

# THE USE OF KEY ATTRIBUTES IN ALTERNATIVE DISPUTE RESOLUTION (ADR) PROCESS DESIGN

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After the rapid deployment of Alternative Dispute Resolution (ADR) methods, the problem in question for the authorities is on how to design the most appropriate ADR implementation model that can fit nicely in the existing nature of the industry that the model is built in, and meet the needs of the actors in it. A theoretical framework based on the use of key ADR attributes is developed to provide a systematic approach to the design of ADR implementation models. As a part of the framework developed, a list of ADR attributes is determined by literature analysis and then, using the qualitative data obtained from the indicator exercise comprising interviews with experts, a set of ADR attributes was selected and structured in a hierarchical scheme. This scheme will be used as a base for the analytical hierarchy process (AHP) survey to identify the key attributes for Turkish construction industry public works in the final stage of the research. The proposed framework based on the use of key attributes may be used by all policy makers and process designers since it provides a systematic and objective approach to the design of ADR implementation models, which will take the requirements of the end users into consideration and focus on the fundamentals avoiding overly complicated processes.

Keywords: alternative dispute resolution (ADR), alternative dispute resolution attributes, model building, Turkish construction industry.

## INTRODUCTION

Alternative Dispute Resolution (ADR) is a “non-adversarial technique which is aimed at resolving disputes without resorting to the traditional forms of either litigation or arbitration” (Ashworth, 2005, p.53). It is defined in the European Commission’s Green Paper (2002, p. 6) as “out-of-court dispute resolution processes conducted by a neutral third party excluding arbitration”. The most widely used ADR methods are mediation, conciliation, adjudication and dispute review boards/panels. The discussion on arbitration in the literature seems to result in defining arbitration not an ADR method but a quasi-judicial procedure because of its features closer to litigation in terms of duration, cost and the level of bureaucracy (EC Green Paper, 2002, p.6; Adriaanse, 2005, p.347; Carmichael, 2002, p.265).

Rubin and Quintas (2003) suggest that the salient characteristics of ADR make it an attractive option for settling the complex and time sensitive disputes that often arise during the course of construction projects. Beside being a faster, less bureaucratic and more cost-effective process that do not require the use of attorneys to present claims, the real-time approach to disputes can prevent deterioration of business relations and the consideration of disputes by knowledgeable industry professionals can provide

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reaching more equitable results based on the realities of the construction process instead of applying the strict letter-of-the-law removed from its relevant context.

The negative perceptions of the use of ADR in the construction industry, on the other hand, have been analysed by Brooker and Lavers (1997) on the basis of an extensive survey in the UK construction industry which identified the following most frequently stated negative attitudes to ADR: (i) proposing ADR to the other side is a sign of weakness; (ii) ADR reveals one's position to the other side; (iii) ADR before discovery of documents could result in a settlement being entered into when one should have gone for something better; (iv) ADR can be used to delay payment; and (v) ADR is non-binding and therefore too weak to be effective (for non-binding methods of ADR). Despite these negative perceptions, Brooker and Lavers (1997) conclude that the widespread dissatisfaction with its long-established 'rivals' speaks in favour of ADR; many respondents who had never used ADR expressed an interest in doing so and ADR was perceived as enjoying real advantages over litigation and arbitration, in terms of reduction of damaging confrontation, reduced cost and time, and the expectation of flexibility and a good settlement rate.

As a result of its advantages over adversarial methods, ADR is widely used in many countries' construction industries today and is spreading fast globally (Cheung, 2006). However, although the benefits of ADR are widely appreciated as Cheung (2006) suggests, the adoption and implementation of such new methods is obstructed by the relevant laws, regulations and the absence of an adequate institutional framework. Resolute government policies for both the adaptation of the legislation and the institutional development are required for viable implementation. Therefore, after the rapid deployment of ADR methods, the problem in question for the authorities is on how to design the most appropriate ADR implementation model that can fit nicely in the existing nature of the industry that the model is built in, and meet the needs of the actors in it.

This paper reports the completed stages of a research that is being undertaken in Turkish construction industry, which aims to develop a model for the implementation of ADR in public works. Firstly, a systematic approach is developed to provide guidance to policy makers and drafters who are involved in implementing ADR. This is a generic approach (not country or industry specific) and can be applied everywhere. It provides a holistic map that defines the content and the steps of the research process needed for the design of ADR implementation models. The core principle of the framework developed is transferring the characteristics and the special requirements of the industry to the model in a right way. This is obtained through the use of key ADR attributes. Cheung et al (2002) suggest that by focusing on these critical attributes, the dispute resolution process (ADR implementation models) to be designed can be kept simple and effective. The problem areas and the relations with the environment are shaped based on this principle. For this purpose, after the development of the general framework, a method for the identification of key ADR attributes is adopted.

