

# COMMERCIAL CASE STUDY

EXHIBITING AV EXCELLENCE: EXPO TRADE FAIR CENTER - KRAKOW, POLAND





## EXHIBITING AV EXCELLENCE: EXPO TRADE FAIR CENTER

### COMMERCIAL INSTALLATION LOCATION: KRAKOW, POLAND

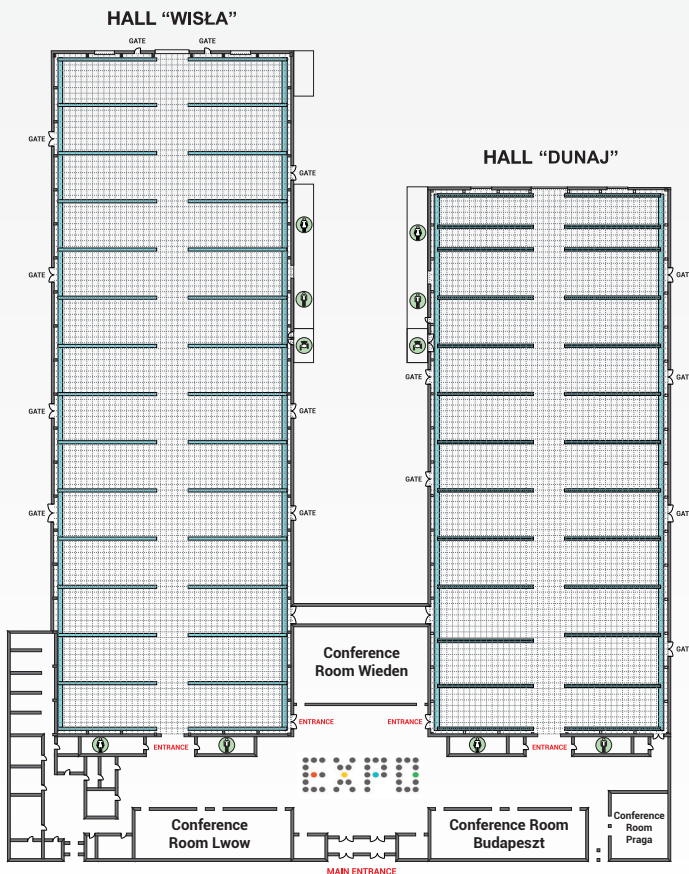
Completed in July 2014, the EXPO Trade Fair Center in Krakow, Poland was designed to be the most advanced such venue in region, and considerably larger and more versatile than its predecessor located in the old trade halls of Krakow.

The new space afforded designers greater possibilities in terms of what the venue could be used for, offering the flexibility required by modern trade fair venues to accommodate events of any kind and any size.

With technology integral to any modern exhibition venue, AV and communication was one of the most important areas of attention for the designer to offer the kind of service expected by exhibitors and attendees, with signal management, audio systems and video distribution all required to provide the kind of faultless reliability and high quality without compromising features that meets the demands of any event.

The integrator, Signum, chose a WyreStorm hybrid HDBaseT / HD over IP distribution comprising of a series of HDBaseT matrices, 70m and 100m HDBaseT extenders, a switcher/scaler and NetworkHD™ to deliver signals throughout the venue, as Signum CEO Grzegorz Augustyn explains.

"The natural choice was to use WyreStorm as the leading supplier of HDBaseT solutions and equipment that offer the level of reliability required for this kind of extensive use. As events are held almost every week, weekends and holidays, often more than 10 hours per day and sometimes 24/7 for two or more days, the reliability of an installed solution is a key consideration when specifying equipment. If you combine this with WyreStorm's reputation as a manufacturer of switchers and extenders, the client needn't be concerned about what kind of content is being transmitted or whether it can be distributed."



Digital signage information greets visitors at the open plan main entrance, with the hallway leading to a 4000m<sup>2</sup> exhibition hall to the right and another 5000m<sup>2</sup> hall to the left with a number of offices and facilities to the side and a first floor restaurant serving the venue above the main exhibition area.



Connected to entrance and exhibition halls are 4x conference rooms featuring 15 projection systems that can be partitioned into individual sections to accommodate smaller conferences, meetings or training sessions. Each partition in every conference room is afforded a pair of floor boxes offering HDMI, VGA with stereo audio and MIC XLR connectivity and its own screen for digital signage or displaying content from floor boxes.

