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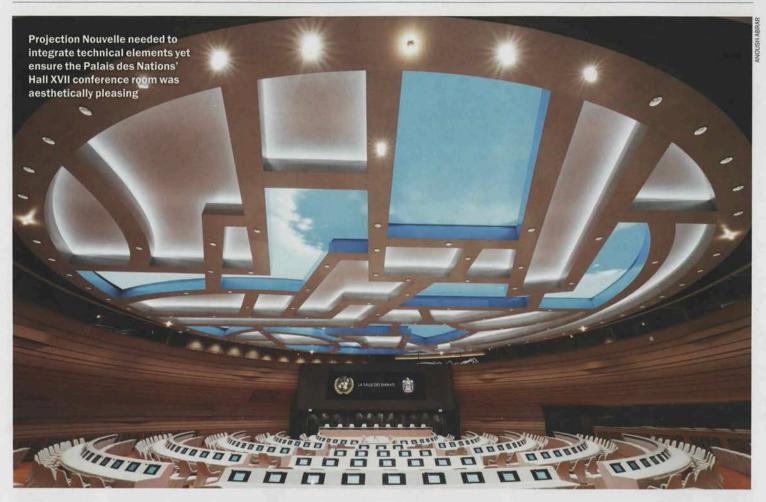
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AV excels in the hall of fame

Audio visual challenges don't come much greater than renovating one of the largest diplomatic centre's conference halls. Zoe Mutter examines the mammoth task faced and the solutions that helped create a meeting environment of the highest technical standard.

Aside from the United Nations offices in New York, the European headquarters in Geneva, Switzerland is the second largest UN centre in the world and demands a suitably impressive technical set-up. Housed in the beautiful Palais des Nations overlooking Lake Geneva, it is not only one of the most active centres for multilateral diplomacy but also a stunning example of 20th century architecture.

As the Palais des Nations' Hall XVII conference room – La Salle des Emirats – had not been updated since 1973 the renovation project that began in 2014 was much needed. The project had precise technical

requirements and had to include elements such as a videowall, interpretation technology and control. Costing \$22 million and funded by the Permanent Mission of the UAE at the UN headquarters, it was also imperative the renovated hall combined the latest innovations whilst recognising the culture and heritage of the UAE and the United Nations.

The concept behind the upgraded hall is based around everyday life in the United Arab Emirates. Following this theme, the sky and desert was reflected through the ceiling, floor and technical set-up. Part of the design revolves around the emblem of the UAE - a golden falcon, the Emirates

flag and seven stars representing the seven Emirates of the Federation. The text is then transformed into a rounded metallic structure that preserves the traditional values of Arabic calligraphy. This structure is also linked to the ceiling which follows the overarching theme of the Emirates desert and sky from dawn to dusk.

Elsewhere, the walls are made from wood panels in a curved shape to signify the wind in the sand dunes while the orange hues of the carpet resemble the colours of the sand in the desert of Abu Dhabi.

Aesthetically pleasing AV

The Palais des Nations complex is home to 34 conference rooms in which a staggering 9,000 meetings are organised every year. This brings 28,000 delegates together who expect to have access to reliable technology.

Swiss systems integrator Projection Nouvelle won the tender to carry out the design and implementation of the AV equipment in the hall based on their experience and customer focus. Working hand-in-hand with architects Siavosh Adeli and Joakim de Rham, they integrated the technical elements of the project whilst ensuring the room was aesthetically pleasing. Throughout the process the team worked with a selection of new products such as Televics's e-ink Nameplate based on the Plixus conference architecture.

"Some products didn't exist at the beginning of the project," says Alexandre Rouvelet, technical director at Projection Nouvelle. "There was less than"

>> LA SALLE DES EMIRATS, GENEVA













Clockwise from top left: most areas are equipped with an AMX automation system; a selection of Televic products featured; the stunning meeting set-up; a bespoke metal structure supports the LED screen

a year to develop these and produce samples. We received the Nameplate one week before the project began and installed 250 of them in one weekend!"