## **METHODOLOGY**

The flow chart in Figure 1 shows the methodology adopted in the research process of developing a model for the implementation of ADR in Turkish public works. The first stage is the data gathering stage which involves the literature analysis, case studies and identification of critical success factors. The results of this part of the research has been reported in the earlier works of the authors. In the second stage of the research, a

systematic approach is developed to be used as a theoretical framework in the design of ADR application models. This is a generic approach that can be applied everywhere and provides a holistic map which defines the content and the steps of the research process needed for the design of ADR implementation models. This theoretical framework proposed will be explained shortly to provide a basis for the core issue of this paper, which is the use of key ADR attributes.

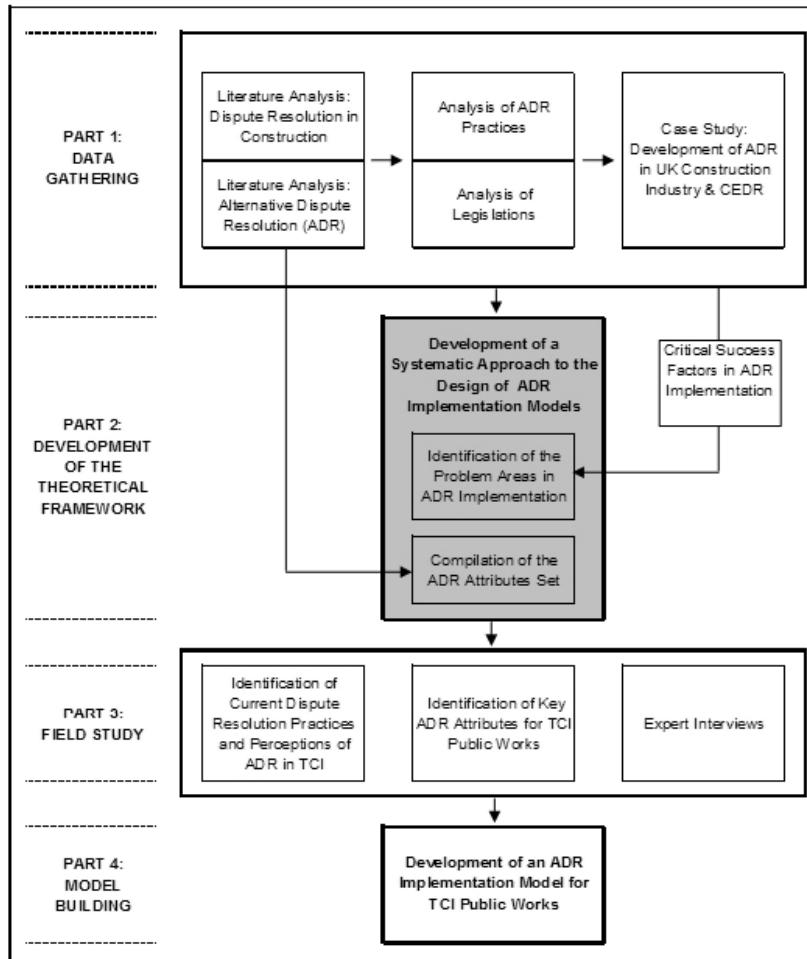


Figure 1 : Methodology Flow Chart

Identification of ADR attributes includes:

1. The analysis of the literature to constitute a list of attributes used by the other researchers before.
2. An indicator exercise comprising interviews with experts with the aim of selecting a set of ADR attributes from the literature list (evaluation of the repetitive and inappropriate attributes).
3. Structuring a hierarchical scheme with the selected attributes.
4. Identification of the key ADR attributes for the industry which the model is built in.

This paper reports the results of the first three steps, where a set of ADR attributes is determined as a result of the literature survey, and then structured in a hierarchical scheme using the qualitative data gathered in the indicator exercise done with the experts. This scheme will be used as a base for the extensive survey in Turkish construction industry that will identify the key attributes by analytical hierarchy

process (AHP) in the third stage of the research. The set of key attributes to be identified will be used as the main input to the model developed.

## A THEORETICAL FRAMEWORK FOR ADR APPLICATION MODEL DESIGN

Figure 2 shows the main groups of the theoretical framework developed, that are: processing the existing knowledge in the discipline & identification of critical success factors, identification of the key ADR attributes, ADR implementation problem areas, institutional relations with the environment and support functions (Figure 2). Key ADR attributes are used to transfer the special conditions of the industry (such as culture, expectations of the actors, existing practice etc.) to the model. The method adopted for the identification of the ADR attributes will be discussed in the sections below.

