Case Study

wavecom
communications engineering

REDE PME
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Faro Airport – LocON Project

Implementation of a Wireless Network infrastructure

The LocON project aims to integrate wireless location and communications embedded systems, managing all these coexisting wireless systems in an efficient way.

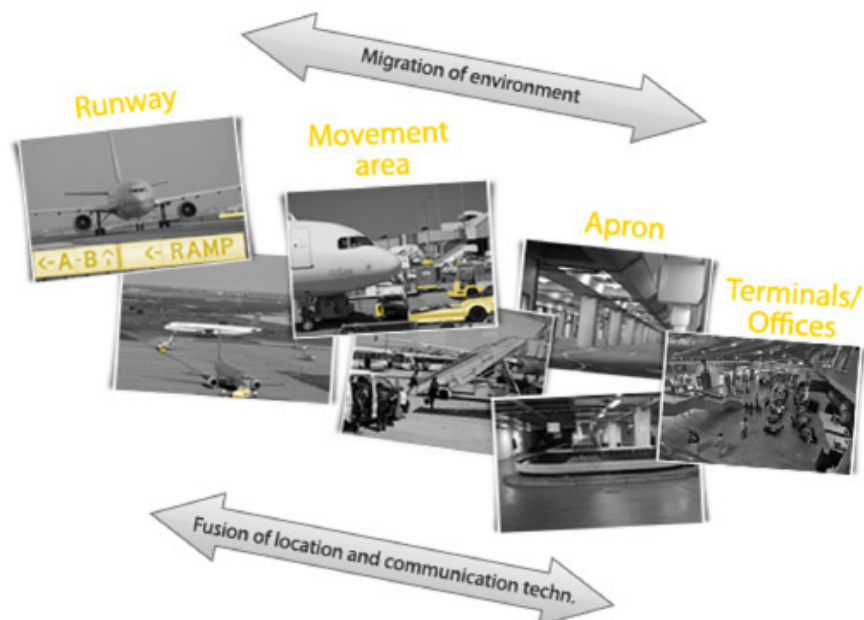# Case Study

Background

The LocON project aims to integrate wireless location and communications embedded systems, managing all these coexisting wireless systems in an efficient way. A new platform was implemented in order to control, in a more efficient, safe, robust and flexible way, large infrastructures, such as an airport.

A system like this can be applied, afterwards, to other scenarios such as a port, a hospital, construction works, football stadiums, industrial sites or even metro/train stations.

Thus, complex application scenarios, as the ones mentioned above, may benefit from the control and monitoring of the different services, for the efficiency of their operations. Additionally, the security of staff and users is also improved.

The project in numbers

The first phase of this project includes the partial coverage of the outdoor area of Faro Airport and the total coverage of the Departures Terminal Luggage area. In the following phases, the total outdoor area of the Airport as well as the remaining ones will be covered.

The solution

Implementation of a Wireless Network supporting the transport of the information collected by each one of the different location systems.

Gathering the information of all the located devices, the system can ensure the global management and control, in a quicker and more effective way.

Main features

The project includes different operational areas with many different contexts of radio propagation such as metal, outdoor areas, indoor/outdoor transitions. In any of these scenarios it is necessary to ensure mobility.

Thus, it was implemented a low latency communications network, capable of supporting the diverse location systems simultaneously, considering high standards of robustness, resilience and reliability.

Besides fulfilling the requirements mentioned above, the network must be capable of managing, in a transparent way, the mobility of each subject or object to locate, providing the best and more efficient way to communicate, in every situation.

Associated services

"The implemented Wi-Fi network is also capable of supporting all the communications using Wi-Fi devices, for operational support, in a private and safe way, besides being responsible for the transport of all wireless communications of the LocON system (real time)."

The implemented Wi-Fi network is also capable of supporting all the communications using Wi-Fi devices, for operational support, in a private and safe way, besides being responsible for the transport of all wireless communications of the LocON system (real time). For this purpose, QoS mechanisms are implemented in order to give priority to all the services.

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About Wavecom:

Wavecom was established in 2000 and has three core fields of activity:
Wireless Networks and Networking, Unified Communications and R&D.
Our core business consists of the development and integration of
telecommunications solutions, specialized in Radio and Unified
Communications technologies. The company started its activity as a
telecommunications integrator specialized in Wireless, expanding then its
activity to the Unified Communications field.
In Portugal, the company has 29 employees. It is also present in Cape Verde
and Brazil.
Wavecom is the market leader for wireless connections in unlicensed band and
has developed the major VoIP project (Open Source) in Europe.