



#### Available online at www.sciencedirect.com

## **ScienceDirect**

Procedia Engineering

Procedia Engineering 69 (2014) 241 - 246

www.elsevier.com/locate/procedia

24th DAAAM International Symposium on Intelligent Manufacturing and Automation, 2013

# Quantification of Variables of the Information Model for Resolving Maritime Disputes Through Arbitration

Viducic Vinko<sup>a\*</sup>, Pivcevic Daniela<sup>b</sup>

<sup>a</sup> Faculty od Maritime Studies, Zrinsko-Frankopanska 38, Split 21000, Croatia
<sup>b</sup> Municipal Court of Split, Dracevac bb, Split 21000, Croatia

#### **Abstract**

The goals of this paper have been to explore and define the advantages of resolving maritime disputes through arbitration compared to their settlement in state courts, to emphasise the importance of arbitration in resolving maritime disputes, to encourage the parties to settle maritime disputes in this way, and to determine and quantify the values of the most relevant variables of the information model for resolving maritime disputes by means of arbitration versus state courts through the period 2008-2018. The research proves that arbitration clearly presents a faster, more creative and cost-efficient way of settling maritime disputes when compared to judicial proceedings. The advantages also include practical and economical aspects, flexibility and confidentiality. Due to these advantages, arbitration becomes the principal means of resolving disputes in maritime trade. Quantification of the values of the main variables of the information model for the period 2008-2018 proves that it is more beneficial to the parties involved in maritime issues to settle their disputes through arbitration than before state courts.

© 2014 The Authors. Published by Elsevier Ltd. Open access under CC BY-NC-ND license. Selection and peer-review under responsibility of DAAAM International Vienna

Keywords:

#### 1. Introduction

The research has determined the most relevant variables of the information model for resolving maritime disputes by means of arbitration versus state courts through the period 2008-2018: The parties' decision to choose maritime arbitration as the method of dispute settlement; Arbitration becomes the principal means of resolving disputes in maritime trade; Arbitration offer a more creative way of settling disputes when compared to judicial proceedings;

\* Corresponding author. Tel/fax.: 0038521330327.

E-mail address: vviducic@pfst.hr

Maritime disputes are resolved in a much faster and more cost-efficient way both for the society and individual; Arbitration is chosen as it is practical and cost-effective; Settling disputes in court is expensive and time-consuming, which is detrimental to business operations in maritime industry and trade. This research proves that, in comparison with state judicial proceedings, arbitration presents a faster, cheaper, more flexible and more confidential way of settling maritime disputes.

This paper will serve as the groundwork for future research aimed at defining the direct growth rates of the information model for resolving maritime disputes by arbitration versus by state courts.

The study of the available scientific and specialised literature has lead to the conclusion that arbitration in maritime disputes, despite its considerable importance, lacks a comprehensive and integral analysis which would deal with maritime disputes separately from other issues that can be settled through arbitration. Therefore, the aim of this paper has been to address the issue systematically, to prove the advantages of maritime arbitration and to encourage the parties in dispute to engage in arbitration in order to settle their issues in a faster and more beneficial way. This may result in further enhancements and increasingly efficient arbitral proceedings, and eventually contribute to the development of shipping and maritime affairs in general.

The methodology of the research has been based on studying and analysis of the relevant literature, legal provisions, regulations, judicial and arbitral decisions, as well as on direct observation of the current situation, information gathered through everyday practice and data available on the internet. The scientific methods that have been used in the paper include description, comparison, analysis and synthesis, induction and deduction, modelling, etc.

## 2. Resolving maritime disputes through arbitration

The development of the international seaborne trade has been followed by increasingly complex legal and factual relationships between legal entities. This development requires an increasingly high-professional legal, technical, business and other expertise in persons engaged in resolving disputes among the various parties. State courts find it harder and harder to meet these requirements. The role of maritime arbitration has consequently become more important, in particular due to the fact that dispute settlements in courts in many countries have become very expensive and time-consuming. In comparison with state judicial proceedings, arbitration presents a faster, cheaper, more flexible and more confidential way of settling maritime disputes. However, large corporations are not willing to sacrifice fair proceeding and justice for fast settlement, so many arbitral tribunals and individual arbitrators make additional efforts aimed at promoting their neutrality, skill and expertise.