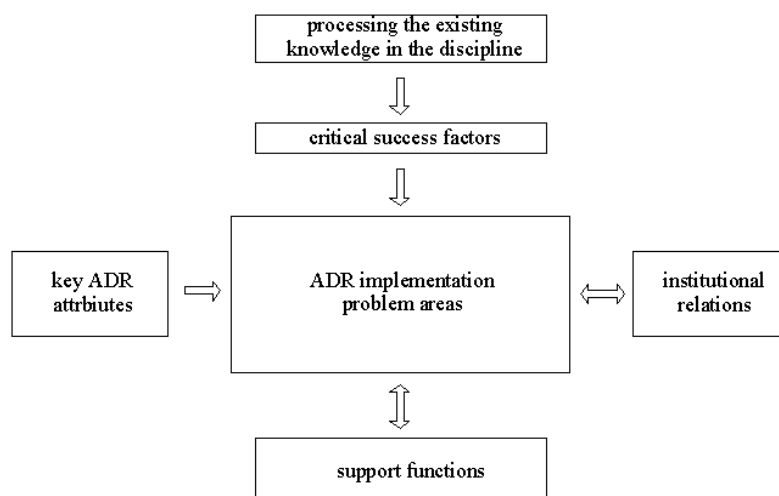


Figure 2: A Theoretical Framework for ADR Application Model Design

The systematic approach developed for the design of ADR application models gives the answers to the following questions:

- how the existing knowledge in the discipline will be transferred to the model
- what the critical success factors are in ADR implementation
- how the problem areas, that constitute the parts of the model, should be identified
- how the relations of the model with its environment should be defined
- how the support functions should be designed
- how the attributes and special requirements of the industry/structure that the model is built in will be transferred to the model
- what methods should be used in the research phase for collecting and processing data

### *Processing the Existing Knowledge and Identification of Critical Success Factors:*

The first component of the framework deals with processing the existing knowledge and derivation of critical success factors from them as input data. When tackling a research problem, the selection of the information to be used as input is important. Therefore, the first component determines what and how the existing information

should be processed as input to the model. This includes the analysis of ADR literature, ADR practices, legislations and ADR institutions.

**ADR Implementation Problem Areas:** Problem areas are the core of the framework proposed. These are the sections that constitute the model and resolved based on the input obtained (critical success factors and key ADR attributes). Key ADR attributes define the foundations which the problem areas are built on. These problem areas are ADR method selection and process design, ADR institution design, adaptation of legislation for ADR, standards and accreditation of third parties, provisions in the standard forms of contract, determination of the ethical codes (code of conduct) and interaction of the model with existing business practices and culture.

*Relations with the Environment:*

In this section, institutional relations with the judiciary, government agencies and other organisations are defined. These relations also determine how the problem areas of the model are resolved.

*Support Functions:*

The strategies for support functions such as publicity and promotion, monitoring and auditing and training are defined in this section.

*Key ADR Attributes:*

Key ADR attributes are the main input of the proposed framework. The special conditions and requirements of the industry is determined through a field study and transferred to the model within this component. The method proposed for identifying these key attributes and the set of selected attributes are given below. By focusing on these key attributes, the model to be designed can be kept simple and effective (Cheung *et al.*, 2002).

## **IDENTIFICATION OF KEY ADR ATTRIBUTES**

### **ADR Attributes in Literature**

The first step in identifying the key ADR attributes is the literature analysis. Table 1 shows the list of attributes identified and used by the previous researchers.

Collectively these publications provide a rich list on the attributes of ADR. It is anticipated that some attributes are more important than others due to cultural, geographical, social and human factors. But before identifying the key attributes for an ADR process design, the listed attributes in Table 1 will be eliminated from inappropriate and repetitive ones by an indicator exercise.

### **Results of the Indicator Exercise**

After the preparation of the ADR attributes table, an indicator exercise comprising interviews with experts was done in order to select the set of ADR attributes to be used in the next stages. The three interviewees of the indicator exercise were all experts in the use of ADR and asked to evaluate the repetitive and inappropriate attributes in the literature list. According to the results of this indicator exercise, eleven attributes were evaluated from the list. Table 2 shows the evaluated ADR attributes and the reasons of their evaluation.

