The SSE Arena, Belfast is the largest indoor arena in Northern Ireland and is the home venue for the Belfast Giants ice hockey team.

The multi-purpose venue opened in 2000, boasting, for the time, state-of-the-art facilities. Despite ongoing upgrades, by 2015 the network was in need of a major overhaul. According to Clara Killen, digital marketing development manager for The SSE Arena, Belfast, the aim was to create a ‘digital arena’ with seamless connectivity for visitors, and a host of new IP services.

“Investment in the visitor experience is paramount. We don't stand still,” explains Clara Killen. “An upgraded network will support improvements in retail, in CCTV, entertainment, and more right across The Odyssey Trust site for the arena, Belfast Giants and W5. The opportunities for digital are huge.”

Working with long-term tech partner, KNI, The Odyssey Trust selected Aruba to build a wired and wireless network. This would allow guest access to the network, as well as provide the infrastructure on which to run IP telephony, IPTV and a new retail service.

“Aruba is a market leader. When we looked at examples of Aruba network solutions in action, particularly at venues in the US, we had the confidence they could deliver the necessary quantity and quality,” says Brian Hughes, head of facilities, Odyssey Trust Company.

With the Aruba solution in place we’re in a far stronger position to engage with guests, before, during and after they visit.

CLARA KILLEN
DIGITAL MARKETING DEVELOPMENT MANAGER FOR THE SSE ARENA, BELFAST

**ARUBA WI-FI + AIRWAVE LIFTS VISITOR EXPERIENCE, BOOSTS REVENUES AND SECURITY AT THE ODYSSEY TRUST SITE – THE SSE ARENA, BELFAST, BELFAST GIANTS AND W5**

**DEPLOYING PERVERSIVE ENTERPRISE WI-FI**

KNI deployed a pervasive enterprise Wi-Fi system across the Odyssey site, that includes Aruba 802.11ac indoor and outdoor access points (APs) and 7200 Series Mobility Controllers.

KNI further increased efficiencies by unifying the wireless and wired network with Aruba's Mobility Access Switches. Plus, The Odyssey Trust adopted Aruba's vendor-agnostic management tools AirWave, for optimising Wi-Fi experiences, and ClearPass, for strong security.

“As well as the public network, there is also the corporate network,” says Marcel McAlinden, Business Solutions Manager, KNI. “ClearPass ensures employees have authenticated access to the corporate network, with different rights and better speeds.”

**IMPLEMENTATION TO MEET A TIGHT DEADLINE**

After 15 years of being wireless-free, the network upgrade was given a tight deadline.

Besides the logistical complexity of planning coverage across the 23-acre site (the wired network alone required 120km of cabling), KNI needed to account for dramatic fluctuations in network loads.

**REQUIREMENTS**
- High-density, unified Wi-Fi and wired access
- Mobile app that engages visitors on location
- Scalable, simple guest access

**SOLUTION**
- 802.11ac Indoor & Outdoor APs
- 7200 Series Mobility Controllers
- Mobility Access Switches
- Aruba ClearPass for access control
- Aruba AirWave for network management

**BENEFITS**
- Omnipresent and high bandwidth internet connection for visitors
- Connection and control over hundreds of digital signs and PoS stations
- Seamless visitor experience on the Arena app for enhanced digital engagement
- Generation of incremental revenues via the app
- Enablement of future adoption of Aruba Beacons for further guest engagement initiatives
- Robust, unified and secure wired and wireless network
“Obviously, for most of the day the arena stands empty, but half an hour before an event the arena has 11,000 people logging on to the network,” says Marcel McAlinden. “And they expect to be connected from anywhere, quickly and without a hitch. Then, as soon as the gig starts network usage drops off a cliff, building again as the show goes on. However W5 operates during working hours and not in the evening so these fluctuation across the site needed to be considered.”

