the case may proceed to stages of arbitration and litigation as need be.

³ See Chandramohan, A. et. al.,
http://thegrenze.com/pages/serve.php?fn=501_1.pdf&name=FIDIC%20AND%20NHAI%20CONDITIONS%20OF%20CONTRACT:%20ACCOMPANIMENT%20STUDY%20ON%20INDIAN%20HIGHWAYCONSTRUCTION%20PROJECT&id=1188&association=Narosa&conference=CTET&confyear=2016

A. STEP 1: MSPI Guidelines for addressing disputes using (ADR) - Conciliation Clause:

- I. Conciliation
- II. Arbitration
- III. Litigation

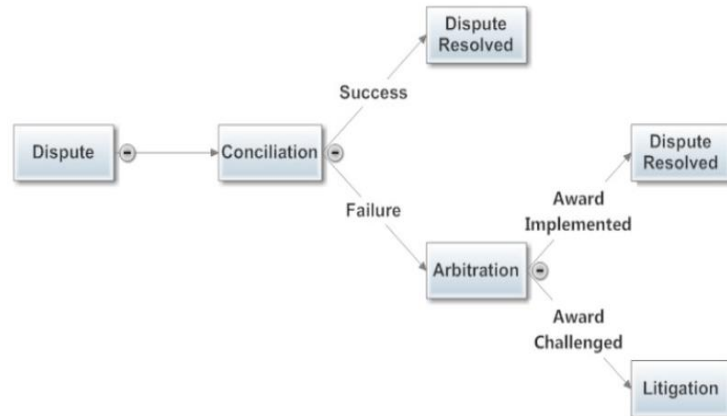


Figure 1: Dispute Resolution Standard Template - MSPI⁴

B. STEP 2: MSPI Guidelines for addressing disputes using (ADR) - Dispute Review Board (DRB) Clause:

- I. Dispute Review Board
- II. Arbitration
- III. Litigation

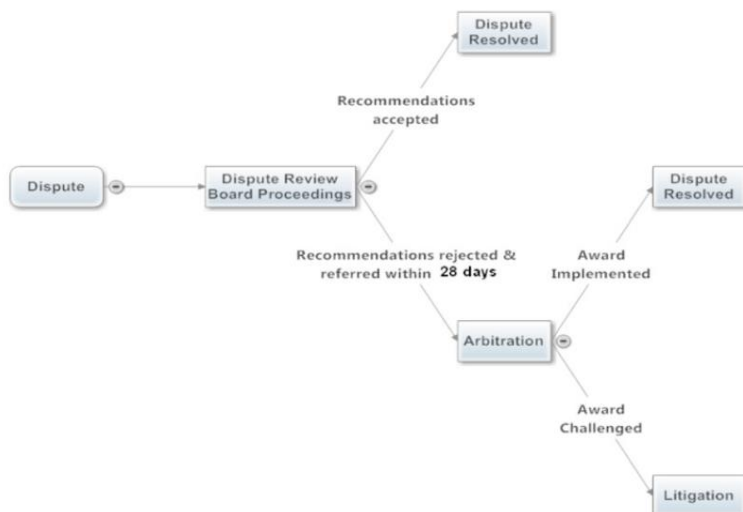


Figure 2: Dispute Resolution Standard Template - MSPI⁵

⁴ See Shodhganga. http://shodhganga.inflibnet.ac.in/bitstream/10603/81468/13/13_chapter4.pdf

⁵ See Shodhganga. http://shodhganga.inflibnet.ac.in/bitstream/10603/81468/13/13_chapter4.pdf

2.1. NHAI

NHAI, is a premier public sector organization tasked with the responsibility for the purposes of construction development, maintenance and management of the national highway projects in India. Due to NHAI's very nature of business operations, the PSU is involved in a multitude of several on-going projects which are in the form of various contracting methods and this paper shall delve upon the Engineering, Procurement & Construction (EPC) mode of contracting projects.

As per the NHAI General Conditions Contract (GCC), in order to resolve disputes, the management adopted dispute principles in accordance to FIDIC guidelines. Until August 2012, NHAI used the DRB method as a gateway to resolve all their disputes. Post August 2012, NHAI has adopted the Conciliation method of addressing disputes.