Table 1. ADR Attributes in Literature

	ADR Attributes	Brown and Marriott (1999)	Cheung (1999)	David (1988)	Goldberg et al. (1992)	Harmon (2003)	Hibberd and Newman (1999)	Mohammad (2005)	Suen (2001)	Yiu and Cheung (2005)	York (1996)
1	width of remedy		X				X				X
2	immune from external influence							X			
3	confidentiality				X						
4	voluntariness	X	X		X		X				
5	liabilities to opponent's cost	X	X	X			X		X		X
6	consensus					X					
7	fairness					X					
8	enforceability					X					
9	bindingness							X			
10	transparency of judgement							X			
11	independency				X		X		X		
12	flexibility										X
13	formality	X			X						X
14	addressing power imbalance		X	X	X						
15	speed	X	X	X			X		X		X
16	improves communication	X	X		X		X				X
17	impartiality	X		X					X		
18	cost reduction	X	X				X			X	X
19	wide range of issues							X			
20	control by parties						X				
21	control by neutral	X	X				X		X		X
22	preservation of relationships	X		X							
23	possibility to reject neutral							X			
24	ability to appeal	X			X						
25	ease of implementation	X	X				X				
26	effective case management							X			
27	credibility							X			
28	knowledge in construction							X			
29	experience in construction							X			
30	professional behaviour							X			
31	neutrality							X			
32	creative agreement					X					

*Table 2: Results of the indicator exercise*

<b>Evaluated ADR Attributes</b>	<b>Reason</b>
neutrality	Close match to impartiality
professional behaviour	Includes impartiality, effective case management, knowledge in construction
experience in construction	Joined with knowledge in construction
credibility	Includes impartiality, effective case management, knowledge in construction
control by neutral	Reciprocal of control by parties
wide range of issues	Close match to flexibility
transparency of judgement	There is no "judgement" in some forms of ADR
enforceability	Close match to bindingness
liabilities to opponent's cost	Inappropriate as a key attribute
voluntariness	Close match to consensus
width of remedy	Close match to creative agreement

### **Hierarchical Scheme**

In the indicator exercise, eleven attributes are evaluated and twenty-one attributes are chosen to be used in the AHP survey. The chosen attributes belong to the different aspects of the ADR process and it is therefore hard to compare them at once. While "cost reduction" is a benefit that ADR provides, "knowledge in construction" is a characteristic that a neutral may have. While "speed" can be compared to "preservation of relationships" as benefits, "impartiality of the neutral" can not be compared to "bindingness" etc. Some of these attributes are intangible ones such as consensus and control by parties while others are tangible ones such as cost and speed. In addition, due to the relatively large number of attributes, it is not possible to compare the importance of these attributes with the same level of focus. Therefore, these attributes have to be compared in smaller groups to identify the key attributes that will be used as the main input of the implementation model. Cheung *et al.* (2002) suggest the use of analytical hierarchy process (AHP) in the selection of key ADR attributes, whose successful use to assess priorities within a given set of attributes has been reported in many studies before. It provides decision makers with a systematic, transparent, and logical approach in prioritizing the relative importance of the factors, and therefore improving objectivity and reducing any human bias in making decisions. The AHP process involves procedures to decompose a multi-attribute decision problem into a system of hierarchy, which contains the objective statement, its measurable attributes, and each option concerned. The pairwise comparison technique of AHP will be used in the next stage of this research to identify the key ADR attributes from the set determined in this paper.

For this purpose, a hierarchical scheme is structured with the set of selected attributes as seen in Figure 3. The groups of the hierarchical scheme is based on the dispute resolution process determined by Cheung et al (2002), which is based on Walker's (1996) system view of a process; that is, a typical process which consists of input (resources), process (operation) and output (product). Cheung et al (2002) see dispute resolution as a process as well, which consists of five main phases: input (dispute), process, external input (neutral third party), outcome (settlement) and benefit.