The client needed a multimedia system offering multiple functions – interpretation, voting, RFID badge, a USB connector to share documents, an integrated camera, multiple choice of video signal and nameplate control. To fulfil this requirement 240, 10-inch Televic uniCOS conference and interpretation systems featuring touch screen functionality were selected. These were joined by 300 Televic Confidea F-CS language selectors for listeners which were integrated into the central table and armchairs so auditors could choose the language they wanted.

This was one of the company's most ambitious projects to date, points out Bart Deschodt, Televic Conference's general manager, because the company supplied cutting edge, tailored video solutions and a bespoke e-ink name display. He says: "Mr Adeli's vision required us to delve into the aesthetic details of each component. Our joint goal was to shape a space where the conferencing equipment blends in with the architecture of the room in a cohesive way. That's one reason we developed an entirely custom finishing without any visible external screws."

Televic's Video-IN and Video-OUT Boxes also

allow for easy injection and extraction of any video stream, anywhere on the Plixus network, in Full HD and with delays of less than a single frame. As the UN headquarters hosts meetings in multiple languages the interpreters are vital in making messages clear to every participant. The Televic Lingua Interpreter Desk offered a solution that - when combined with Plixus's low-latency video features - allows interpreters to have up to six Full HD lip-synced streams.

The new e-ink name display that Televic developed - a paperless solution that saves time manually printing and placing paper cards - offers delegates a personalised nameplate with crisp, legible text or a custom logo.

As Carl Lylon, Televic Conference's R&D team leader, highlights, the biggest challenge was achieving total integration: "We combined a number of brand-new R&D innovations, such as the e-ink Nameplate. Even the smaller details such as the screwless finish of the 10-inch uniCOS units seemed simple on the surface but required a totally new mechanical approach to ensure a perfect fit and easy maintenance."

The project relies upon Extron fibre transmitters and most areas are also equipped with an AMX automation system with 32x32 matrix HDbaseT, used for control and signal management. Rouvelet

says: "The matrix is reliable and flexible and can be split into modules. Every output has a scaler and redundant power supply. The UN also has a central control room to supervise all the rooms."

Video processing was carried out using an Analog-Way Ascender 32 with extension. "We need six video signals for the videowall and in certain modes we have to display four images at the same time which is possible with the Ascender," says Rouvelet.

But one of the difficulties when speccing and installing the kit was the size of the room, with some cables exceeding 100m. Projection Nouvelle also had to send and receive signals from the TV studio two floors below whilst juggling integrating the cameras and connections and maintaining the aesthetic of the space. Blackmagic's ATEM performed as a seamless switcher to send video signals to the UN TV Studio which was already equipped with a Snell chassis.

An efficient 3 CCD motorised camera that interfaced with the Televic system was also required so Projection Nouvelle opted for five Panasonic HD-SDI AW-HE 130 PTZ cameras. These automatically film anyone that activates their microphone. Elsewhere, Sony's FWL-48W705C monitor offered the quality and dimensions needed for the press room and area at the front of the room.

Consistently high quality audio

With a wealth of experience in designing sound systems, Sound Directions France was chosen to design and commission the audio solutions in the hall, with an aim of blending the speakers in seamlessly whilst achieving an impressive level of audio quality in the room.

"We often work with them on big projects and on this occasion a line array was installed on either side of the videowall with additional ceiling speakers for the area at the front of the hall and press room," adds Rouvelet.

Projection Nouvelle chose Biamp's Tesira to route all audio signals from the room. The main audio distribution system features Active Audio's StepArray 180P directivity control column loudspeakers and their dedicated electronic circuitry, a 6x150W amplifier and an NUT DSP processor. Safety messages are broadcast using Ray-On column loudspeakers and Soundtube ceiling speakers were opted for due to the consistently high quality of sound delivered wherever people are stood in the room.

The Dante connection and encryption offered by Shure's ULX-D4 wireless receivers, ULX-D1 transmitters and ULX-D2 transmitters meant adding them into the audio line-up was a no-brainer. All audio channels could then be controlled in manual mode using the Soundcraft Si Performer 1 mixer with Dante.

Projection Nouvelle relied upon Sound Directions' recommendation when choosing which audio evacuation system to use too. The company had worked on several installations featuring ASL products and were convinced it was the most appropriate system after carrying out further testing.

A seamless visual experience

The low power consumption and high brightness offered by LED technology made it a perfect match))