

# Chapter 113

## A Customised Dataset to Assist Legal and Ethical Governance of Seaports

**Ana Ximena Halabi Echeverry**

*Macquarie University, Australia & Universidad de La Sabana, Colombia*

**Deborah Richards**

*Macquarie University, Australia*

### ABSTRACT

*Attention to the legal and ethical principles of governance of seaport authorities (PAs) can enhance the future possibility of sustainable development of a port. This chapter presents a customised dataset and accompanying descriptions compiled from multiple sources and repositories that can be mined to provide adequate understanding over key decisional variables to assist the implementation of three Port State Control (PSC) mechanisms. Considerable care is given to the selection and combination of variables which may identify potentially serious accidents and the port's legal and ethical liabilities. The authors seek to clarify the relationship between the Corporate Social Responsibility (CSR) of PAs and, what is possibly the most important issue facing PAs nowadays, the issue of security. In order to validate the relationship between PSC and CSR, the authors suggest the use of the Regression Approach in Time Series Analysis (RATS) method that offers an assessment of mutual impacts of the PSC variables and a forecast of future values of CSR. RATS would enable PAs to be aware of the CSR challenges occurring among partner ports at least one time-step ahead. This may represent an important advance in using decision support systems to assist managers in performing complex analyses and making strategic choices.*

### INTRODUCTION

The principles of legal and ethical governance of port authorities (PAs) are of paramount concern. Some authors describe them as the Corporate Social Responsibility (CSR) of a port (Neef,

2006; Schøyen & Bråthen, 2011). One example concerns the port of Oslo in Norway that became the centre of debate within Norwegian society that resulted in the port having to act contrary to its own economic interests, in order to rebuild residential and recreational areas in compliance

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with their CSR program. For more details see the European Sea Ports Organization [ESPO] (2011). Others, such as the Maritime Transport Security Act (MTSA, 2003) clearly relate the principles of legal and ethical governance of PAs with the scope of conduct prescribed by law that covers peaceful acts to protect the port and its surroundings. Some other acts cover: labor rights, transnational organized crime, drug trafficking, money-laundering and trafficking in arms, illegal transfers of nuclear, chemical and biological materials, to the commission of serious crimes such as murder, extortion, kidnapping, assault, hostage-taking and robbery (United Nations, 2008).

It is through the practice of legal and ethical governance that PAs can foresee future possibilities for the sustainable development of a port. A lack of adherence to legal and ethical principles has harmful impacts on cooperative relationships between countries (from a higher perspective), including cooperation for development. Moreover, it has adverse consequences for the political and social development of the states in which the port operates, and jeopardizes friendly relations among partner ports on a lower scale. An example of this cooperation is The Megaports Initiative involving more than 20 global ports –e.g. Freeport, Antwerp and Rotterdam- which aims to enable actions against the potential nuclear material smugglers (U.S. Government Accountability Office [U.S. GAO], 2005).

It is essential that decision-makers see the urgency of including legal and ethical factors in the formulation and consideration of port governance in the long term. In a number of decisions, “decision-makers are unlikely to perceive the moral issues comprehensively or formulate the problem with a high degree of ethical concern... by taking into account (for example) invisible stakeholders such as future generations, animal life and the environment (Chae et al., 2005, p.203).” Instead, PAs are prone to identify tactical actions substantially oriented to safety and security regulations (Paris MoU, 2010), and consider the extent

to which several factors affect primary inspections of foreign vessels in national ports, such as:

1. Restrictions of ships’ operations as a minimum level of control that may exist at the port.
2. Inspections of crew and unaccounted personnel and/or fraudulent documents as a result of a statutory commitment with the interface ship/port/city area.
3. National security inspections as a result of strict procedures to deter for example, national and international acts of terrorism.

High expectations are placed on compliance with the International Maritime Organization [IMO] regulations (2011), particularly on the quantity and scope of data to be analysed and the pressures imposed over the use and combination of existing databases to identify potential threats. Moreover, Seifert (2004) states that a high number of port initiatives attribute good managerial outcomes to customised Decision Support Systems (DSS). For example, recently the Transportation Security Administration [TSA] implemented the Program Computer-Assisted Passenger Prescreening System II [CAPPS II], weighting and scoring several categories of factual data and providing an analysis for a homeland security decision tool.

In this chapter, we propose a framework that appropriately incorporates ethical and legal factors into a dataset as an important stage in customising decisional support systems to guide PAs in taking complex managerial decisions and choices. More importantly, it is clear in our case that data mining applications represent a significant increase in the quantity and scope of data as well as in discovering patterns from which to make reasonable action. The suitability of our data will represent a significant step in considering an effective support method that may be implemented by PAs.

The main focus of the chapter is to explain and combine the concepts related to the principles of legal and ethical governance of PAs. Two sepa-

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