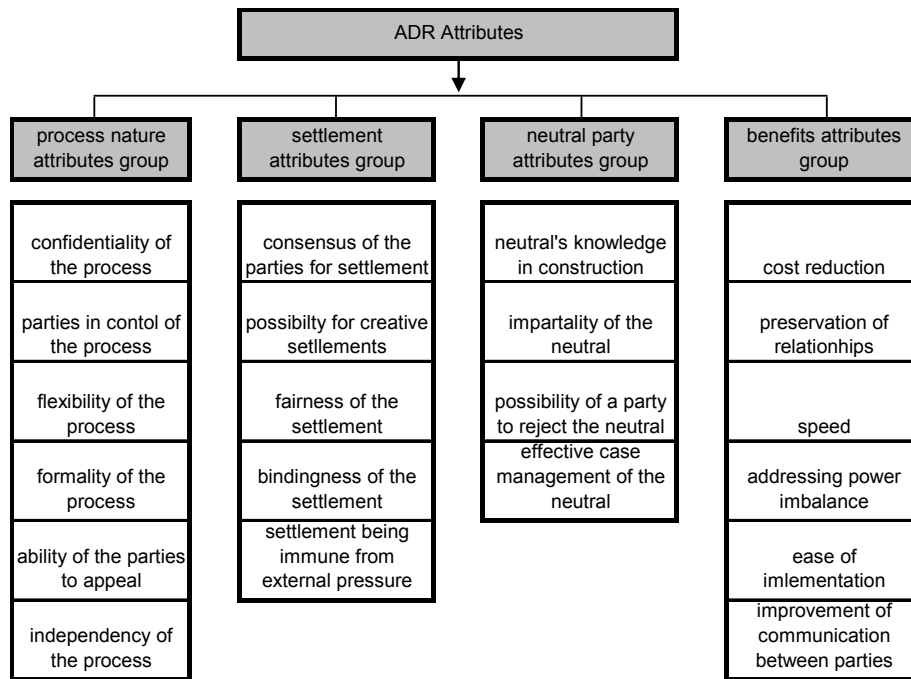


Figure 3: Hierarchical Model of ADR Attributes

**Process Nature Attributes:** Attributes such as confidentiality, control by parties, flexibility, formality, ability of the parties to appeal and independency concerning the procedures adopted in ADR were categorized in process nature group.

**Settlement Attributes:** Agreement or judgement reached at the end of the ADR process is the settlement. A mutually agreed settlement should be the common objective of the parties, the achievement of which depends on many factors. Some ADR methods like construction adjudication used in the UK requires judgement of the neutral, however neutrals in ADR processes are generally expected to encourage and facilitate commonality. In this respect, consensus, creative settlements, fairness, bindingness, and settlement being immune from external pressure were categorized in settlement group.

**Neutral Party Attributes:** It is inherent to the nature of dispute resolution that human factors play an important role in the process. Beside the parties, neutral's attributes may define the success of the process so the involvement of a neutral in assisting the parties to reach a settlement is another key characteristic of ADR. The effectiveness of the process depends heavily on the competence, experience and knowledge of the neutral (Goldberg et al 1992, Brown and Marriott 1999). On this basis, neutral's knowledge in construction, impartiality of the neutral, possibility of a party to reject the neutral and effective case management of the neutral were categorized in neutral party group.

**Benefit Attributes:** Benefits of ADR are the reason why ADR is deployed and adopted so fast. The advantages of ADR over the traditional methods of dispute resolution attract the attention of policy makers and users. It is therefore important to determine and consider the expectations in the design of an ADR implementation model. Cost reduction, preservation of relationships, speed, addressing power imbalance, ease of implementation and improvement of communication between the parties were categorized in benefits group.



In the next stage of the research key attributes will be determined in an expert survey using AHP and the hierarchical scheme structured in this paper for Turkish construction industry public works. But the framework and methodology proposed above can be applied everywhere in the design of ADR implementation models.

## CONCLUSIONS

Resolving construction disputes is a difficult task, especially without the presence of appropriate methods and an adequate institutional framework. The problem of unfinished public projects, the waste of resources due to poor dispute resolution practices and the need for adequate mechanisms have identified dispute resolution as a key area requiring improvement in Turkish construction industry public works. Despite the need for more cost-effective and swifter dispute resolution methods, lack of an institutional framework has evidently been hindering the acceptance of ADR in the industry. This study is part of a wider research on developing a model for the implementation of ADR in Turkish Construction Industry Public Works. The primary aim of the research is to develop an implementation model in order to effectuate the ADR initiative in Turkish construction industry public works. The systematic approach comprising the use of key ADR attributes described in this paper was developed in the second phase of the research and was used as a theoretical framework in the development of the final model.

It is anticipated that some attributes are more important than others due to cultural, geographical, social and human factors in an industry. By focusing on the empirically identified key ADR attributes, the model to be designed can be kept simple and effective. Above all, new practices will only be widely accepted for use unless they meet the needs of the users. The core principle of the framework developed is transferring the characteristics and the special requirements of the industry to the model in a right way. This is obtained through the use of key ADR attributes.

Taking this methodological approach proposed in this study as a theoretical framework, an ADR application model will be developed for Turkish construction industry public works in the last phase of the research as it is deemed to bear actual significance for unfettered development of the industry.

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