#### 2.1. On arbitration in general

The history of peaceful dispute settlement is as long as disputes themselves and as long as the need for settling them [1]. The syntagma "peaceful dispute settlement" should be considered as the opposite of the dispute settling method that takes place before an authority incorporated in a (state) hierarchy, i.e. judicial (state) apparatus [2]. From ancient times, arbitration has been recognised as a means of peaceful resolution of international trade issues, including maritime disputes. Compared to earlier ways of settling disputes between the concerned parties in the dawn of socio-economic development of the society, arbitration appeared as a higher organisational model for enforcing the protection of parties' interests. Over the historical development of the society, the role of solving disputes through arbitration grew increasingly significant, in particular since the beginning of the intensive development of international trade, as the participants in the international trade affairs were largely citizens of various countries so that they preferred an arbitration as a means of resolving their disputes to bringing their issues before any state's courts whose legal and judicial practice they often did not know or lacked confidence in these institutions. Arbitral proceeding practice has met the expectations of the direct participants in international trade who sought a valuable and efficient alternative to judicial dispute settlement, despite the restrictive effects of uneven and diversified regulations on arbitration in various national legal systems [3].

## 2.2. Institutional and ad hoc arbitration

The growth of the international maritime industry and trade has resulted in the increasing number of maritime disputes [4] which has been traditionally, and in most cases, settled by *ad hoc* or institutional arbitrations [5]. Institutional arbitrators are organisations where arbitral tribunals (councils or individual arbitrators) settle the disputes [6]. Institutional arbitration is a permanent body with standing procedure rules and an established administrative apparatus, which exercise the arbitration proceeding in compliance with its arbitration regulations; in doing so, it may take into consideration the wishes of the concerned parties as well. Unlike institutional arbitration, *ad hoc* (occasional) arbitration is an arbitration that is not governed by the rules of any arbitral institution – the parties may agree on their own proceeding rules [7]. *Ad hoc* arbitration is formed just for one particular dispute and it does not exist in an organisational way prior to the dispute. In such arbitrations the parties have the initiative and responsibility to establish an arbitration tribunal that will be settling their dispute and they also have to define the necessary rules for conducting the arbitration proceedings and to settle the issue of tariffs, rewards and costs with the arbitrators [8].

#### 2.3. Maritime arbitration

All basic principles and provisions governing the organisation and the functioning of arbitrations apply also to maritime arbitration due to the fact that the latter is but a specific form of general commercial arbitration. Maritime law is essentially a specialised branch of commercial law so that maritime arbitrations resolve commercial disputes that involve vessels. In most cases, these disputes arise from the breach of obligations agreed upon in maritime contracts, which occurs quite frequently in national and international trade [9]. However, legal relationships and nature of disputes among partners in international seaborne trade particularly emphasise the importance of certain features of arbitration proceedings and significant efforts are made in order to maintain the quality of arbitrations, find enhancements and deal with various difficulties. Due to their specific nature and importance, the international maritime trade relationships have been regulated for a long time by special national legal codes which are insufficiently harmonised at the international level [10]. Given the expanded international maritime entrepreneurship, efforts are made to remove the differences in regulating maritime relationships because various national regulations result in legal uncertainty. Harmonisation of rules and standards, regardless of various national legal systems and different interests of legal entities in joint maritime adventures, leads to increased understanding and confidence among the nations and results in the coexistence of law with politics and economy [22].

Modern arbitration adjudication, including maritime arbitration, responds to the dissatisfaction with the obsolete, slow, expensive and rigid state adjudication [11]. The purpose of maritime arbitration is to resolve maritime disputes in a fast, efficient and professional way (these disputes involve vessels and all aspects of maritime affairs related to vessels, e.g. disputes arising from charter parties, bills of lading or bills of sale). Arbitral adjudication is therefore manifested as an expression of certain social solidarity between the opponents in the dispute, common concepts of justice and fairness, mutual loyalty before and during the dispute, their readiness to accept a solution that does not necessarily meet their requirements in full. On the one hand there is fierce competition within the international maritime industry, but on the other, there is cooperation and communion. Although innovations are slowly introduced in this industry, they spread fast once their commercial cost-efficiency is proved. Maritime arbitration is an innovation that has been increasingly implemented within the industry [12].

