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Preface

SAFE 2009 conference is the third international conference on Safety & Security Engineering following the first one held in Rome, in 2005, and the second one held in Malta, in 2007. Both of them were very successful.

Safety & Security Engineering, due to its special nature, is an interdisciplinary area of research and applications that brings together, in a systemic manner, many disciplines of engineering, from the most traditional to the most advanced and novel.

Safety & Security Engineering presents a totally new approach since it first analyzes the hazard context not only by means of traditional tools but also by using risk analysis techniques. It then manages this process by means of technical solutions, installations, systems, human resources and procedures to prevent and face incidental events, natural and manmade.

This means that Safety & Security Engineering uses a systemic and multidisciplinary approach to the problems needing to be solved, decomposing them into elementary parts, studying their reciprocal relations and interactions and finding a final optimal solution that takes into consideration all the multiple aspects of the complex system.

Nowadays, most processes must integrate safety and security considerations from the beginning to ensure the desired standards are reached within given costs.

The purpose of this 3rd International Conference on Safety and Security Engineering (SAFE 2009) is to continue to provide a forum for the presentation and discussion of the most recent developments in the theoretical and practical aspects of Safety and Security Engineering. This book contains the conference papers grouped in the following topic areas:

- Infrastructure Protection
- Risk Analysis, Assessment and Management
- Public Safety and Security

- Homeland Security
- Surveillance Systems
- Injury Prevention
- Safety Culture
- Emergency and Disaster Management
- Modelling and Theoretical Studies
- Earthquakes
- Transportation Problems
- Geotechnical Problems
- Railway Safety

The Editors are grateful to the members of the International Scientific Advisory Committee and other colleagues who helped to review the papers included in this book. They are also indebted to all authors for their presentations.

The Editors
Rome, 2009

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