Chapter II
Developing Measures and Standards for the European Electronic Signatures Market

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ABSTRACT

The European Authorities have promoted a specific and innovative framework for the use of electronic signatures, allowing the free flow of electronic signature-related products and services cross borders, and ensuring a basic legal recognition of such facilities. The core aim was to promote the emergence of the internal market for certification products, mainly intending to satisfy various requirements for the proper use and immediate “adoption” of electronic signature applications related to e-government and personal e-banking services. Thus, a number of technical, procedural, and quality standards for electronic signature products and solutions have been developed, all conforming to the requirements imposed by the EU regulation and the relevant market needs. In the present work, we examine the role of standardization activities for the promotion of several needs of an “open” European market based on the effective usage of e-signatures, and being able to affect a great variety of technological, business-commercial, regulatory, and other issues. In any case, the transposition of legal requirements into
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INTRODUCTION

The digital technological landscape has changed significantly during the past decade. New communication technologies, new media, the Internet, and devices carrying new functionalities are expected to meet consumers’ demand for seamless, simple, and user-friendly digital tools providing access to an extended range of services and content (i2010 High Level Group, 2006). In fact, electronic communication via open networks such as the Internet has been remarkably increased and expanded, on a scale unimaginable some years ago. As a consequence, electronic communication networks and information systems have been developed exponentially in recent years and are now an essential part of the daily lives of almost all European citizens (European Commission, 2002); in addition, they both constitute fundamental “tools” to the success of the broader European economy in the international scenery (Chochliouros & Spiliopoulou, 2005).

In particular, networks and information systems are converging and becoming increasingly interconnected, thus creating a variety of potential opportunities for all categories of “players” involved. This rapid expansion concerns all sectors of human activity, whether business, public services, or the private sphere. Actually, global networks have truly become the “lifeblood” of our societies and economies: An overwhelming number of employees use a mobile phone, a laptop, or a similar device to send or retrieve information for their work. Furthermore, in multiple cases, such information can represent a considerable value, for instance, describe a business transaction or contain technical knowledge (Lalopoulos, Chochliouros, & Spiliopoulou, 2004).
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