The exhibition halls themselves feature a further 21 floor boxes and 3 large projector screens, with NEC and Sharp projectors fed by a combination of WyreStorm HDBaseT and NetworkHD, as Grzegorz explains:

"In addition to the HDBaseT system, for exhibition halls we introduced WyreStorm's NetworkHD IP transmitters and receivers to give the client the flexibility of arranging space based on their own IP networks – a decision certainly appreciated by the client as event organizers use this HD over IP system extensively due to its quality and flexibility."



WyreStorm's NetworkHD Product Manager, James Meredith, explains this 'hybrid distribution' use of both HDBaseT and HD over IP is becoming more commonplace as the requirements of projects seek to utilize the benefits each technology offers.

In addition to the cost benefits and ease of installation of HD over IP, in a certain space not all screens would necessarily be large enough for a higher quality, uncompressed HDBaseT transmission to be needed or the resolution required by those screens might not necessitate an uncompressed transmission."

"Similarly, in some install environments IP is not always appropriate and HDBaseT might be more suitable, such as if a client does not want to include video over a network, if a high quality network was not initially installed or where the quality of an uncompressed transmission is paramount over the lower bandwidth compressed content – if a client is using a \$100,000 projector, they would likely prefer to send uncompressed content through an HDBaseT switcher rather than compressed content over IP."

From the perspective of WyreStorm's product offerings, in future there won't be the need to decide between HDBaseT matrix switcher or IP because all lines will be mutually compatible and able to work together. In many ways 'hybrid distribution' offers the best of both worlds."

## WYRESTORM CASE STUDY

As the entire EXPO Trade Fair Centre system is divided between conference rooms, exhibition halls and public space, all permanent source and distribution equipment is located in 3x system AV equipment racks in a back office to house the central management and switching of audio and video signals. Given the number of exhibitors or conference room attendees that can be accommodated at one time, each with their own content on laptop, mobile device or any kind of other storage device or media player, the client stressed a need for a range of digital and analog connectivity to be solution. The solution as installed by Signum was a WyreStorm 11x2 multiformat switcher/scaler to accommodate all eventualities.



Signum's Grzegorz Augustyn concludes by noting how the strengths of a hybrid distribution of HDBaseT and HD over IP enabled them to achieve the objectives of the project:

"Due to the long distances between areas, transmission protocols within HDBaseT and NetworkHD were used to enable the transfer of full HD signals with audio to the centrally located equipment, with everything integrated using RTI automation, with WyreStorm offering control drivers for all their products, and other low current systems as per local regulations. Digital signage sources needed to be incorporated into our infrastructure, which added additional players to the system, so thanks to WyreStorm HDBaseT and NetworkHD they are now working under full load almost 24/7 on certain screens."

### EQUIPMENT LIST

Product	Description	QTY.
WyreStorm MX-0808-PP	8x8 HDBaseT matrix switcher	3
WyreStorm MX-0404-PP	4x4 HDBaseT Matrix Switcher	1
WyreStorm SW-1102	11x2 Switcher/Scaler	11
WyreStorm EX-1UTP-IR-100-EDID	HDBaseT Extender set (100m/328ft)	19
WyreStorm RX-70-IR-PP	HDBaseT Receiver (70m/230ft)	13
WyreStorm NHD-IP-TX	NetworkHD Transmitter	2
WyreStorm NHD-IP-RX	NetworkHD Receiver	2
WyreStorm NHD-IP-CTL	NetworkHD Controller	1

### OTHER EQUIPMENT USED:

NEC and SHARP Projectors with various resolutions  
 AVERS and ADEO screens  
 Ecler audio amplification equipment  
 Clearone sound processing and mixing  
 Sennheiser microphones  
 RTI control system.

### ABOUT THE INTEGRATOR:

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A passionate team of experienced AV professionals based in Krakow, Poland, Signum have a well-deserved reputation for pushing the boundaries of integration by combining years of experience, knowledge and first class engineering to create advanced multimedia technology and integrated building automation systems for commercial projects.

With a highly skilled, trained and experienced engineering team, Signum's innovative solutions are born from a belief in aligning the high quality and trusted components from leading manufacturers to offer the very best in quality and cost efficiency for every investment and enterprise.