A. Before August 2012

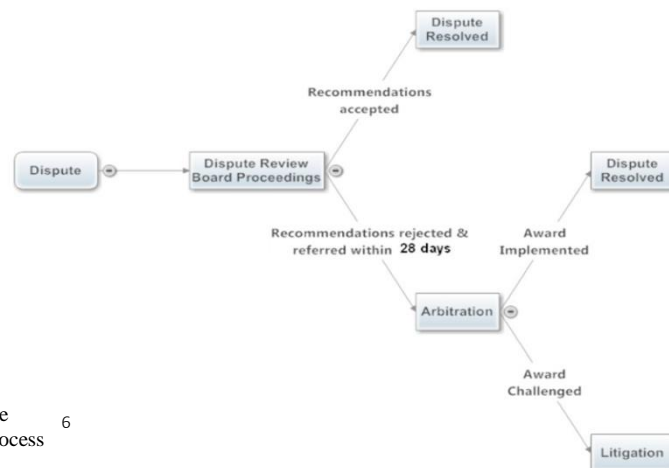


Figure 3: NHAI Dispute Resolution Standard Process ⁶

B. After August 2012

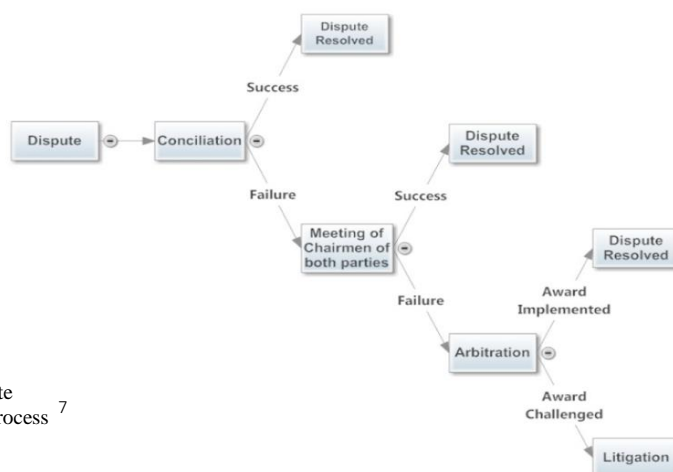


Figure 4: NHAI Dispute Resolution Standard Process ⁷

⁶ See Shodhganga. http://shodhganga.inflibnet.ac.in/bitstream/10603/81468/13/13_chapter4.pdf

⁷ See Shodhganga. http://shodhganga.inflibnet.ac.in/bitstream/10603/81468/13/13_chapter4.pdf

3. Issue

Despite both of these mechanisms (DRB & Conciliation) in place to resolve disputes in an organized process, NHAI EPC contracts have performed poorly during that phase. This has led to contracting parties to participate and opt for Build Operate and Transfer (BOT) contracts over EPC contracts.

The problems recognized by in-house reports of NHAI as well as external monitoring bodies note that, major causes of concern have been due to NHAI not incorporating and facilitating the use of ADR methods in their contracts. The issues noted, have been described below.

- I. Errors /Omissions in the contract document (By PRINCIPAL – NHAI)
- II. Failure to recognize the contractual obligation (By CONTRACTORS)
- III. Failure to properly administer the contract (By PRINCIPAL & CONTRACTOR)

Reasons for such failure attributed to non-conformance of either incorporating MSPI ADR guidelines or not proper execution of PSU adopted GCC ADR guidelines. The below mentioned sample ADR process incorporated by NHAI, by giving the contractor no option for Conciliation or DRB as a dispute clause option and pushing them straight towards Arbitration or Litigation for EPC projects above and beyond Rs. 50 Cr.

KM 69,000 by BM (on selected stretches) in the state of West Bengal” with Contract Package No. : Krish / ER- I /13-14

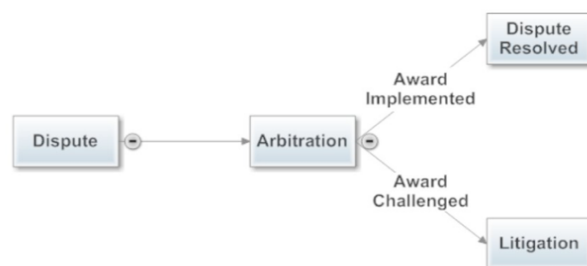


Figure 5: NHA Dispute Resolution Standard Clause

Figure 4.9: Dispute Resolution Process as actually used by NHAI recently in majority of contracts below Rs. 50 Crores for the Engineering Procurement and Construction (EPC) and Item Rate Construction (IRC) Contracts



Figure 4.10: Dispute Resolution Process as adopted by NHAI recently in Item Rate Construction (IRC) Contract for “Patches and Potholes repairing of NH-34 from KM 31,000 to KM 69,000 by BM (on selected stretches) in the state of West Bengal” with Contract Package No. : Krish / ER- I /13-14

