

SOUND PROOFED

NEXO outlines their GEO S12-ST sound reinforcement system, which offers high-output long-throw loudspeakers that have been developed specially for stadium and arena use.

The installation of high-specification audio systems in stadia and arenas around the world is a trend driven by increasingly sophisticated spectators as well as international regulations. French manufacturer **NEXO** is one of the leading suppliers of high-quality sound reinforcement systems, drawing on 30 years of experience supplying the concert industry to produce loudspeakers that can throw audio over large distances without loss of intelligibility or power.

Recently installed for FC Anderlecht in Brussels, at the **Stade Olympique** in Lausanne, and going into stadia in Lens and Montpellier in France, NEXO systems are a popular choice with acoustic consultants seeking to meet safety standards as well as providing superior entertainment systems.

Generally referred to as PA/VA systems, these multipurpose audio installations are technically more complex and versatile than standard voice-evacuation systems (VA). The VA part of the system is comprehensively regulated; in addition to generic national and European safety standards, there is specific legislation by governments, and targets defining the venue's environment are set by sports management bodies, such as FIFA and the Olympic authorities, prescribing, for example, the minimum measurements for intelligibility and sound levels.

PRAGUE'S O2 ARENA

The **O2 Arena** in Prague is the latest large-format multipurpose venue to embrace NEXO's GEO S12-ST sound reinforcement systems, high-output long-throw loudspeakers developed specially for stadium and arena use.

Built for the 2004 Men's World Ice Hockey Championships, the O2 Arena is home to the HC Slavia Praha and HC Lev



Praha ice hockey teams and also hosts a range of other sporting and corporate events and concerts. Capacity-wise, its audience record stands at nearly 19,000 fans for a Madonna concert.

Formerly known as the Sazka Arena, the venue needed to replace its existing PA system installed 10 years ago; which, by the venue's own admission, had been under-specified and under-powered from day one. This time, the brief required a complete PA/VA system to provide information and emergency announcements as well as music. The new system needed to integrate easily into the Arena's existing systems, and to represent good value for money.

"We looked at the best technology around the world," says Jan Plihal, head of media technology at the

Arena. *"After much research and negotiation, we selected NEXO's GEO S12-ST system, which uses a total of 96 loudspeaker cabinets."*

DELIVERING HIGHER SPL & ENHANCED SPEECH INTELLIGIBILITY

The GEO S12-ST cabinets are flown from the Arena's central 'cube', carrying large screens on each side, which descends from the ceiling for sporting, congresses and corporate events. When the cube is lowered, it is still 24m from the cabinet to the floor, and this is where the GEO S12-ST's long-throw capability comes into its own. These cabinets have been developed from the standard GEO S12 concert sound design to deliver higher SPL (volume) and the

enhanced speech intelligibility required for stadium and arena applications.

24 subbass cabinets enhance events such as motor sports, BMX championships and the Davis and Federation Cup tennis matches.

"These days, events like this are more and more of a show," says Plihal. *"It's not just about the sports, we have to think about the commercials as well."*

Although a typical level for an ice hockey match is 90-94dBA, a SPL of 106dBA is now possible in the Arena. The system is driven by 16x powerful amplifiers, situated in rack cases in the roof, providing 256KW of power.

The O2's new PA system perfectly meets Plihal's motto, *"to be prepared for all"*, as he explains: *"We have one of the best arena acoustics, with a reverb time of less than two seconds. The seats are acoustically treated, so there is little difference to the sound whether the venue is empty or full. The NEXO loudspeakers have been positioned to minimise the small reverberation problems we get from the glass-fronted VIP boxes. We expect excellent audio for speech and music, and the implementation of the emergency system is the most important thing."* ■

SHOWCASE
SOUND
SYSTEMS
& A/V



The O2 Arena in Prague is the latest large-format multipurpose venue to employ NEXO's GEO S12-ST sound reinforcement system.

Smart speakers
for clever people

From touring sound to fixed installations, audio professionals spec NEXO for the high levels of performance and reliability that come only from a truly innovative approach to speaker system design.

Find out more at www.nexo.fr

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