CHAPTER 2  Nature and Scope of the Study

2.1  Objectives of the Study

The present study has been undertaken with the following objectives:

(a) To comprehensively study the current system of dispute resolution in Infrastructure projects of Indian Defence Forces undertaken by MES through analysis of various live case studies.
(b) To bring out the flaws in the current system of dispute resolution in MES Contracts.
(c) To study of best practices in the field of Alternative Dispute resolution adopted internationally and by other major government agencies in India.
(d) To propose remedies & improvements in the dispute resolution mechanism in Infrastructure projects for Indian Defence Forces.

2.2  Statement of Research Questions

The research question for the study was taken as under:

“Existing dispute resolution mechanism in infrastructure projects of Indian defence forces needs restructuring.”
To help prove this major research question, firstly we need to conduct a descriptive study to reply to following questions:

- What is the current system of dispute resolution being followed in MES Contracts?
- What are the flaws or shortcomings of the current system of dispute resolution being followed in MES Contracts?
- What are the best practices in the field of Alternative Dispute resolution being adopted by international agencies and other major government and public sector agencies in India?

After conducting the study to collect the above referred information, we need to split up the research question into following distinct and refined research questions:

H1: Is there any proactive system in place to resolve the contractual disputes at initial stage for MES Contracts?

H2: Has the strategy of Risk and cost contract as a prerequisite for dispute resolution through Arbitration delivered the desired results in MES?

H3: Can Institutional Arbitration effectively solve several problems associated with current Ad hoc Arbitration in MES?

H4: Is the current Policy for decision making in MES to contest or implement the award/judgment appropriate?

H5: Has Conciliation as a means of dispute resolution taken off in MES?

H6: Is there a scope in MES contracts for adopting innovative alternative dispute resolution techniques like mediation, med-arb, arb-med, etc?

H7: Are the contract conditions in MES including Dispute resolution clause in line with best national & international practices for motivating avoidance of disputes or resolving them expeditiously?

These research questions required analysis other than pure statistical testing. Hence descriptive method of analysis has been adopted.

Once the analysis in respect of the above referred research questions is made to get the answers to these questions, we can actually focus to our main research question i.e.:

“Existing dispute resolution mechanism in infrastructure projects of Indian defence forces needs restructuring.”
From the answers to the research questions and considering study made in respect of the best practices in the field of Alternative Dispute resolution we may explore and recommend as to what modifications can be made to the current system of dispute resolution in MES Contracts so that the Infrastructure projects proceed smoothly eliminating the time and cost overrun.

2.3 Explanatory notes on the research questions

**H1: Is there any proactive system in place to resolve the contractual disputes at initial stage for MES Contracts?**

It is obvious that if a project is to progress smoothly all obstacles need to be removed as they are encountered. These obstacles can be contractual disputes. But if there is no contract mechanism or system in place through which we can get the resolution of disputes as they occur, then these disputes act as impediments in the progress of the project. Therefore, the answer to above research question is the most basic to ascertain our main research question.

Thus, we need to explore the current system prevalent in MES contracts to get an insight into it to see if the system proactively takes care of the disputes. To gain this insight several case studies in respect of MES projects have been undertaken. These case studies have been chosen and undertaken in such a manner that various stages of dispute development and its resolution process are captured in different case studies.

As we flow through various case studies in the light of insight gained through document analysis made of contract conditions and rules of various Indian and international agencies, the effectiveness or otherwise of the system prevalent in MES contracts to proactively tackle the disputes is revealed.

Thus, with the analysis of the case studies, the research question about the presence or otherwise of any proactive system in place in MES Contracts to resolve the contractual disputes at initial stages, gets answered.

**H2: Has the strategy of Risk and cost contract as a prerequisite for dispute resolution through Arbitration delivered the desired results in MES?**

A contract gets cancelled only when there are certain disputes and the project does not get headway towards completion. Thereafter, the contract conditions of the
MES provide that the balance work shall be completed through an alternate agency. Any excess expenditure made by the government in completing the balance work shall be recovered from the defaulting contractor. The fresh contract in contractual terminology is called risk and cost contract as the excess expenditure is made on the risk and cost of the defaulting contractor.