⁸ See Shodhganga. http://shodhganga.inflibnet.ac.in/bitstream/10603/81468/13/13_chapter4.pdf

4. Feasible Alternatives

In order to ensure that contractors rights are safeguarded before they could participate in EPC tenders of PSU organization, which are generally considered very strong due to political and governmental backing and support, it will be necessary for contractors and principal parties in likewise situations to incorporate best practices such as the actions mentioned below:

- I. Firstly, involve conciliation
- II. Secondly, if conciliation fails, enforce DRB
- III. Thirdly, if DRB fails, use the mediation process
- IV. If mediation fails, use Mediation – Arbitration (Med-Arb)
- V. Finally, arbitration as the last dispute choice

5. Development of Outcomes

A. Conciliation

Conciliation involves NHA and its contractors to mutually agree upon the conciliators decision for an amicable settlement. This stage provides for both parties to call upon the conciliator who de-facto is the engineer from the authority for the respective project/organization or a legal expert.

Advantages:

- ❖ Represented by industry experts – Engineer or Lawyer
- ❖ Cheaper and flexible process when compared to litigation
- ❖ Decision of the conciliator may be challenged in the court, or proceed to next stage of ADR

Disadvantages:

- ❖ The conciliation form of dispute is not considered on par with a legal process
- ❖ The decision by the conciliator is not binding on either party

B. Dispute review board

Unlike other ADR mechanisms, the DRB is a three-member constituted body formed prior to the start of a project. This mode of consultation involves Field Observation, wherein the DRB members have to regularly visit project/plant sites to personally monitor and evaluate progress of work. A DRB member thereby becomes an important stakeholder in a project team.

Advantages:

- ❖ Very practical approach oriented, seeks to be informed by personally visiting project – site
- ❖ Helps gain feedback of both contractors and principal by thorough investigation
- ❖ Incorporates notice period of 14 days by aggrieved party to other party
- ❖ 56 days reference period for parties to present their cases to DRB
- ❖ Decision by DRB may be challenged in next phase Arbitration within 28 – day period

Disadvantages:

- ❖ Fee involved to retain DRB expert panel of members
- ❖ Decision not binding on parties, may refer to next phase

C. Mediation

This is an expert technique administered by expert professionals from within the industry, whereby through means of dedicated and specialized negotiation and communication channels between both parties, issues are sought to be resolved. The expert is termed as a mediator to facilitate interaction between both parties and provide room for clear, frank and open communication. The mediator is generally a third party.

Advantages:

- ❖ Helps maintain existing business working relationships
- ❖ Facilitate progress of on-going projects
- ❖ Higher success rate

Disadvantages:

- ❖ Decision not binding as a regular court order
- ❖ Both party's mutual agreement is necessary for the conduct of the mediation process

D. MED-ARB

It is a unique blend of both Mediation and Arbitration techniques to resolve disputes. In this process, the facilitator tries to first address all disputes through means of mediation. Should the former technique not help to resolve a case, the process automatically switches to arbitration mode.

Advantages:

- ❖ Best known and practiced hybrid method for dispute resolution

- ❖ For the mediation phase, a deadline is set to resolve dispute
- ❖ If mediation fails, arbitration is followed, where decision is put into a sealed envelope

Disadvantages:

- ❖ Bias nature of mediator/arbitrator
- ❖ Confidential release of information to third parties may affect preceding decisions

E. Arbitration

It is a form of dispute resolution process settled outside courts. Facilitators are known or referred to as Arbitrators or the Arbitral Tribunal. It is often used in the process to resolve commercial disputes for both domestic and international transactions.

Advantages:

- ❖ Decision is enforceable in the courts
- ❖ This process can be voluntary or mandatory as per contracts
- ❖ Faster and cheaper than courts
- ❖ The language for arbitral proceedings and country may be chosen

Disadvantages:

- ❖ If the decision is mandatory, right to courts access is waived off
- ❖ Limited avenues for appeal of award

6. Selection of Criteria

The selection criteria for the above-mentioned ADR processes to resolve disputes between NHAI and its contractors for its EPC projects should be chosen based on guidelines laid down by MSPI and International Contracting Regulatory Bodies.

