Common Telecommunication Infrastructures

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COMMON TELECOMMUNICATION INFRASTRUCTURES

Sebastián García Galán
Margareta Elin Ohberg
Rocío Pérez de Prado
José Enrique Muñoz Expósito

UJa EDITORIAL

“This book is dedicated to the memory of Grace”

Preface

Having a Common Telecommunication Infrastructure in each building is the best way to ensure the quality of Telecommunications Services. It facilitates, on the one hand, users access to the services they want, and on the other, operators bringing services to the user's door.

The Common Infrastructures in Buildings for Access to Telecommunication Services Act of 1998 which abolishes and replaces the Collective Antennas Act of 1966, establishes the obligation for all buildings to have a Common Telecommunications Infrastructure. Given the speed at which telecommunication technology evolves, regulations must keep up with the pace to ensure that buildings are equipped with sufficient facilities to serve existing services. And this has been the case with the regulations of 1999 (RD 279), 2003 (RD 401) and 2011 (RD 346).

The regulation of 2011 regulates ultrafast access networks for fiber optic and coaxial cable, the infrastructure for DTT and the Digital Home. It also includes the European Directive on Services in the Internal Market, separating the legislation that concerns telecommunication installation companies.

The aim of the book, as expressed by its authors, is to show the current Spanish regulation in Common Telecommunication Infrastructures for the Telecommunication Infrastructures course of the Master in Telecommunication Engineering. Although there are other publications that organize the information of the current regulations, this is the first publication that does so in English. The authors justify this need as the master's degree is taught in English, while it also contributes to a greater international diffusion of the Spanish regulations on Common Telecommunication Infrastructures.

In addition, the authors provide us with their vision of the Future of the Digital Home, commenting on Artificial Intelligence, The Internet of Things and Ambient Intelligence.

Thank you very much for this book.

Javier Pareja

Decano del Colegio Oficial de Ingenieros de Telecomunicación
de Andalucía Oriental y Melilla

Dean of the Eastern Andalusia and Melilla Demarcation of the Official
Professional Association of Telecommunication Engineers.

Foreword

The continuous advance in the development of information and communications technologies, led by the telecommunications sector, represents a substantial change in the model of our society, which is affected by a constant increase of new services, resulting in an improvement of quality of life as well as of life expectancy.

In addition, the technological advances produced in recent years have allowed for the development of new ultra-fast access to technologies that make the telecommunication services offered to end users more powerful, attractive, faster and more reliable. Some of these services require, for the provision to the citizens, the updating and improvement of the technical regulations related to common telecommunication infrastructures inside buildings. It is important to highlight that this updating and improvement could imply relevant changes to Spanish regulations in the future.

In this context, common telecommunication infrastructures play a fundamental role as they structure and guarantee access to these services from homes. This book presents the current Spanish regulations that define the characteristics

that these infrastructures must comply with, as well as the structure and content that must be presented by the CTI technical projects.

Finally, this book is mainly aimed at students of the compulsory course "Telecommunication Infrastructures" included in the Master in Telecommunication Engineering that is taught at the Linares School of Engineering, at the University of Jaén. Since this Master is taught in English, the justification for this book lies in the absence of bibliography in this language.

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