

# NAW (National Assembly for Wales)



Opened by Her Majesty the Queen, on St. Davids day the Senedd is the new home for the National Assembly and is designed to be open and accessible for the public, to invite them in and be part of the democratic process. IVC was approached to design and build the vision for this exciting arena where the future of Wales will be shaped.



Around the debating chamber are large 46" LCD screens for display of documents and live voting results. These screens are housed in bespoke designed cabinets that are also home to audio speakers and speech timing clock displays. DVD, VCR, TV and computer sources are available for these screens, all of which can also be displayed on the members desks by multicast streams.

The solution to provide all of these tools within the chamber meant that the processing power was required within the desk. This is also a live broadcasting environment and the combined noise of 70 computers was not ideal. IVC designed and built small fanless computer systems using low power Pentium M based processors that are silent in operation and can withstand even the most extreme conditions. Each desk has fully integrated silent keyboards, optical mice, touch screens, audio facilities and translation facilities.

Using a Televic based audio conferencing system, IVC developed the voting functions to provide a complete standalone solution that has its own network cabling, is secure and will not fail if a server stalls.

In keeping with the Chamber screens and the committee rooms, signage units designed by IVC are situated all around the building. These 'Dynamic Displays' deliver content to inform the public of key events and activities taking place. With through-glass touch screens, users can access data and find out more about their members, meeting information, agendas and vote results.

Up to 40 Mpeg video streams are on the network available to view at any time in any location from chamber desks, offices and dynamic displays. In order to achieve this particularly in the chamber where 70 desks could all view simultaneously, a software decoder was not going to be practical because they are unreliable, processor hungry, and require several seconds of buffered traffic before reliable playback. IVC commissioned a hardware Mpeg decoder solution that is capable of decoding Mpeg 1, 2 and 4 and many audio levels including AC3 and PCM. They take just 0.4 seconds to decode for days and not just long enough to play a DVD movie. These cards have a PCI interface and can be fitted into any standard PCI interface.

Above the chamber and committee rooms the public may walk in off the street and watch their members in action. There are a total of 229 seating positions and each one has an integral 8" gallery screen. This screen has been developed by IVC and is capable of showing all types of web pages whilst streaming Mpeg video. The user may select between languages, view of the agenda of the current meeting, find members information, the history of the assembly or retrieve archived video meetings via playback on demand.

At the heart of all these systems is a central resource booking system in which every event, video conference, meeting, plenary is booked along with supporting documentation and content. From there, all the other systems are aware of the requirements and communicate, cross platform, to ensure that the requirements are met.

For the user or a member of the public visiting the building, the technology appears almost hidden. It is present but unobtrusive. It is not the main feature of this award winning Richard Rogers designed iconic building but the level of detail and the very advanced techniques used to overcome some very challenging issues has been paramount.



Area by area IVC took a building wide approach to analyse the requirements and propose systems that would not only provide for today's technology, but would shape tomorrow's. The design concepts were so inspiring that many of the products used to deliver them were not available and had to be developed by embracing new technologies.

The main area is the debating chamber itself. Members wanted to be accessible at all times and in touch with the outside world while they were in plenary but still to remain fully engaged to the debate at hand. We delivered a solution that allows the member to log at any desk, to a custom screen that would present their console Welsh or English language, with left or right handed options and full access to supporting documentation, agenda, vote results, currently logged in members, internet, simple messaging, e-mail, word, excel, PowerPoint, etc. The simple messaging function allows members to send messages to other members and officials on an individual or party basis. The system can also be used to send requests for technical assistance if required.



For further information contact IVC Media Ltd

Holland House  
1-3 Bury Street  
London, EC3A 5AW  
Tel: 0207 220 6550

8 Armoury Road  
Lufton Trading Estate  
Yeovil  
Somerset, BA22 8RL  
Tel: 01935 432121

Email: [sales@ivcmedia.co.uk](mailto:sales@ivcmedia.co.uk)  
Web: [www.ivcmedia.co.uk](http://www.ivcmedia.co.uk)