## 3. Advantages of arbitration compared to state court proceedings

The advantages of commercial arbitration in maritime disputes are getting increasingly pronounced. It permits dispute settlement proceedings that are much faster and flexible and less formal than in state courts. "From the modern standpoint and within the cultural environment where state courts represent a stable tradition, arbitration may be viewed as an unusual and innovative method of resolving disputes. In that context, arbitration responds to issues that remain unresolved by judicature and presents an innovative institution which meets the specific needs that are not dealt with efficiently by state courts" [13]. Moreover, arbitration enables the parties to resolve the

dispute by selecting trusted professionals whose expertise will help resolve the dispute in a fair and adequate way. Therefore, arbitration becomes equally exercised with regard to judicature, particularly in settling international commercial disputes. The growth and development of arbitration exercise in maritime affairs have been strongly fostered by the fact that the parties observe the rules and the judicatures encourage it as a dispute settling method.

State courts have become increasingly inefficient in settling maritime disputes and it is clearly necessary to reconsider the role of state courts and seek new ways of resolving disputes. The principle that all disputes are settled in court is increasingly difficult to exercise in real life as the law and judicial practice prove that time-consuming proceedings present the most prominent feature of the judicial systems. This has been a global trend. Fast life-style, new values requiring prompt protection [21], low level of confidence in efficient dispute settlements in courts – these are the reasons for considering alternative methods in legal practice. Under the circumstances, arbitral settlement of disputes appears a necessity [14].

Judicial proceeding form is conceived as a guarantee of fairness, equal treatment of all parties seeking an outcome that stems from exact facts and effective law, but discrepancies often occur between the conception and practice. This is primarily due to general inefficiency of courts in performing their tasks, so that due to the time-consuming proceedings the conceived form is not the guarantee of fairness anymore [15]. Institutional law is to a relatively large extent inadequate framework within which the parties would like to reach the resolution of their dispute and build further business relationships as the laws anticipate paradigmatic situations and respond to real-life phenomena in a relatively slow way [16].

On the other hand, arbitration anticipates the possibility of deviation from unconditional enforcement of law during dispute settlement [17]. Namely, during arbitral proceedings the arbitral tribunal settles the disputes according to the principle of fairness (*ex aequo et bono*) only if the parties have authorised such exercise [18]. Therefore, it is obvious that a formal judicial procedure is not able to adequately respond to the needs and requirements of modern society. Changes in legal and judicial practice referring to the form of proceedings as well as regarding the facts and applied laws indicate s shift towards resolving the disputes through arbitration [19].

When shifting towards somewhat vague system of settling disputes by means of arbitration, a system whose elements are not defined by strict forms and whose aspects are not defined by a particular law, it is clearly necessary to wonder what the development of such a system may bring. It is expected that arbitration assists in solving certain problems within the administration of justice. Such expectations are not insubstantial as, on the one hand they are based on the perception of arbitration determinants, and on the other, on observing the problems of the state judicature and the necessity of its existence. Arbitration is a method of resolving disputes in a different way, which can be a supplement to the dispute resolution system, providing additional legal service and interaction with other elements of the judicature, making the legal system more comprehensive and balanced. In many cases arbitration can result in a more creative dispute settlement disputes when compared to judicial proceedings, a settlement that is much faster and more cost-efficient both for the society and individual. Arbitration can be viewed as a turning point in perceiving dispute settlement as it provides an additional way of resolving the disputes which can enable a redefinition of dispute settlement systems. Arbitration is neither a judicial proceeding nor a court procedure, it does not take place before an institutional state court; hence it represents an alternative solution. However, both theory and practice clearly distinguish arbitration from alternative ways of dispute settlement, given the fact that the arbitrator makes a decision (arbitrament), whereas the term alternative dispute settlement refers to any form of procedure where parties strive to settle the dispute by reaching an agreement with the aid of one or more mediators or conciliators who assist the parties in reaching an acceptable arrangement but without any power to impose a binding settlement on the parties.

Most of the advantages of arbitration are related to the obvious overload of the judicial system and regular courts. There are, however, special reasons which are in favour of arbitration in maritime disputes. They refer to specific issues related to the sea, seafaring and maritime affairs, which require specific approach and expertise.

