



A new approach for the freight transportation system in Venice

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Abstract

Venice is worldwide known as one of the most intriguing places, hosting an average of 15 million tourists per year. This paper describes the causes of the economical inefficiency of the freight transportation system in Venice, and analyses the problems caused by the damages done by the waves. A properly modified form of road pricing, aiming at improving the efficiency of the traffic chains by introducing the pressure of competition between the freight operators, is thereby conceived and the possible deriving scenarios are described.

Keywords: Venice; Lagoon; Wave; Road pricing; Freight; Transportation.

1. Introduction

A “peculiar” city of Arts has “peculiar” traffic problems and requires thereby a “peculiar” approach. In Venice, the increasing amount of freight boats causes an unsustainable wave motion which jeopardizes the survival of the foundations of the old buildings by the sides of some canals.

After reviewing the past attempts to reduce the problem of the wave motion, this paper considers hereby the movement of the boats as a mere kinetic phenomenon, considering the effects of congestion and pollution ultimately not much relevant.

Taking these preliminary remarks into account, a new traffic tool is conceived and thoroughly explained. The possible scenarios deriving from the effectiveness of the tool, and their consequences on the freight delivery system are analysed, leading to the conclusion that the intervention proposed in this paper should be possible, even in a such complex, “peculiar” background.

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