



**ACADEMIC YEAR 2009 – 2010**

**TITLE OF DIPLOMA THESIS:**

Risk analysis during the transport of dangerous goods through tunnels.

The Driskos tunnel case.

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**ABSTRACT**

The transport of dangerous goods by vehicles through tunnels should not be executed with compromises in the safety, but it should be conditioned by strict rules. The present thesis deals with this complicated problem, aiming to present and explain the institutional framework that exists in Europe and Greece, the scientific research that is currently undergoing, as well as the effort that is realised in the Greek territory to create procedures and methodologies that improve the traffic safety and the quality of dangerous goods transportation, according to economic and environmental benefits. While the use of quantitative methods of a risk assessment analysis tends to prevail at least in the countries of European Union, quite enough countries (France, Austria, Czech Republic, Great Britain, partially Germany) use the simulator DG QRAM for risk assessment analysis for the passage of dangerous goods through tunnels, that was developed by the collaboration of OECD and PIARC with the economic contribution of European Union. In order to adopt the above method, the administrative authority of tunnels in Greece placed it in public consultation. This thesis aiming to contribute to this effort, the application of QRA method in the tunnel Driskos of Egnatia Odos Road was examined. The study, the difficulties and the results together with main conclusions and suggestions are presented in the last chapter of this study.

**KEYWORDS**

Tunnels, Risk analysis, Dangerous goods