The contractor always disputes the cancelation of the contract blaming the breaches made by the government as the reason for non-completion of the project. Therefore, immediately on cancelation of the contract he either approaches the court to get the cancelation revoked or invokes arbitration claiming the cancelation as illegal. The court generally directs the parties to arbitration under section 8 of the ACA 96.

Unless the contractor gets the appointment of Arbitrator through court or gets its directions for government to appoint the arbitrator immediately, the appointment is deferred till the conclusion of risk and cost contract as per the MES contract conditions.

Thus, the dispute which occurred during execution of the project and escalated with the cancelation of the contract is kept aside till a fresh contract to complete unfinished work is awarded by the department.

However, the clause appears to be made entirely for the convenience of the department. The dispute raised by the contractor as to the legality of the cancelation is never referred for arbitration at the first instance. Instead, the department decides that their decision of cancelation is right and only dispute which remains to be arbitrated is their claim of excess amount which is crystallized only on conclusion of risk and cost contract.

Even after proceeding as per the contract condition entirely favouring it, does the government succeed in efficiently recovering the excess amount from the defaulting contractor?

- If the answer is in affirmative then the strategy can still be considered to be a success although not equitable.
- But in case the answer is in negative, then we need to review the strategy.

With the analysis of the case studies, we shall explore the success or otherwise of the risk and cost strategy and look for an alternative strategy adopted by other
departments which can better address the issue in not just resolving but by avoiding the crisis situation of cancelation of the contract.

**H3: Can Institutional Arbitration effectively solve several problems associated with current Ad hoc Arbitration in MES?**

Institutional Arbitration in a way can be considered as outsourcing the dispute resolution process to a professional body. Institutional Arbitration is acclaimed and adopted worldwide in all types of disputes specifically commercial disputes. The reasons are its distinct advantages over in-house ad hoc arbitration which are adequately covered under literature review. Recently in India, there has been increased inclination towards institutional arbitration by the law makers as seen from the following:

- Law ministry in its consultation paper uploaded on their website on 08 Apr 2010 has brought out the advantages of institutional arbitration over Ad hoc arbitration.
- The 246th report of Law commission in Aug 2014 has also recommended encouraging of institutional arbitration by the courts.
- The ordinance sent for president approval on 30 Dec 2014 amending the Arbitration and Conciliation Act 1996 has accepted almost all the recommendations of the Law Commission report thus approving the institutional era for resolution of commercial disputes.
- In *Union of India Vs. Singh Builders Syndicate* (2009) 4 SCC 523, the Supreme Court has suggested that government organizations should phase out arbitration clauses providing for appointment of serving officers and encourage professionalism in arbitration.

All said and done, but do we really need institutional arbitration in MES Contracts? The answer shall be in affirmative in case there are really some drawbacks in the current system of Arbitration in practice in MES. These drawbacks, if present, can be revealed from a sufficient sample of case studies in respect of MES Contracts. Thus, the case studies undertaken shall bring to fore problems associated with current system of Ad hoc Arbitration.

In case, it is proved beyond doubt that the current arbitration system is not working efficiently, then we can explore the possibility of adopting different approach
like institutional arbitration. But what kind of institutionalization shall serve the purpose is another question which needs the attention.

Therefore, the answer to this research question is most crucial to decide which direction we need to adopt to efficiently resolve the contractual disputes.

**H4: Is the current Policy for decision making in MES to contest or implement the award/judgment appropriate?**

At present the recommendations of the engineer officials who were party to creation of dispute and further participants in defence of case before Arbitrator is mandatory before any decision to implement or contest the award is taken. In the case studies we shall see whether such practice is appropriate or does it bring an element of bias in their recommendations because of directly being involved in the dispute or its defence.

Further, at each and every stage i.e. before deciding to implement or challenge the award or each successive judgment of the courts, the advice of Legal Advisor (Defence) is required to be obtained. From the case studies we shall see if any quality value addition is achieved from the advice received from LA (Def) in the ultimate resolution of dispute. Or to the contrary, we shall see from these case studies whether the advice delays the process and acts against the interest of the government in majority of cases. We shall explore whether we are actually achieving anything worthwhile from the process or it is acting as a liability we can skip in the best interest of the dispute resolution.

