Dutch Ministry of Foreign Affairs Conference Hall

Case Study

Lightware Visual Engineering

Market	Country
Government	The Netherlands

Lightware Equipment Used in Project

Lightware 32x32 DVI matrix

The third Nuclear Security Summit, held recently in The Hague in the Netherlands, was attended by 58 world leaders, including US president Barack Obama and Chinese President Xi Jinping.

It is hard to imagine a more important group of people to supply a multimedia conference system for. There are also hardly more urgent discussions than the prevention of nuclear terrorism to ensure every speaker is clearly seen, and every word is perfectly heard. "[The Ministry of Foreign Affairs] demanded that the system should have good audio quality and translation for 18 languages," explained Michel Calvelage from Dutch integrator Jacot Audiovisueel.

"[They asked that] it should have a voting system and the discussion system should automatically control cameras so each speaker is shown nicely in a display." Jacot Audiovisueel first became involved in the project a year ago when the Dutch Ministry of Foreign Affairs approached the company for some advice.

Almost 80 years old, Jacot is well-known to the Dutch government having carried out numerous projects for its Internal Affairs, Finance, Health and Security departments.

After initially offering some advice on how to fulfil the needs of an event involving a meeting of world leaders, Jacot was invited to tender last August. The company managed to win the tender by giving a demonstration at its premises showing how it would approach the task.

"We were initially planning to work with established technology, which at that time was the Bosch DCN Congress conferencing system," Calvelage recalled.

"But we were aware that a new system was coming along - the Bosch DCN Multimedia.

"As we want to be innovative and try the latest technology we wanted to use the new system, but at that time it was not ready to achieve all the demands laid out by the client.

"We had to work with Bosch to develop a lot of the software and hardware to achieve what the client was asking for."
One of the challenges was to create a system to control a camera to automatically focus on the person who is speaking.

"We needed an API (application programming interface) to communicate with the DCN Multimedia system but that was not available at the time," Calvelage explained.

"We had to ask Bosch to develop the API with our requirements. The software API they gave us was very good, and very structured as we know from other Bosch APIs we have used for other installations.

"Another challenge was developing an encoding system for video, and for the voting requirements. Jacot Audiovisueel got the green light from the Ministry of Foreign Affairs at the end of last November with the expectation that the system would be ready before February. The company intended to use the DCN Congress system as a backup if the DCN Multimedia was not ready, but at the beginning of March - roughly a month before the event was due to go ahead – the company committed to using the new system.

"We had a redundant system for the DCN Multimedia set up and also had a second server," Calvelage said.

"In the worst case scenario we were ready to put the original DCN Congress system in."

The company was also tasked with setting up the projection system which saw four large screens hung around the participants' circular meeting table in the World Forum Convention Center.

"The big challenge was projection and the lack of information telling people where to sit, and where the screens were supposed to be," said Calvelage "This information was always changing. An adviser had said how the projection was supposed to work, but at a production meeting a month before the event we were told that in the opening act the NSS logo would be hung in the center of the room – where some of the screens were supposed to be. At that point everyone realized that they would have to start from the beginning in regard to setting up the projection system."

The original plans called for two large screens and two small screens. Jacot Audiovisueel found the best alternative would be to use four screens of 10x3m to hang around the table, with Panasonic PT-DZ21 projectors providing the images. Jacot used barriers with sound absorbing material to reduce the noise coming from the eight projectors that were installed.

The company gave Dutch Prime Minister Mark Rutte control of the floor via a Sharp 20" touch screen display and stylus.

"There was a backup technician but Mark is a young guy and wanted to control the system himself," explained Calvelage.

"As well as being chairman of the summit it was a bit of a toy for him to play with!"

Jacot also equipped the room with translation equipment. It already had several translation booths, but the integrator added additional mobile booths to accommodate more translators. As well as the people in the room, the content was distributed via fibre to 200 rooms in the adjoining hotel who could all see the video pictures and choose one of the 18 languages available.

"The system took one week to build," recalled Calvelage.

"It was very important to be able to work well with the other companies there like the interior designers. The production company IDTV doing the opening act had a lot of demands for sound and video."

The summit was held on March 24th and 25th and was attended by around 5,000 delegates and 3,000 journalists. A live feed of the opening ceremony was distributed to the press via 80 narrowcasting screens in the area. There were dedicated networks for the conference system, for the narrowcasting system and for the distribution system so the delegation members could hear in their own language the conference in their meeting rooms.

Calvelage said the system worked flawlessly, dismissing some doubts that had been raised by external technicians who were working on the event.

"What surprised everyone was the quality of the small microphone on the DCN Multimedia," he said.

"The technicians told us that it looked nice but they thought it would pick up a lot of noise and wouldn't give the full spectrum audio quality. These were top engineers from several companies, and they ended up very surprised by the quality – it was really good – and the guys from the Ministry of Foreign Affairs were very happy that there weren't any microphones sticking in front of peoples' faces like you always see in event coverage."

Calvelage said a good relationship between Jacot and Bosch is essential to the success of the project.

"There was a good synergy between our companies and it was fun to work on this project." he said.

"The software guys from Bosch are theoretical and technical guys. It was the first time DCN Multimedia was used in a big conference and it was the first time these technical guys had come to an event like this to see how it was being used.

"They understood that it was a really important event for us and for the Netherlands."

Martin de Graaf, project lead IT & telecommunications for the NSS, said: "Jacot won the public tender for conference technology, narrow casting and projections on quality and price. For the conference technology Jacot offered the Bosch DCN multimedia units, the first time these were used on this scale. With the complements of the Prime Minister the performance of the Jacot team was very professional and at the same time customer- oriented. To conclude, the Ministry looks back with great pleasure at the partnership with Jacot. They had a major stake in a flawless and very successful conference."