- ADR clauses should be beneficial for both parties, non-biased
- Forms of dispute resolution must be properly explained in the contract
- Proper documentation without errors of the ADR clauses
- Proper administration of the contract can be enforced only post clear guidelines and non-errors/omissions

6.1. Research Analysis

As provided by the Guild of Project Controls Compendium and Reference (CaR), to evaluate the Benefits Cost Analysis for both NHAI the principal party and its Contractors, the Multi-Attribute Decision Making (MADM) tool has been adopted and applied. Given the recognition of MADM as a highly useful technique to evaluate subjective attributes, it was the ideal for the technique

to be adapted for this paper's research analysis and subsequent decision making.

Guild of Project Controls Compendium and Reference (CaR): Multi Attribute Decision	
NON-COMPENSATORY APPROACH	COMPENSATORY APPROACH
✓ Dominance – CHOSEN	Non – Dimensional Scaling
Satisficing	Additive Weighting Technique
Disjunctive Reasoning	
✓ Lexicography – CHOSEN	

Figure 6: Multi Attribute Decision Making Tools – CaR⁹

6.2. Scenario

A sample NHAH EPC Highways Construction Contract was chosen and the Dispute Resolution clause was compared with global standard guideline documents of FIDIC, EJCDC, AIA and CONSENSUS. With the help of certain keywords and ADR best practice techniques, paragraphs of the contract and baseline documents were compared to find the following mentioned below.

- Which best practices are adopted and incorporated by NHAH in their EPC contracts
- What are the outlined best practices of Global Construction Standard Organizations
- Recommendations for NHAH to adopt and incorporate best practices to their EPC contracts
- First Dominance Comparison done to evaluate NHAH dispute clauses against all standards
- Second Dominance Comparison to evaluate dispute clauses prescribed by all standards
- Lexicography to study standard organizations ranking against the keywords

Alternative Dispute Resolution Clause comparison between NHAH & Global Construction Standards

KEYWORD	NHAH CONTRACT	FIDIC	EJCDC	AIA	CONSENSUS
ADR: Conciliation	YES	NO	NO	NO	NO
ADR: Dispute Resolution Board	YES	YES	NO	NO	NO
ADR: Med-Arb	NO	NO	NO	NO	NO
ADR: Mediation	NO	NO	NO	YES	YES
ADR: Arbitration	YES	YES	NO	YES	YES
ADR: Amicable Settlement	NO	YES	NO	NO	NO

Figure 7: Multi Attribute Decision Making Tools – CaR¹⁰

⁹ See CaR Guild: Planning Planet. <http://www.planningplanet.com/guild/gpccar/managing-change-the-owners-perspective>

¹⁰ See CaR Guild Blog: Planning Planet. https://js-pag-cert-2017.com/w15_sjp_tracking-reporting-cpi-spi/

DOMINANCE (USING PAIRWISE COMPARISON)				
KEYWORD	NHAI vs. FIDIC	NHAI vs. EJCDC	NHAI vs. AIA	NHAI vs. CONSENSUS
Conciliation	BETTER	BETTER	BETTER	BETTER
Dispute Resolution Board	EQUAL	BETTER	BETTER	BETTER
Med Arb	WORSE	WORSE	WORSE	WORSE
Mediation	WORSE	WORSE	WORSE	WORSE
Arbitration	EQUAL	BETTER	EQUAL	EQUAL
Amicable Settlement	WORSE	WORSE	WORSE	WORSE
DOMINANCE	YES	NO	MAYBE	MAYBE

Figure 8: Multi Attribute Decision Making Tools – CaR¹¹

DOMINANCE (USING PAIRWISE COMPARISON)						
KEYWORD	FIDIC vs. EJCDC	FIDIC vs. AIA	FIDIC vs. CONSENSUS	EJCDC vs. AIA	EJCDC vs. CONSENSUS	AIA vs. CONSENSUS
Conciliation	WORSE	WORSE	WORSE	WORSE	WORSE	WORSE
Dispute Resolution Board	BETTER	BETTER	BETTER	WORSE	WORSE	WORSE
Med Arb	WORSE	WORSE	WORSE	WORSE	WORSE	WORSE
Mediation	WORSE	WORSE	WORSE	WORSE	WORSE	EQUAL
Arbitration	BETTER	EQUAL	EQUAL	WORSE	WORSE	EQUAL
Amicable Settlement	BETTER	BETTER	BETTER	WORSE	WORSE	WORSE
DOMINANCE	YES	MAYBE	MAYBE	NO	NO	NO

Figure 9: Multi Attribute Decision Making Tools – CaR¹²

ORDINAL	RANKING	RELATIVE RANKING BASED ON ATTRIBUTE
5	Dispute Resolution Board	FIDIC > EJCDC > AIA > CONSENSUS
4	Amicable Settlement	FIDIC > EJCDC > AIA > CONSENSUS
3	Arbitration	FIDIC > EJCDC > AIA > CONSENSUS
2	Mediation	CONSENSUS > FIDIC > AIA > CONSENSUS
1	Conciliation	CONSENSUS > AIA > EJCDC > FIDIC
0	Med-Arb	CONSENSUS > AIA > EJCDC > FIDIC

Figure 10: Multi Attribute Decision Making Tools – CaR¹³

6.3. Results

From the above-mentioned figures 7, 8 & 9 the following observations have been recorded.

