

## Solutions for the display of electronic documentation



Horsham District Council has taken the initiative with its decision to issue only electronic documentation for planning applications, drawings, etc, and it is clear that this trend will accelerate to include other forms of documentation. This means that all local authorities under the overall control of Horsham District Council will require equipment to present such information to committees and meetings.

We were asked by Southwater Parish Council (SPC) to specify and install suitable equipment in their Council Chambers and we worked closely with the Clerk and her staff to identify the system requirements, operating within a very tight budget. The final setup, shown in the picture above, was recently signed off by SPC who have encouraged us to contact you to describe the system and its capability.

We hope that you will take the time to review our solution - described overleaf - for SPC and that you will contact us using the details below to discuss your own requirements. We recognise that many local councils are smaller than SPC and will have completely different budgets and needs. We will be pleased to make a short, free visit to assess your facilities.

Our engineers are very highly qualified in all aspects of electronic equipment design and our primary business is computer networks and computer support. Please see our website for further information.

## SPC KEY REQUIREMENTS

At an early stage in discussions, it became clear that, to cover all of the presentation scenarios, two display devices would be necessary. The SPC Council Chamber can be partitioned into two separate rooms and, while a projector might adequately serve one room, it was not practical to routinely demount the projector and set it up in the other room. There was also a requirement for good-quality audio in several of the presentation scenarios. It was therefore decided that one presentation device would be a large flat panel display with built-in speakers and mounted on a mobile trolley, while the other device would be a ceiling-mounted high-brightness projector capable of displaying onto a large pull-down screen. The displays can be driven independently with different material, or can display the same content.

When it was built, the Council Chamber was network cabled to allow access to the IT system of the Clerk's Office. We configured a low-cost device to function as a powerful firewall and network isolator, allowing internet access in the Chamber but with no other communication with the IT system. This kept the costs of new comms equipment to an absolute minimum.

To minimise unsightly cabling, SPC wanted the standard link to the projector to be wireless. This was achieved using a wireless projector which communicates with a low-cost wireless router (which also manages the link to the internet and the wireless link to one or several laptop computers) sited unobtrusively in the Chamber. While it is technically possible to also link the flat panel display wirelessly, this would have taken us over budget, so we adopted a link using an HDMI cable, giving high definition video and high quality sound in a single cable. HDMI is the new compact connection technology for domestic TVs, DVD players, etc.

To control the equipment and to act as the main controller of displayed content, we purchased and configured a mid-range laptop running the new Windows 7 operating system; this can simultaneously provide an HDMI feed and a wireless connection. The use of this type of computer eliminates a lot of the fiddly setup parameters which are a feature of earlier designs. SPC wanted to be able to turn on the computer and it would work immediately for most of the presentation scenarios which were envisaged and this has largely been achieved. However, the flexibility remains to adapt to other presentation requirements such as working with multiple computers simultaneously.

The picture overleaf shows the main system components. The 52" flat panel display is on the left, mounted on a high-quality stable mobile trolley with lockable wheels. Even in bright light, the picture is very clear. A DVD/hard disk recorder allows direct presentation of video and other material.

The laptop can be seen on the table between the flat panel display and the projector screen. It can be positioned anywhere and when communicating with the projector only, is also fully mobile. The laptop screen can be made to show different content from that being shown on the projector (speakers notes, etc).

The projector can be seen mounted in the ceiling on a stand which can be rotated and adjusted to any angle. The projector can be controlled from a handset e.g. for digital zoom, as has been done for the projected image.

Finally, the wireless router linking the projector and the laptop(s), is shown in the inset.

The overall budget for this system was set at £4,500 and the cost would have come in at £4690; however, thanks to the generosity of a local supplier, a major component was supplied well under the retail cost and the project was completed under budget.