1. INTRODUCTION

Telecommunication networks are currently the primary infrastructure for providing emergency services. These emergency systems are based on old-fashioned telecommunication technologies that cannot cope with the new Internet Protocol (IP)-based services that the average European citizen use every day. Furthermore, most telecommunication operators and providers have decided to migrate from circuit-switched networks to packet-switched networks after realizing the tangible benefits, which include convergence, rich services, cheaper maintenance, and improved user satisfaction. As Next Generation Networks (NGNs) are replacing the current telecommunication networks, it follows that the current emergency systems need to be upgraded as well in order to fulfil the NGN regulatory requirements in terms of emergency services.

The NGNs technologies make use of best of both worlds: flexibility, efficiency and innovativeness of IP networks, and Quality of Service (QoS), Security, Reliability, Customer-friendly features of legacy networks. The transition from circuit-switched telephony to IP telephony requires the provision of the same functionalities already offered in circuit switched networks. This applies, in particular, to emergency services. As Public Switched Telephone Networks (PSTN) will be removed in the future (this is expected to be achieved until 2020), operators are obliged to provide emergency services in IP networks as well. In many countries, this is already regulated by the government or on the way to be regulated. In this deliverable, we try to (1) better understand the current emergency systems (2) describe and evaluate the standardization work being achieved in order to handle the migration of these vital services to NGNs.

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