Further, we shall see from the document analysis of other departments’ policies whether some changes for improving the scenario can be adopted.

**H5: Has Conciliation as a means of dispute resolution taken off in MES?**

Conciliation as a means to resolve the disputes can be held at the peak of all the means available of alternative dispute resolution as the amicable settlement gives a win-win situation for both parties. The dispute is resolved once for all without any party needing to take shelter of long and expensive litigation.

Conciliation as a dispute resolution mechanism got legal recognition with adoption of Arbitration and Conciliation Act 1996. MES adopted the conciliation as a dispute resolution technique in its contracts in 2005. However, the adoption was not made universal in all contracts. It is only in contracts worth more than Rs. 1 Crore that
the clause found its place. Further, there is a restriction imposed over its use by referring only those claims which are below Rs. 2 Lakh or less than 1% of the contract amount.

From the case studies we shall see if these restrictions are practicable in resolving the routine contractual disputes. As the case studies pertain to contracts mostly older than the date when the conciliation clause was adopted, the clause was not there in these contracts but the efficacy of these restrictions can still be ascertained from the claims raised by each party. Further, the analytical analysis of these case studies shall show if conciliation was the better option in resolving these disputes.

From the analysis of the case studies, we shall see if with these restrictions has conciliation as a means of dispute resolution really taken off in MES or modifications in its implementation are required.

**H6: Is there a scope in MES contracts for adopting innovative alternative dispute resolution techniques like mediation, med-arb, arb-med, etc?**

There are certain innovative alternative dispute resolution techniques being adopted across the globe rather than just focusing on the pure techniques like Arbitration and Conciliation. We shall see from the various case studies if there is any flexibility in the contract conditions through which we can resolve the disputes more efficiently and expeditiously.

In case the answer to the above research question is in the negative, then we can propose some innovative techniques to provide some flexibility in the effective resolution of the dispute.

**H7: Are the contract conditions in MES including Dispute resolution clause in line with best national & international practices for motivating avoidance of disputes or resolving them expeditiously?**

We shall explore not only the dispute resolution clauses of various national and international organizations but other most relevant conditions of contract which can pave the way for not only the efficient resolution of disputes but avoidance of disputes as well.

Thereafter we can see if these conditions exist in the MES contracts as well. In case the MES conditions are not in line with these best national and international practices the same can be proposed for implementing in MES contracts as well.
The answers of all these above referred research questions will throw light on our main research question as to whether existing dispute resolution mechanism in infrastructure projects of Indian defence forces is adequate or it needs restructuring.

2.4 Research Design

The aim of an applied research or action research is to find a solution for an immediate practical problem. The current research is also being carried out with a view to solve problems existing in the Dispute resolution process in Infrastructure contracts being concluded by MES for Indian Defence forces. Therefore, it falls in the domain of applied or action research.

Researcher is an officer of MES and knows the intricacies of the issues by participation in the phenomenon being directly responsible for the defence of cases from the UOI side in the Arbitration proceedings. Being involved in the dispute resolution process for almost 15 years in the department has got the ability to analytically diagnose the problems and search for solutions. Therefore, the research design adopted for this action research is Descriptive research.

Descriptive Research:

The Descriptive research is used to study the present condition or existing state of affairs and replies to ‘what is’. This type of research is used to study a phenomenon occurring at specific place and time by exploring the environment, practices, structures, existing differences/relationships/opinions/processes/trends. Thus, it can also be treated as fact finding mission used to ascertain the characteristics of the phenomenon. Descriptive study seeks to provide a clear picture about the phenomenon as it already occurs.¹

Thus, in the present research the focus has been to study ‘what’ practices are being followed in the Dispute resolution process in infrastructure contracts being undertaken by MES; and in comparison ‘what’ practices are being followed by other government and public sector entities. Thereafter, ‘what’ practices are being followed by international agencies like FIDIC, World Bank, UNCITRAL, ICC, etc.

