

# The Wireless World Indoors

## ... for Public Venues

Provision of enhanced in-building wireless services to provide a mix of services to meet the needs of all customers and provide adequate public safety

### The Challenge

Public venues such as airports, stadiums and shopping centres have the unenviable task of providing seamless multi-carrier, multi-service wireless coverage for thousands of visitors, often on a daily basis. In addition, many public venues are anxious to take advantage of the numerous advances in wireless technology which could enhance customer experience and give them the edge over their competitor venues. Addressing the differing needs of so many people, from staff, media representatives, fans and business travellers can be achieved through the provision of a reliable, ubiquitous in building wireless coverage.

Wireless services may include:

#### Commercial cellular communications

The emergence of pioneering, new mobile applications has dramatically increased the mobility and expectations of staff and the general public for ubiquitous coverage wherever they may be in the building and enterprises are keen to provide them with the wireless service providers and services of their choice.

#### Public safety communications

Owners of public venues have the need and very often the regulatory requirement, to improve the provision of wireless services in their facilities. This is most apparent in the area of public safety. In recent years, ensuring the safety of emergency service personnel entering a building in their day to day work and in emergency or disaster situations has become critical.

#### Building automation

The ability to run applications such as motion sensors, door locks, lighting, alarm sensors etc...wirelessly over the core in-building infrastructure, reduces energy consumption, operating costs and disruption.

### The Benefits of Enhanced Wireless Coverage

- Optimisation of your IT expenditure through the provision of a reliable, in building wireless coverage.
- Provision of a safe, secure environment through ubiquitous public safety coverage.
- Enhance customer experience through anytime, anywhere access to voice and data applications.
- Selective streaming of services to certain areas within the building or campus.
- Staff work more effectively, productively and collaboratively.
- Create new revenue opportunities – attract new tenants
- Positive ROI for each stakeholder – it has been shown that each stakeholder involved in the provision of wireless infrastructure in the corporate sector can gain a positive ROI of up to 20 X original investment with the addition of public safety and security (Source: IBW Alliance “Wireless Overview” Vol5. No5). Stakeholders within the public venue sector could expect to see similar returns.

How can you, as an IT provider, building owner or manager within the public venues sector, effectively provide coverage for commercial and public safety wireless to meet customer needs, tenant's demands and regulatory requirements?

## The Solution

There can be many challenges in the provision of in-building wireless coverage. Different materials such as steel and tinted glass, cause in-building penetration of RF signals to weaken resulting in reduced data rates and even complete loss of signal. Without comprehensive, reliable and unified coverage, the venue is at risk from poor signal, and black spots which would lead to lapses in customer cellular and laptop coverage and vital emergency service communication systems.

Zinwave's unique 3000 Wideband Active Distributed Antenna System (DAS) removes many of the traditional issues and considerations associated with delivering multiple RF services in buildings. It provides ubiquitous coverage for all wireless services on one easily installed system. In addition, services can easily be routed to the areas of the building where they are required i.e. WiFi services can be routed to public access areas, but perhaps not seen as necessary in food preparation areas - see diagram.

## Summary...

By enabling the latest exciting advances in wireless technology and emerging mobile applications, the public venue distinguishes itself as an innovative leader within the industry. However, in order to take advantage of these exciting new developments, it is essential that there is ubiquitous, reliable in building wireless coverage in place.

## Key benefits:

**True Wideband** - Supports any service, protocol and modulation scheme from 150MHz to 2700MHz

**Low component count** - With as few as four components, an in-building wireless network can be built to support any mix and any number of services

**Lowest cost per sqm** - Comprising of a single hardware layer, the Zinwave 3000 system becomes more and more cost effective compared to a traditional solution with each additional service

**No costly upgrades** - Additional services can be added without the need for supplementary hardware, therefore avoiding further cost & disruption

**Easy planning & installation** - Self-calibration and auto-configure features simplify design & deployment

## One solution, one system for all your wireless needs...