## 4. Quantification of the variables of the mental-verbal model

This chapter deals with the quantification of the variables of the information model for resolving maritime disputes through arbitration versus state courts for the period 2008-2018. The value of the model variables is determined for the years 2008, 2013 and 2018 on the scale from 0 to 100. It is assumed that the value of the variables is zero in the under-developed countries, whereas their value amounts to 100 in the most developed countries in the world [20]. Here is the quantification of the variables of the information model for resolving maritime disputes through arbitration versus state courts for the years 2008, 2013 and 2018:

- Decision made by parties to choose maritime arbitration: 10, 20, 60;
- Arbitration becomes the principal way of resolving disputes in maritime trade: 5, 15, 50;
- Arbitration offers a more creative dispute settlement compared to judicial proceeding: 7, 40, 80;
- Settlement of maritime disputes through arbitration is much faster and cost-effective for both the society and individual: 20, 50, 70:
- Arbitration is chosen for economical reasons: 15, 40, 65:
- Judicial dispute settlement is expensive and time-consuming: 30, 40, 50.

#### 5. Conclusion

Arbitration has been increasingly interesting and appealing because it ensures a fair, neutral, professional, persistent and effective means of peaceful settlement of maritime disputes. The above discussion and the produced results prove that, compared to traditional national judicial systems, maritime arbitration features a number of wellknown advantages, including time-saving, cost-efficiency, flexibility and confidentiality. It is hard to estimate whether there is an adequate environment for resolving disputes through arbitration in certain countries at the moment, so that the final rating of the new possibilities for selecting dispute proceedings will be given by business people and participants in arbitral proceedings. The following years will show whether the legislator has succeeded in creating the legal framework for selecting efficient ways for settling disputes. In practice, special attention should be paid to the development of ad hoc arbitrations with the purpose of faster and more efficient resolution of the disputes in the area of maritime affairs, thus disburdening courts. It is also necessary to encourage the settlement of maritime disputes and foster arbitration mechanisms within certain professional organisations which could, in specialised areas such as maritime disputes, provide highly specialised arbitrators, proceedings adjusted to procedural matter and other specialised services. Furthermore, arbitral procedure should be simplified in low-profile cases and simple commercial disputes in order to speed up proceedings, reduce costs and achieve higher efficiency. When submitting disputes to arbitration, solutions and practice in other national legal systems, as well as familiarisation with foreign conditions, business environments and customs should be taken into consideration. From the standpoint of legal safety, it would be desirable to harmonise arbitration practice within courts, arbitral institutions and in general. It is likely that maritime arbitration will continue to grow worldwide but its growth and popularity should be adequately followed by legislation.

It is obvious that the variables having most of the room for growth are: Arbitration becomes the principal way of resolving disputes in maritime trade and Judicial dispute settlement is expensive and time-consuming.

The variables that will perform best in 2018 are: Arbitration offers a more creative dispute settlement compared to judicial proceeding and Settlement of maritime disputes through arbitration is much faster and cost-effective for both the society and individual.

On the basis of the performed quantification of the most relevant variables of the model, further research will be able to produce the direct growth rates of the information model for resolving maritime disputes through arbitration compared to state courts for the years 2008, 2013 and 2018.

## References

- [1] Puharic, K., "Mediation: procedure of settling international trade disputes" ("Mirenje: postupak rješavanja međunarodnih trgovačkih sporova"), in: *Pravo u gospodarstvu*, 36/1, 1997, pp. 128-139.
- [2] Simac, S., "Mediation procedure with an overview on Mediation Law" ("Postupak mirenja s osvrtom na Zakon o mirenju"), in: *Pravo u gospodarstvu*, 2, 2004, pp. 91-113.