Thereafter, the study examines as to ‘what’ are the drawbacks in the current practices being followed by the MES and ‘what’ are the best international practices that, if employed, can improve the present state of affairs.

2.5 Research Methods

There are several methods for conducting a Descriptive Research like Correlational Research, Causal-Comparative Research, Case Study, Ethnography, Document Analysis and Analytical Method.

This study has used a combination of **Case Study Method, Document analysis and Analytical Method**.

The main method used in this study for the descriptive research design is **Case Study Method**. However, **document analysis** has been used not only as a tool to collect data for the case studies but also as one of the Research methods to study the General Conditions of Contract (GCC) and Works Manual of leading Central Government and Public Sector Infrastructure Building Organizations as well as the relevant documents in respect of FIDIC, World Bank, ICC and UNCITRAL to ascertain the best practices in the field of Alternate Dispute Resolution in Infrastructure Contracts. Finally, **Analytical Method** has been employed to analyze the case studies as well as suggest best possible improvements to the Dispute Resolution Process for expeditious and effective contractual dispute resolution for MES Infrastructure Projects.

**Case Study Method:**

Case study method is one of several methods for conducting descriptive research. **Robson**² has defined case study as “a strategy for doing research which involves an empirical investigation of a particular contemporary phenomenon within its real life context using multiple sources of evidence.”

**As per Robert K. Yin**³, this research method is an empirical inquiry that investigates a contemporary phenomenon within its real-life context; when the boundaries between phenomenon and context are not clearly evident; and in which

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multiple sources of evidence are used. Thus, Case study method is used to study prevailing real life situations, issues and problems. It is an excellent technique to appreciate a complex issue and to reinforce the earlier knowledge about that issue. Generally, the case studies are qualitative in nature used to analyze the content and context of a limited number of events or conditions.

The choice of this research strategy is attributed to several reasons as discussed below:

Case study has a distinctive advantage over other research strategies when “how” or “why” questions are being posed to discover a current phenomenon and when the researcher has little or no control over the events. This study has used case study as a research strategy to explore the manner as to “how” the contractual disputes are being handled in MES and “why” the dispute resolution process is not producing the desired results.

As per Denscombe, Case Study research offers the opportunity to “explain why certain outcomes may happen – more than just find out what those outcomes are”. In this research, the facts of the case present the outcomes - the way things unfolded in reality, the issues and problems encountered leading up to dispute, manner of handling the dispute resolution under the constraints of environment, contractual conditions and circumstances. On the other hand, the analysis of the cases gives an opportunity to explain why the dispute resolution process failed under the prevailing constraints and also presents the opportunity to explore possible remedies to avoid or help in better and expeditious resolution of disputes.

As already stated above, Case study research generally answers several questions beginning with "how" or "why." In the present study the questions in respect of each case study are:

How the dispute arose?
How the dispute was/is being resolved?
How the dispute could have been resolved in a better way?

Thus, there is a need to establish a research focus by forming questions about the phenomenon and establishing a clear purpose for the study. Thereafter, the

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phenomenon is studied in depth to create an understanding of the case for answering the research questions.

There are various complexities associated in a case, but the researcher in his analysis has tried to focus on an approach in the dispute resolution that leads to win-win situation for both parties. Thus, more than the adversarial approach the focus is more on collaborative approach to resolve the contractual disputes.

2.6 Population & Sample (Selection of Cases)

The selection of cases is an important stage of research. From amongst the population of cases available, what cases are selected needs considerable deliberation. Whether to use a single case or multiple cases or whether to study unique case or typical cases or whether to select cases to give adequate representation to each of geographic regions, etc are the things which require due consideration. The selection of cases is done through purposeful sampling which is nothing but "selecting information-rich cases for study in depth". Although, each case remains a single entity, its conclusions contribute to the whole study.