A. DOMINANCE COMPARISON

- NHAI contract clauses suited more towards FIDIC GUIDELINE
- NHAI contract lacks clauses of MEDIATION, MED-ARB
- FIDIC guideline contract (Red Book) emphasis on DISPUTE RESOLUTION
- FIDIC dispute mechanism options MORE DISPUTE CLAUSES

¹¹ See CaR Guild Blog: Planning Planet. https://js-pag-cert-2017.com/w15_sjp_tracking-reporting-cpi-spi/

¹² See CaR Guild Blog: Planning Planet. https://js-pag-cert-2017.com/w15_sjp_tracking-reporting-cpi-spi/

¹³ See CaR Guild Blog: Planning Planet. https://js-pag-cert-2017.com/w15_sjp_tracking-reporting-cpi-spi/

- | | |
|---|--------------------------|
| ▪ FIDIC lacks key techniques - | MEDIATION & CONCILIATION |
| ▪ AIA & CONSENSUS have the clause | MEDIATION |
| ▪ EJCDC emphasis to Dispute Resolution in Contracts | VERY LOW |

B. LEXICOGRAPHY

- | | |
|----------------------------|-------------------------------------|
| ▪ Dispute Resolution Board | High and Accepted by Most Standards |
| ▪ Med-Arb | Needs to be adapted |
| ▪ Most Clauses | Not adapted yet by NHAI |
| ▪ New Clauses documented | Need if adapted, to be properly |

7. Conclusion

Addressing disputes in construction contracts, is key to the health, towards successful execution and completion of the undertaken project by a contractor. Dispute clauses are incorporated into contracts with the sole objective of giving both parties the principal owner and the contractor a medium to address and resolve issues in an organized process. In the case of NHAI, it was observed that the company has incorporated clauses of conciliation, dispute resolution board and arbitration imbibed from FIDIC guidelines. However, in order to facilitate contractors execute the dispute techniques, it would require NHAI as the principal owner to properly document all the clauses in detail. NHAI could explore the option to adapt other best industry ADR practices such as Mediation and Med-Arb, which would give both parties more options and stages to resolve disputes before going into litigation. With the advancement of time, technology and call for the need modern day infrastructure, projects are in abundance so are disputes. Alternative Dispute Resolution provides the ultimate platform to address disputes within contracting parties by saving costs, keeping track of time and reinforcing a committed working relationship. Henceforth, enhanced ADR practices are the ideal solution for companies like NHAI to incorporate within their mega EPC highways projects for successful addressal of disputes.

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Appendices

The clause analysis done, enclosed as a MS Word Online Document, of the NHAI contract comparison with Global Construction Contract Standards.

https://skema-my.sharepoint.com/personal/chiranjit_sonowal_skema_edu/Documents/ANALYSIS.docx?web=1

About the Author



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Chiranjit Sonowal is currently a Masters Candidate at SKEMA Business School, Lille Campus, based in France for the academic year 2017-2019. As part of a key module “The International Contracts” qualification requirement under the direct supervision of Professor. Paul D Giammalvo, the Course Director and the Professor Paul Gardiner, the Programme Director, this student paper has been produced with the purpose of getting it published with The PM World Journal. He hails from Assam, a North-Eastern State in India, famous globally for its rich crop cultivation of Tea. Previously, he has served as a Business Development and Project Consultant for over 33 months with RACE Consulting, based out of New Delhi, India and served on several consulting projects within the Public, Private, IT, Education, Insurance, Energy and Government sectors. Some key notable projects he has been involved, include Accenture, Bharat Petroleum, TCS, National Insurance, etc. He has completed his graduation in Project Management with honours from Lancaster University, United Kingdom during the year 2014. He is a certified PRINCE2[®] Practitioner and AgilePM[®] Professional. Contact him on: chiranjit.sonowal@skema.edu or c.sonowal@outlook.com