ENABLING DIFFERENT SYSTEMS TO TALK TO ONE ANOTHER
The overhaul met its deadline. In the year since, Brian Hughes says the performance has been remarkably unremarked upon: “We don’t see any issues, and we don’t have any negative feedback from users. Very quickly, we’ve gone from a position of having no Wi-Fi to visitors taking it for granted.”

Wireless data traffic, is rising month on month, but remains seasonal. Total data traffic for January 2017 stood at 1.315Tb versus 1.051Tb in December 2016; 1 Million unique sessions at 886,661 in December. Average traffic per user in January was 47Mb (vs 41Mb in December ).

The SSE Arena, Belfast has installed 200-plus digital signs and 115 new EPOS terminals. There is IP telephony across the site, along with IP CCTV. Social media and digital marketing are highly strategic initiatives for the SSE Arena. Belfast Giants and W5 which is why they have created an app for visitors, enabling, among other features, users to order and collect food and drinks and benefit from the convenience of a priority line called the ‘App Queue’ to collect their refreshments when ready.

“We are in a far stronger position to engage with guests, before, during and after they visit us, be it in the Arena, at a Belfast Giants game or in W5,” explains Clara Killen. “We can connect the whole experience, from the moment they buy a ticket to where they sit, what they buy and how they move around the venue. A lot of the systems are talking to one another. We're beginning to build a single view of our customers.”

MORE RESILIENT, MORE ENGAGING
The Aruba solution, with its reliability, visibility and security has transformed The Odyssey Trust site into a safer environment, the visitor experience is more engaging and the site is ultimately performing better.

The entire site is now covered by 140 IP CCTV cameras, including 1,500 car parking spaces. Brian Hughes says the new cameras operate better in low light, and make it easier to track incidents: “The whole security package is much enhanced from what it was.”

IPTV in the Arena shows replays of action at a Belfast Giants game, 200 digital signs improve way finding and promotions. All managed off the Aruba network.

The app has had over 50,000 downloads to date. It has led to an increase in food and beverage sales, without impacting traditional sales, particularly among the 1,200 season ticket holders at the Belfast Giants’ 30 home games.

“This is really important,” says Clara Killen, “Belfast Giants fans are regular visitors and we want to provide the best experience for them. The more regularly people visit the Arena, the more likely they are to download and use the app. For Belfast Giants games, around 10% of food and beverage orders go through the app, where regular visitors understand they benefit from the fast-track queues.

“We can’t affect the outcome of the game, but we can make sure visitors have the best experience possible while they’re here.”

CREATING A SINGLE VIEW OF THE CUSTOMER
Data is an invaluable asset and the Arena, Belfast Giants and W5 are collecting a lot of it from the Aruba network via AirWave and ClearPass reports. The next step, says Clara Killen, is to better understand the data. “We have 12 months of data – from point of sale ticketing to app purchasing data so over the next 18 months we'll be creating a CRM tool to give us a single view of the customer.”

Phase 2 of the app is underway. The plan is to create separate experiences for different user types (recognising the difference between an ice hockey season ticket holder and a once-a-year concert visitor), with an end-to-end solution, from ticket purchasing to car parking to personalised alerts.

The site is also looking at Beacon technology with a view to developing the app further. This could improve wayfinding, interactive displays within the W5 discovery centre, and offers the possibility of personalised promotions.

Clara Killen says early analysis of network usage is helping inform her digital marketing strategy. “For instance, if it’s a One Direction audience we know they’ll be using Snapchat and Instagram. A Belfast Tattoo audience will be older, more likely to be using Facebook. Clearly that influences how we communicate with target markets.”

Keeping this data secure is a top priority for The Odyssey Trust, and this is where Aruba ClearPass plays a major role in protecting the network.

AN INNOVATION CENTRE OF EXCELLENCE
In innovation terms Clara Killen says the Aruba network catapults the Arena, Belfast Giants and W5 into the big leagues: “We were the first venue in the UK to develop an app. We’ve had venue operators from Sweden and Norway over to look at what we’re doing.

“It’s been lovely to say Belfast is leading the way.”