The dispute cases in respect of contracts related to government Infrastructure projects formed the basic source of data for the study. The present study, whose initial research focus has been to study the existing dispute resolution process in MES Infrastructure contracts, has chosen multiple cases using purposeful sampling to select information-rich cases from the available population. The cases chosen are mainly typical cases to represent the true picture of the existing situation. The majority of cases have been chosen from MES but some cases are also chosen in respect of Railways, CPWD, ONGC, IOCL, etc from the period when they experienced similar issues. Out of a total of twenty case studies selected for this research, ten cases are live disputes pending at various stages of dispute resolution in respect of MES. These stages may be Arbitration proceedings, application to set aside the award pending with District Civil courts or appeals pending with high courts against the orders of the District Civil Courts.

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Other ten cases are in respect of disputes which have been finally disposed off after being decided by the Supreme Court in the last five years. Out of these ten cases, four pertain to MES, three to Railways and one each to CPWD, ONGC and CPWD.

The cases in the present study can be divided into two types i.e. Macro level & Micro level as discussed hereinafter:

**Macro level:**

The populations for Macro Level cases consist of relevant cases of Contractual Disputes of Infrastructure Projects, in respect of all Organizations under Study, which were finally decided by the Supreme Court under Arbitration Act (ACA 96 or Arbitration Act 1940) during the period 2009 to 2014. The cases have been selected using purposeful sampling as shown in Table 2.1.

**Table 2.1 : Table showing selection of sample cases from those finally decided by the Supreme Court during the period 2009 to 2014**

<table>
<thead>
<tr>
<th>Organization</th>
<th>Population (Cases)</th>
<th>Sample (Cases)</th>
<th>% of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>MES</td>
<td>06</td>
<td>04</td>
<td>67</td>
</tr>
<tr>
<td>Railways</td>
<td>08</td>
<td>03</td>
<td>38</td>
</tr>
<tr>
<td>CPWD</td>
<td>02</td>
<td>01</td>
<td>50</td>
</tr>
<tr>
<td>IOCL</td>
<td>02</td>
<td>01</td>
<td>50</td>
</tr>
<tr>
<td>ONGC</td>
<td>02</td>
<td>01</td>
<td>50</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>20</strong></td>
<td><strong>10</strong></td>
<td><strong>50</strong></td>
</tr>
</tbody>
</table>
Micro Level:

(i) Population & Sample for cases of MES pending at various Courts being personally dealt by Researcher in official capacity at his Present Place of Posting and Research Place (Jhansi & Gwalior) using purposive sampling are placed at Table 2.2.

Table 2.2 : Table showing selection of sample cases of MES being personally dealt by Researcher from those pending at various Courts

<table>
<thead>
<tr>
<th>Arbitration/Courts</th>
<th>Population (Cases)</th>
<th>Sample (Cases)</th>
<th>% of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arbitration</td>
<td>01</td>
<td>01</td>
<td>100</td>
</tr>
<tr>
<td>Dist. Courts</td>
<td>11</td>
<td>03</td>
<td>27</td>
</tr>
<tr>
<td>High Courts</td>
<td>06</td>
<td>03</td>
<td>50</td>
</tr>
<tr>
<td>Supreme Court</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>07</td>
<td>39</td>
</tr>
</tbody>
</table>

(ii) Population & Sample for cases of MES where Arbitration awards were implemented to finally resolve the dispute in the last 5 years (2009-14) at his Present Place of Posting of Researcher & Research Place (Jhansi & Gwalior) using purposive sampling as placed at Table 2.3.
Table 2.3: Table showing selection of sample cases of MES being personally dealt by Researcher where Arbitration awards were implemented to finally resolve the dispute in the last 5 years (2009-14)

<table>
<thead>
<tr>
<th>DISPUTES</th>
<th>Population (Cases)</th>
<th>Sample (Cases)</th>
<th>% of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Awards</td>
<td>10</td>
<td>03</td>
<td>30</td>
</tr>
</tbody>
</table>

Overall: The Combined Population and Sample for cases in respect of Table 2.1, 2.2 and 2.3 has been tabulated in the summary table 2.4 as shown below:

Table 2.4: Summary Table showing Combined Population and Sample for cases in respect of Table 2.1, 2.2 and 2.3

