

IST Project Fact Sheet

Electronic commerce Legal Issues Platform II (WHYLESS.COM)

Funded under 5th FWP (Fifth Framework Programme)

Action Line: 2000-2.1.3 Mobile and Ubiquitous eCommerce and eWork

Project URL: <http://www.whyless.org/>

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whyless.com will research the economic and technical requirements and performance of an open mobile radio access network based on ultra broadband radio transmissions and fixed/radio network resource brokerage. In the frequency spectrum domain this will be achieved by the standardisation of the said radio transmission scheme, such that a tradable commodity is created, which will be subject to open market offer and demand principles. New network entities will settle user demands and network offers in a service contract clearly addressing Quality of Service requirements and cost. The expected impact is ubiquity and guaranteed QoS for mobile and fixed users. A new radio transmission scheme will be employed under re-use of already allocated and used frequency bands. The project principles of near autonomous and multi-owner network elements, made coherent by enhanced versions of the Internet Protocol, will enable SME contributions to the network and enable new eCommerce and eWork scenarios in the build, operation and use of the open mobile radio access network.

OBJECTIVES

The key objectives of whyless.com are concerned with the release of the enormous sleeping economic potential of wireless communication. whyless.com will research scalable and tradable radio spectrum and network resource commodities in order to maximise the technical and economical efficiency of information transport resources under guaranteed Quality of Service conditions, while enabling steady evolutionary network growth and swift adaptation to future user and business requirements. Open market principles, applied to network resources, in conjunction with new radio transmission technologies will be researched in whyless.com as to their possibilities to elevate flexibility and connectivity to prime network features. whyless.com will outline novel economic and business scenarios, particularly for SMEs, and analyse the societal impact. Demonstration of feasibility of the envisaged radio technology, which 'recycles' already used spectrum, is another objective with impact far beyond the whyless.com project. This technology, supported by unlayered network

architectures may (in future) avoid spectrum auctioning and facilitate a smooth flow of spectral resources into the market place.

DESCRIPTION OF WORK

All work undertaken in whyless.com is aiming at demonstrating the feasibility of the open mobile radio access network and its two fundamental principles, which are information transport capacity broking and seamless mobile access. whyless.com will define architecture(s) and model(s) of a system providing ubiquity and guaranteed Quality of Service for mobile users on the basis of open market network capacity trade. All methods of investigation will be applied, from analysis through assessment to simulation and emulation, in order to demonstrate in an encompassing view, which covers all aspects of the novel network, the fundamental feasibility of the current vision. This implies that critical areas will be researched in more depth than areas where technology and procedures are believed to be in place or easily brought in place. Exploration of the limits of the proposed vision and its economic and technical stability will indicate the degree of openness suggested by the vision. This will include analysis and description of novel applications embedded in business scenarios, as well as the possibility of small scale contributions to the build and the operation of the network. According to the nature of feasibility study work will start and progress on all levels of the system simultaneously in order to prevent the open mobile radio access network from being defined by what technology currently seems to offer, but also to prevent that individual high level requirements lead to technological problems which endanger the realisation of the vision. Steady confrontation of the makeable with the desirable in the light of the vision will lead to an answer of when, how and under which circumstances the vision may be turned into an operative system. A high degree of information exchange, regular meetings and deliverables on work package level will help to create iterative convergence towards the project goals. Next to analyses and simulation, a multimedia enhanced demonstration of the open mobile radio access network will be developed. Using a novel 'electronic business descriptive language', its operation, features and performance will be demonstrated to wide public.

Project details

Project Acronym: WHYLESS.COM

Project Reference: IST-2000-25197

Start Date: 2001-01-01

Duration: 39 months

Project Cost: 6.15 million euro

Contract Type: Cost-sharing contracts

End Date: 2004-03-31

Project Status: Completed

Project Funding: 3.49 million euro

Participants

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