

## Amsterdam ArenA Supports New Services with CommScope's SYSTIMAX® GigaSPEED® X10D Solution

Investment in single network infrastructure helps to transform football  
and concert venue into a 'Smart Stadium'



Over the last 12 years, more than 20 million people have visited football matches, concerts and corporate events at the Amsterdam ArenA. The stadium plays an important role in the sport and cultural life of the city of Amsterdam and also has an international reputation as a technology pioneer.

With the rapid development of modern technology, even the latest techniques used during the construction of the ArenA stadium were becoming slightly outdated. Apart from that, the Amsterdam ArenA always had ambitious plans to offer new services to visitors. In order to support these plans, it was decided to upgrade the stadium's cabling infrastructure with SYSTIMAX network infrastructure solutions from CommScope.

### **Smart Stadium**

"It's important to monitor our competitiveness. It has become as easy to travel to a concert in Frankfurt or Düsseldorf," says Coen Keizer, Network and Telecom Manager, Amsterdam ArenA. "We have also noticed that visitors to large venues like the ArenA appreciate a personal approach."

To meet this demand, the ArenA has developed the 'Smart Stadium' concept.

"Try to imagine a personal digital assistant that guides you to the stadium from the moment you leave your house. All aspects of the visit will be communicated via personal messages to the visitors' mobile phones," says Coen Keizer.

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— Coen Keizer,  
Network and Telecom  
Manager of the  
Amsterdam ArenA

It will be possible to receive information about which train to take to the stadium, where it is best to park a car and details of an event they attend. Once at the stadium, the assistant will answer questions like, where the nearest kiosk or emergency exit is located and what merchandise is available. Although there will be stewards helping the visitors in the stadium, the digital assistant will be able to provide additional services.”

#### **One Platform**

To be able to provide the new communications services, the upper two tiers of the stadium are equipped with SYSTIMAX GigaSPEED® X10D cabling. In addition, the entire stadium is served by Cisco IP infrastructure. This forms the foundation of the network infrastructure of the stadium.

The ArenA was looking for one transport layer for all its systems. Therefore 750 screens for narrow casting, air conditioning, heating, lighting and operation of the retractable roof are connected to the IP network.

Coen Keizer is responsible for creating the new infrastructure. He is working on the concept and its implementation together with KPN, a CommScope BusinessPartner.

“Everybody finds it very obvious that broadband internet is available everywhere in the stadium,” he says. “We could have never predicted that twelve years ago. Then the ArenA was one of the first to provide ISDN connections to a limited number of places. Today everybody would like to have access to the Internet. We are also receiving more and more requests for organizing business events where broadband Internet is absolutely essential. The existing ISDN connections cannot support these requirements.”

“The ArenA would also like to provide additional services to hospitality ‘Skyboxes’. It will soon be possible to place catering orders from the eighty Skyboxes via a digital touch screen rather than by telephone. Digital television will also be available. This will require installation of all new network outlets. We would also like to make sure that business visitors in the ArenA’s ten meeting rooms can enjoy the benefits of a new cabling infrastructure.”

#### **Extensive Investment**

The choice of the SYSTIMAX GigaSPEED X10D solution was based on quality and trust. Coen Keizer comments: “If you are using one network to run everything, it is very important to have confidence in the cabling infrastructure. We are totally dependent on the physical network. With this kind of investment, it is important to know who you are doing business with.”

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The investment in new infrastructure for the ArenA is significant, but so are the opportunities to earn it back. “Through the network, we can offer many new services, sell more products and make a visit to the stadium a unique experience,” says Coen Keizer. “Ultimately, it is also intended to attract more visitors to the stadium.”

The GigaSPEED X10D cabling supports transmission speeds up to 10 Gb/s and meets new standards including ISO Class E<sub>A</sub> and Category 6A. This assures the future-proof infrastructure of the ArenA. Coen Keizer says: “Replacement or extension of the cabling is a very expensive and time consuming process. With the GigaSPEED X10D Solution, we have ample growth potential.”

#### **From Football Temple to a Concert Hall**

To manage all its cabling infrastructure, the Amsterdam ArenA is using the SYSTIMAX iPatch® System. “The iPatch System gives us the flexibility we need as an event location,” says Coen Keizer. “Our network has to be regularly adapted to the specific requirements of an event. The stadium must be easily transformed from a football temple to a concert venue.”

"For example, concert organizer Mojo requires a hundred workstations in the stadium during the event. Besides, in order to install the connections correctly, it is also important to know whether the stage is placed in the middle or in the North of the stadium."

Currently, the ArenA works with a database that contains details of all network connections. If a component fails or is disconnected, the IT manager will not receive any notification. If a connection is changed, the database has to be manually updated.

The iPatch System ensures that this happens automatically and without errors. Coen Keizer says: "During the event, everything should go smoothly. The connections are secure, because the system provides continuous monitoring and, in addition, the specific network set-up can be reused for similar events with the same requirements. This will save us time and money."

#### **Project Finish Line**

At a later stage of the project, after completing the first personalized services in summer 2009, Coen Keizer would like to introduce an integrated solution. This will link the payment system to the stadium access control and the Customer Relationship Management System.

Commenting on the installation, Carl van Bethray, Country Manager of CommScope Enterprise Solutions in the Netherlands said: "The high performance network infrastructure gives Amsterdam ArenA the solid foundation it needs for innovative new services. The iPatch Solution also provides a real-time interactive monitoring and control over the entire physical network. It gives the status of an individual communications channel, displays all connectivity details, communicates with network switches on LAN and alerts about potential problems.

The combination of 10G transmission and advanced infrastructure management gives the ArenA freedom to introduce advanced new systems without fear of connectivity issues. And that helps to continue maintaining its position as a venue that other stadiums look to for ideas and inspiration."



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