- [3] Brcic, G., "Peaceful settlement of commercial disputes through arbitration" ("Mirno rješavanje trgovačkih sporova putem arbitraže"), in: *Privreda i pravo*, 13:2004, 11, pp. 40-44.
- [4] Bolanca, D., "The Maritime Law in the Era of Globalisation Universal Law of Mixed Legal System", in: Zbornik radova Pravnog fakulteta u Splitu, 39, No. 3-4 (67-68), 2002, pp. 333-338.
- [5] Kapov, T., "Maritime arbitration at Society of Maritime Arbitrators in London" ("Pomorska arbitraža pri Londonskom udruženju pomorskih arbitara"), in: *Pravo u gospodarstvu*, 4/2012, pp. 1091-1125.
- [6] Goldstajn, A., Triva, S., *International commercial arbitration (Međunarodna trgovačka arbitraža)*, Informator, Zagreb, 1987, p. 13.
- [7] International Trade Centre: Arbitration and alternative ways of settling disputes how to resolve international business disputes (Arbitraža i alternativno rješavanje sporova kako rješavati međunarodne poslovne sporove, Croatian Chamber of Economy, Zagreb, 2003, p. 62.
- [8] Soliman, U., Maritime Arbitration between Ad Hoc Arbitration and Institutional Arbitration, online edition by Soliman Advocates available at http://www.solimanadvocates.com/Publications.htm [accessed: July, 2013].
- [9] Marinovic, R., "Mediation and arbitrations in Anglo-Saxon Law in maritime shipping and transport of goods" ("Mirenje i arbitraže u anglo-saksonskom pravu u pomorskom prometu i transportu roba"), in: *Kapetanov glasnik, More je naš izbor*, No. 18, 2009, pp. 25-33.
- [10] Grabovac, I., Liability of the shipper in the transport of goods in Maritime Code of the Republic of Croatia and in international conventions (Odgovornost prijevoznika u prijevozu stvari u Pomorskom zakoniku RH i u međunarodnim konvencijama), Književni krug Split, 2010, p. 7.
- [11] Triva, S: "Civil procedure law" ("Građansko parnično procesno pravo"), in: Narodne novine (Official Gazette), Zagreb,1983, p. 649.
- [12] Russell, J. C., "Development and Trends of the Lex Maritime from International Arbitration Jurisprudence", in: *Journal of Maritime Law and Commerce*, 2012, vol. 43, pp. 255-277, also available at: http://Works.bepress.com/russellcortazzo/2, [accessed: July, 2013].
- [13] Varady, T.; Barcelo, J.; Von Mehren, A., International Commercial Arbitration, Thomson West, 2006, p. 1.
- [14] Triva, S.; Uzelac, A., "Croatian arbitration law" ("Hrvatsko arbitražno pravo"), in: Narodne novine (Official Gazette), Zagreb, 2007, pp. XXIII-XXV.
- [15] Uzelac, A., "The form of arbitration agreement how to make oneself free of paper literacy?" ("Forma arbitražnog sporazuma, kako se riješiti bauka papirnate pismenosti?"), in: *Pravo u gospodarstvu*, 2:2001, pp. 113-144.
- [16] Liebscher, C., "Fair Trial and Challenge of Awards in International Arbitration", in: *Croatian Arbitration Yearbook*, 6, 1999, pp. 83-100.
- [17] Triva, S., "Arbitration or state adjudication" ("Arbitražno ili državno sudovanje"), in: *Pravo u gospodarstvu*, year 43, 2004, No. 2, p. 10.
- [18] Sikiric, H., "Arbitration in line with the principle of fairness Ex aequo et bono" ("Arbitraža uz primjenu načela pravičnosti Ex aequo et bono"), in: Pravo u gospodarstvu, 34, 1995, pp. 91-126.
- [19] Giunio, M., "Arbitration and state courts" ("Arbitraža i državni sud"), in: Pravo u gospodarstvu, 34/1-2, 1995, pp. 59-74.
- [20] Viducic, V., Maritime tourism (Pomorski turizam), Pomorski fakultet (Faculty of Maritime Studies), 2007, Split, Croatia.
- [21] Clipa, F.; Clipa, R.; Filipeanu, D., "Considerations on the Impact of Legal Institutions Renewal in Strategic Management", *Annals of DAAAM for 2012 & Proceedings of the 23<sup>rd</sup> International DAAAM Symposium*, Ed. B. Katalinic, Published by DAAAM International, Vienna, Austria, 2012, pp. 0301-0304.
- [22] Tarman, Z. D., "Juridiction and arbitration under the Rotterdam Rules", *The United Nations Convention on Contracts for the International Carriage of Goods Wholly or Partly by Sea*, Heidelberg, Springer-Verlag Berlin 2011., pp. 265-289.