<table>
<thead>
<tr>
<th>Cases</th>
<th>Population (Cases)</th>
<th>Sample (Cases)</th>
<th>% of Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 2.1</td>
<td>20</td>
<td>10</td>
<td>50</td>
</tr>
<tr>
<td>Table 2.2</td>
<td>18</td>
<td>07</td>
<td>39</td>
</tr>
<tr>
<td>Table 2.3</td>
<td>10</td>
<td>03</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>48</td>
<td>20</td>
<td>42</td>
</tr>
</tbody>
</table>

The criteria for selection of cases in purposive sampling:

These case studies have been chosen and undertaken in such a manner that various stages of dispute development and its resolution process are captured in different case studies. Thus, there shall be few case studies where the focus shall be
on the initial occurrence and development of dispute whereas in other case studies the focus shall be on some fundamental issues like abnormal delays in payments, delays in arbitration, legality of awarding past, pendent lite and future interest, legality of awarding damages in prolongation of contracts, efficacy of decision making for challenging the awards, abnormal delays in litigation, etc.

The cases have been selected in such a way from the relevant populations that cases pertaining to all major issues involved are covered in proportion to the importance of that issue. Although, all cases have several common issues but the cases are classified in accordance with the one major issue into following types:

Table 2.5 : Classification of cases in accordance with one major issue involved

<table>
<thead>
<tr>
<th>Major Issue</th>
<th>Number of Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk and Cost</td>
<td>06</td>
</tr>
<tr>
<td>claims after Cancelation of Contract</td>
<td></td>
</tr>
<tr>
<td>Award of Damages for Prolongation of Contract</td>
<td>04</td>
</tr>
<tr>
<td>Abnormal Delays in Payments</td>
<td>03</td>
</tr>
<tr>
<td>Detrimental litigation</td>
<td>02</td>
</tr>
<tr>
<td>Appointment of Arbitrator through Court</td>
<td>02</td>
</tr>
<tr>
<td>Abnormal Delays in Arbitration Proceedings</td>
<td>01</td>
</tr>
<tr>
<td>Interest payments</td>
<td>01</td>
</tr>
<tr>
<td>Efficient Dispute Resolution</td>
<td>01</td>
</tr>
<tr>
<td>TOTAL</td>
<td>20</td>
</tr>
</tbody>
</table>
2.7 Source of Data

The researcher has consulted both primary and secondary sources. In legal research, the primary sources:

(a) Are information sources containing law
(b) Communicate the law
(c) Are books of law rather than books on law
(d) Examples are Constitutions, Laws, Acts, Decrees, Gazettes, courts and appellate court decisions, regulations and ruling of administrative agencies

Primary sources used for this research are:

(a) Arbitration Awards
(b) Court Judgments
(c) Official Files (in respect of Micro level case studies)
(d) Acts
(e) General Contract Conditions (GCC) of MES, CPWD, Railways, NHAI, DMRC, ONGC, BHEL, IOCL, NTPC, SAIL, MSPI, FIDIC, World Bank
(f) UNCITRAL Model laws and rules on Arbitration & Conciliation
(g) ICC Rules of Arbitration, Mediation & Dispute Boards

In legal research, secondary sources:

(a) Are information sources about law
(b) Analyze the law
(c) Are books on law rather than books of law
(d) Examples are journals, textbooks, treatises, commentaries, restatements and other periodicals.

Secondary sources used for this research are:

(a) Law Commission Reports and consultation papers
(b) Research papers & Articles in National & International Journals
(c) Thesis on relevant topics
2.8 Data Collection:
The case study method uses multiple sources and techniques for data collection. Data is generally qualitative. The researcher has collected data from both primary and secondary sources as under:

