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Protecting the communication: Data protection and security measures under telecommunications regulations in the digital age



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ABSTRACT

Keywords:

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This paper aims to provide a comparative overview and evaluation of various legal frameworks for electronic communications security in light of the recent developments in the electronic communications sector. The article also includes an insight on European Union and Turkish legal environment for data protection security in electronic communications sector.

The dynamic and ever-changing nature of electronic communication technologies brings brand new opportunities for quick access to extensive information and communication through integrated channels. On the other hand such dynamic nature paves the way for new challenges and concerns regarding electronic communications security. Both national and international sector regulators and policy-makers are encountering new threats for security of electronic communications while trying to adapt to convergence and the ongoing tendency for Internet Protocol ("IP") based digital networks.¹ Various legal frameworks come into force accordingly and legal security measures are created by the regulators and the sector actors, in order to overcome security concerns. Evolution of electronic communication technologies and new challenges that it yields, forces national and international authorities to work for unified solutions and cooperation in fighting against these challenges.

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1. Introduction

The history of communication begins with the history of humanity. Invention of the optical telegraph in the year of 1792 is accepted as a corner stone of the communication systems.² In 1862 first fax was sent by an Italian physicist's pantelegraph

and it was only 15 years before Alexander Graham Bell patents the telephone.³ A rapid development in communication systems and invention of fax machine with the ability of scanning, invention of telautograph, audio and radio transmission took place after the following years since the worldwide communication systems emerged by virtue of Internet in 1991.⁴ This

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¹ Centre for European Policy Studies (CEPS), E-communications: Regulatory Challenges for the Post-Lisbon Era, available at <http://www.ceps.eu/taskforce/e-communications-regulatory-challenges-post-lisbon-era>.

² William von Alven, Bill's 200-Year Condensed History of Telecommunications, <http://www.cclab.com/billhist.htm>.

³ Id.

⁴ Telecommunications and Industrial Development, United Nations Industrial Development Organization, Research and Statistics Branch Working Paper 14/2009, Anders Isaksson, Research and Statistics Branch Programme Coordination and Field Operations Division UNIDO, available at http://www.unido.org/fileadmin/user_media/Publications/Research_and_statistics/Branch_publications/Research_and_Policy/Files/Working_Papers/2009/WP%2014%20Telecommunications%20and%20Industrial%20Development.pdf.

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