

BUSINESS INNOVATION SYMPOSIUM (E6)
Space-related Commercial Applications and Markets (2)

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FUTURE THINKING ON THE GALILEO AUTHENTICATION APPLICATION -INNOVATION BY
LIVING MOBILE

Abstract

The Galileo commercial service is one of today's challenges towards a successful exploitation of the European Global Navigation Satellite Systems (GNSS). This document underlines actual trends on the mobile market showing that convergence of new breakthrough technologies and GNSS positioning is significantly progressing. In particular, actual and future issues and consequences for the development of a GNSS-based authentication application encompassing the users' identity, positioning, velocity and timing are investigated. Authentication could result in a "sustaining/revolutionary innovation" allowing the mass diffusion of existing mobile services (e.g. by means of digital signatures and smartphones used as e-wallets). It has been shown that barriers related to security and privacy issues can influence the development rate of this new era of mobile services. Authentication could allow navigation satellites to become definitely a key complement of new terrestrial wireless-based technology. It could contribute to many current EU policies such as the ones for ubiquitous society, smart cities, intelligent transport systems, etc. The development of a robust authentication application within the Galileo E6b frequency band is a key step for the Europe Union to confirm its ambition to become a leading knowledge-based society. In order to try to achieve this future scenario, the service requirements have to be fixed and proper strategic choices have to be taken by the EU in the upcoming years.