Collecting Primary Data:
(a) Document analysis of official files has been carried out in respect of case studies which are being dealt by the researcher in his official capacity.
(b) Information obtained through Right to Information (RTI Act 2005) in respect of several government & public sector organizations to access their Arbitration Awards, lower and High Court Judgments and other data in respect of their alternate dispute resolution system.
(c) Court judgments mainly retrieved from Supreme Court website.
(d) The General Conditions of Contracts (GCC) and the Works Manual have been accessed through the official websites of the respective organizations.
(e) Focus group and unstructured Interviews with several stakeholders (Arbitrators, Engineer officials, Contractors and Government Counsels). The main focus of discussion during these formal and informal interactions was on the following issues:
   - Efficacy of Risk & Cost strategy
   - Arbitration clause and arbitration culture in MES
   - Merits of adopting Dispute Review Board (DRB)
   - Creation of a countrywide Wing to help resolve contractual disputes
   - Advantages of Institutional Arbitration
   - Optimal use of Conciliation in MES Contracts
   - Promptness and quality of decision Making on implementation of awards
   - Amendments required in various MES contract clauses for effectively dealing with issues like award of damages, interest liability during dispute period, introduction of equitable contract clauses to avoid disputes, etc

Collecting Secondary data
Most of the secondary data as stated above has been retrieved by the researcher from the official websites of the respective organizations.
2.9 Scope of the Study:

(Period to be taken as the base for the Research)

All the case studies pertain to cases as under:

Firstly, where the Contractual disputes in respect of MES are still alive at Arbitration stage or at various Courts; or

Secondly, where the awards implemented by MES without challenge in the courts during the period from 2009 to 2014; or

Thirdly, where the relevant cases have been finally decided by the Supreme Court of India during the period 2009 to 2014.

However, since the actual span of the dispute resolution process including litigation in Courts in most of the cases generally ranges from 10 to 30 years, certain relevant cases from other organizations like CPWD, Railways, ONGC, IOCL, etc of this period have been considered as they pertain to times when contract conditions & hence problems were similar to those faced by MES at present. These case studies have clearly brought out several flaws in the current system of dispute resolution in MES.

Further, to study the best practices adopted by other national & international organizations in the field of Alternative Dispute Resolution in commercial contracts, document analysis of their existing General Conditions of Contract (GCC), works manuals, Model Laws & rules have been undertaken. GCC of 06 Major Indian Government departments (incl. MES) & 05 Public Sector organizations, FIDIC & World bank with respect to dispute resolution considered. Model Laws & Rules of UNCITRAL for Arbitration & Conciliation, ICC Rules of Arbitration, mediation & Dispute Boards. Mediation Rules of several High Courts and Mediation Training Manual of Supreme Court of India have also been considered. Thereafter, using analytical method, the best practices are interpreted in the context of MES and recommendations for incorporating the same in MES contracts have been made.

2.10 Data Analysis:

During the process of data evaluation and analysis, the researcher remained open to new prospects and insights till the very last. As this study has used multiple data collection methods, it created opportunities to triangulate data for strengthening the research findings and conclusions. The study exposed some of the initial
impressions of the researcher and provided new insights into the issues. Focused and semi-structured or unstructured interviews helped to validate data and key observations.

The study has adopted the technique of **cross-case search** for patterns by looking at the data from various angles to avoid reaching premature conclusions. When data from one case was substantiated by the evidence from another case, the findings became stronger. Similarly, when conflicting evidence was encountered, the researcher went for deeper examination to identify the cause or source of conflict. However, in every case the evidence was treated fairly to produce analytic conclusions answering the original "how" and "why" research questions.

Researcher being an officer of MES, knowing the intricacies of the issues by participation in the phenomenon being directly responsible for the defence of cases from the government side in the Arbitration proceedings for almost 15 years has got the ability to analytically diagnose the problems and search for solutions.

Therefore, analytical method has been used for data analysis and on the basis of case studies, document analysis and information and opinion received from stake holders in the field of ADR through interviews & focus group, an in-depth analysis has been made to give findings & recommendations.

The technique adopted in this study for writing the case study has been to unfold the case in a chronological manner and narrating it as a story. The draft case studies were circulated to the various stake holders for their comments. The draft was then reformulated and modified considering the comments received.

Case studies have been reported in such a manner that complex issues are converted into a language that is understood by the reader independently. The reader shall be able to experience and understand the intricacies himself and able to co-relate his own real life experiences. The reader shall be convinced that all aspects of the case study have been covered.