

INTRODUCTION

The objective of this deliverable is to provide a draft of the EMYNOS framework architecture describing the building blocks that will be implemented within this project in order to address Next Generation emergency services.

The first chapter deals with requirements classification and refinements. The EMYNOS requirements were also discussed in D2.3 (a previous deliverable), however, but to ease their accessibility to the readers, they have been classified based on various criteria including their relevance to the PSAP, citizens, and mobile operators or VoIP providers. Some additional requirements have also been identified while working on the different blocks of the architecture.

The second chapter discusses the communication part in the EMYNOS framework; the core functionalities that are needed to establish services and applications related to extended eCall, solutions for persons with disabilities, and warnings. A high level architecture is proposed where issues such as location information encoding and retrieval, emergency calls identification and routing, emergency calls presentation on the PSAP side, and exchanged data privacy are addressed. A particular focus is on the IETF and W3C standards that were specified to address these issues. The chapter also includes a section describing the elements of EENA long term vision of NG112 relevant to the EMYNOS framework.

The third chapter describes the EMYNOS vision for the extended eCall. This includes integration of additional sensor information into the transmitted data and the inclusion of new application areas like powered two wheelers and monitoring of cargo and individuals. These extensions are made possible by the introduction of SIP and allow the PSAP a more detailed overview of the emergency situation. These extensions must also be considered in relation to privacy and other standards.

The fourth chapter deals with the use of social media for emergency services. It analyses how social media can be effectively employed by a PSAP and describes which functions for social media data analysis will be implemented as well as how the results will be presented.

The fifth chapter explains how to include the solutions being developed to the requirements of people with special needs. Disability profiles of blind and low vision users, deaf and hard of hearing users, speech impaired users and motor disabled users are discussed. Native API proposed for Assistive Technology solutions is presented. Moreover, the chapter defines additional data that may be sent in the background to PSAP, containing information about the caller's disability and communication skills. Support with the use of symbol communication to individuals not able to speak or write is also described.

The sixth chapter deals with improving warning systems to support not just text but other media types and communication means.

The seventh chapter presents an initial study on warning system. The Turk sat warning application, the Fraunhofer FOKUS KATWARN applications and the APIs that will be used are explained.

Finally, an appendix is included with more details about previous chapters that could be useful.

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