# A novel infrastructure facilitating access to, charging, ordering and funding of assistive services

Gianna Tsakou[1], Helen C. Leligou[2], Nikos Katevas[2]

1 SingularLogic, 2 TEI Stereas Elladas, Psahna Evias, 34400 Greece
gtsakou@singularlogic.eu, leligou@gmail.com, katevas@teihal.gr

**Abstract.** Given that, nowadays, access to ICT is required for almost any kind of education, employment and commerce form, and is increasingly required for travel, it is mandatory to focus on integrating groups of users with any type of disability at a personally and societally affordable cost. In this paper, we outline an ICT-enabled novel infrastructure that significantly facilitates user access to a large set of specialised assistive services and enables small ICT players (e.g. web entrepreneurs) to develop novel services "on user/user group demand" supported by crowd funding. Our vision is to create an infrastructure that can move ideas more quickly from conception to market and consumer availability, that can be more efficient by being better targeted to user needs, that can move users closer to researchers and developers to ensure that the full range of needs are better addressed and that can reduce both the development and operation cost of assistive services. The system we propose consists of the Assistance on Demand (AoD) service infrastructure which aims to be a gateway for accessing on demand diverse types of human and machine-based assistive services. This AoD is accompanied by a flexible payment infrastructure that aims at enabling, for all relevant stakeholders (end users, service providers, etc.), the easy, flexible and reliable handling of multiple bills for different services, while at the same time supporting crowd-funding, as necessary, for user-driven assistive technology (AT) or service development. In this paper, we present the state-of-the-art technologies and approaches that will serve as the basis for the design and development of the AoD and payment infrastructures and then we discuss the requirements that these intertwined systems have to fulfill and draw high-level design directions.

**Keywords:** Service platform, Assistance on Demand, micro-payments, service description and ranking, non-functional ranking, crowd-funding

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