Conversation is a key part of many formal processes in legal, government and corporate areas. The process hasn't changed a lot but Anna Mitchell finds that the congress technologies to facilitate these meetings are under a whole new set of pressures.

Evolution of conversation

Despite a trend toward smaller, less formal and more flexible meeting areas – often dubbed huddle spaces – there is still a call for organised, regulated and large discussion. These congresses are usually held by governments, within the judicial systems or for high level corporate discussions and negotiations.

These meetings have a specific set of demands and congress systems from a number of manufacturers have been developed to effectively serve the needs of meeting participants.

A major change in recent years is a shift to networked systems to allow installers, managers and users of congress systems greater flexibility and functionality.

"Over the past several years, we have seen increased demand for networked systems," confirms Keith Sylvester, product specialist at Media Vision – a conferencing system provider that represents Taiden in many European countries as well as the USA and Canada.

"With the expansion of Ethernet technologies and a major shift in the industry to digital standards, the days of analogue and the troubles of expansion are quickly coming to an end. Most, if not all, organisations already have networking technologies implemented. The

66 With the major shift to digital standards, the days of analogue and the troubles of expansion are quickly coming to an end. 99
- Keith Sylvester, Media Vision

recent proliferation and adaptation of Dante and DM standards have removed the need for cable bundles and mass wire runs. Rather, a single Ethernet connection is all that is needed for most modern equipment."

Matthias Holz, business unit manager for Conference at beyerdynamic, points out that there are two sides pushing the demand for networked systems: "Firstly, the cabling of the microphone units and secondly the control aspect."

Karel Vanheule, product manager at Televic, agrees: "More and more network managers and system administrators play a larger role in conference and meeting settings. They've become decision makers as well. As a result it is only logical that they require an IP network to administer these systems."

"Following the development of network technology, the interface between [the] congress system and other integrated equipment has become simple,

effective and flexible," notes Kevin Lee, overseas sales manager at Gestton.

However, one demand that often tops the lists of requirements is security. So how does that demand balance with the increasing requirement for networked systems that sit on IP networks.

Sylvester, says: "With everything attached to a network, security concerns arise." He explains that Taiden combats this using proprietary technology. "The majority of the Taiden network stays internal via a proprietary gigabit switch," he adds.

Televic also upholds security by removing its systems from any contact with LAN or internet traffic. "Opening up any network inherently creates vulnerabilities," points out Vanheule. "International institutions for example, usually require very strict confidentiality. That's why our new [Plixus] network architecture was created with security as a priority. Next to a proprietary >

Beyerdynamic Quinta installation for KfW bank.

< protocol, we also tunnel IP traffic to clearly separate conference data and regular IP traffic.

"Our Plixus network architecture is entirely Ethernet based," he continues. "When we conceived Plixus it was simply a prerequisite to move to an IP based system. What's more, all communications on our Plixus network run over a single Cat 5e cable. It makes installation very easy and it gives us flexibility as well. Managing networked audio (via a Dante interface) or streaming video is effortless. Additionally our engineers developed a proprietary, packet-based protocol that transports HD 1080p/60 video and uncompressed 48 kHz audio over a single Cat 5e cable."

Xavtel offers a proprietary network system where all the hardware for the networking is included (in this way no third party device can enter the network), while Bosch argues that robust encryption is important to maintain security.

Murat Keskinkilinc, EMEA marketing manager for Conference Systems at Bosch Security Systems, says: "Meeting owners need to be able to rely on the conference system completely and need to be sure that there is no unauthorised access to the meetings. Therefore the encryption method is very important.

"All the audio and data that is running through the [DCN multimedia] system is encrypted securely, in accordance with internationally recognised standards," he adds.

Gestton's Lee notes that: "ensuring local network security is not our obligation. However, to avoid security risks posed to end users during their use of the systems we share our experience with integrators and provide a guideline to them to conduct a risk assessment to determine what measures should be taken."

"The other trend I can see is people ask me 'how can I connect my tablet or smart phone'," observes Romano Cunsolo, director of marketing and business development at Xavtel. "They have all their documents there and they want to connect to the conference or videoconference system to share them. There are systems that allow this already but the problem is when it comes to doing this through a conference system you need a very high security level.

"Xavtel has started thinking about having a dedicated connection for a device such as an iPad which turns the iPad signal into the same protocol as our network."

The congress market is now talking about IP, networking protocols and encryption. But it's not just the language that has changed. They are increasingly talking to a different type of customer. These people are communications managers and IT departments. Is the AV industry ready? And, just as importantly, are IT departments ready for pro audio?

Beyerdynamic's Holz, says: "Since the whole

Roundtable event in Moscow

> ## " Audio and telco providers need to understand (IT departments') needs and how to communicate on the right platforms. "
> *– Romano Cunsolo, Xavtel*

audio industry is getting more and more into the IP networking world [it] is improving [its] skills in application and products."

Bosch's Keskinkilinc says: "During [DCN] training, our trainers also share their experiences about what typical questions/concerns they can receive from IT/network managers and provide our partners with the answers/solutions to these questions."

"We are a company coming more from IT and unified communications and collaboration (UCC) than pro audio in terms of our approach," says Xavtel's Cunsolo. "Communication is handled by IT departments now and they need to gain audio knowledge. And audio and telco providers need to understand [IT departments'] needs and how to communicate on the right platforms."

Most of the recent developments in congress systems are focused at delivering greater flexibility to participants while upholding the security and reliability required by these types of meeting scenarios.

At the same time videoconferencing technology has steadily become more secure and reliable. If these developments meant that videoconferencing could be deployed for certain top level meetings then it would cut the cost and time pressure levied by travel on busy politicians, legal experts and corporate bosses.

So what do makers of congress systems see for the

future of their industry?

"Nowadays in some applications a videoconference is part of a congress system already," answers Holz. "With the effect of globalisation the need for global communication from local conferences is getting more important. When it comes to audio, video and control, this demand is currently, and will continue to be, integrated into our product specification."

Media Vision's Sylvester notes: "Videoconferencing is such a niche and specific technology that doesn't fit with your typical government or corporate boardroom. For local, in room functionality, it is crucial to have systems that are ubiquitous in nature, taking as little real estate as possible, while providing the most functionality as needed.

"The primary focus is within the room and the participants involved. The key to moving forward with conferencing systems is how to integrate with videoconferencing systems more natively, or to incorporate technologies within the conferencing systems that allow for remote participation."

In many ways very little has changed when you look at how a parliament meets to discuss legislature or how a body such as the UN makes decisions. However, behind the scenes the technology to facilitate these meetings is undergoing a mini revolution of fast-paced development to serve evolving needs. ∾