— Prifysgol Cymru —

VIDEOCONFERENCING

— University of Wales —

An Introductory Guide

CONFERENCING 5 CYMRU

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University of Wales Videoconferencing Network

An Introductory Guide

1 What is Videoconferencing

Through a live video link videoconferencing allows you to hold face-to-face meetings between groups of people at two or more locations. Everyone can see and hear what is going on. Each person can say their piece. In fact, its just like being in the same room.

2 The University of Wales System

We have established videoconferencing lecture rooms in five centres, at Aberstwyth, Bangor, Cardiff, Lampeter and Swansea to enhance collaboration in teaching, research and administration throughout the University. The network incorporates a central switching unit which supports both point-to-point links between pairs of centres and also multipoint connections allowing any number of the centres to be coupled together for a multicentre conference.

The system can support simultaneously upto three separate conferences, so that no centre is 'locked out' at anytime. There is also a connection to the main national and international network which will enable us to interact with external facilities.

The equipment and furniture installed in the rooms provides for up to six people at a conference table in each centre and allows also for lecturing to larger groups. The capacities of the rooms vary, having been a matter for individual college selection, ranging from 20 at Swansea to 50 at Bangor. Large screen colour television monitor displays provide good viewing conditions. The display can include 'head and shoulders' pictures of lecturers and conference participants, a general view of students in a remote location, and displayed material derived from overhead projector transparencies, 35 mm slides, hand written or printed material on paper, and small objects. Direct display of computer graphics is possible, as are videotape presentations, provided the optional equipment has been selected by individual centres.

3 The Facilities

The five centres each contain a conference table for six together with additional seating. The arrangement and extent of the additional seating varies from centre to centre. Current total capacities are as follows:

Aberystwyth:	30
Bangor:	50
Cardiff:	30
Lampeter:	30
Swansea:	20

The system is based on "open sound" allowing participants in any room to take part on a fully interactive basis. The microphones are unobtrusively mounted on the conference table. Selective muting is available and may be employed, for example, for local consultations in individual rooms.

The main conference cabinet shows pictures from the remote location(s) on large screen colour displays. Cameras mounted within the cabinet pick up the images of upto six people seated at the conference table. Pictures and sound signals are simultaneously transmitted to the monitors in the distant videoconferencing rooms, so that in conference mode it appears that the two groups are sitting across the table from one another. A small colour monitor in the cabinet provides a continuous check on the picture being sent.

A hand-held TV-type control pad is used to operate the cabinet and associated facility, enabling you to switch to display of graphic material or to an auxiliary camera used, for example, for white board or flip chart illustrations.

A display station allows you to show written and typed documents, photographs and small objects. The built-in camera has a zoom facility which may be used to pick out fine detail. The unit incorporates a carousel projector allowing 35 mm slides to be presented and back lighting provides for display of overhead transparencies.

4 Booking Arrangements

A simple computerised booking system has been set up which may be readily accessed from any College via JANET. Setting up the required conference connections may also be done from any College although in the first instance at least this will normally be centrally managed, effected as indicated by the booking system.

5 What are the uses of the network?

The network may be used to support a wide variety of applications. These include the following:

5.1 Meetings

Meetings of committees, working parties and interest groups involving representation from two or more colleges can make use of the videoconference facilities with considerable savings in time and travel. It is best not to try and hold all meetings via the network: videoconferences generally work best when participants know one another. You might find it useful to have shorter, more frequent 'working' meetings using the network augmented by occasional, longer, face-to-face meetings.

5.2 Small Group Seminars or Tutorials

These may be carried out via the network just as for a videoconference. If the group at any one location exceeds six then the additional seating and monitors will be employed. It is suggested

that at each location there should be a coordinator or local chairman.

This form of operation is likely to prove especially valuable with, for example, final year specialist options, postgraduate courses and research seminars.

5.3 Lectures to larger groups

The extent to which lectures my be presented to larger groups varies from centre to centre, conditioned by the size of room made available and the layout adopted by the college involved. If the accommodation proves inadequate it is likely that overflow facilities can be provided. College representatives should be kept informed of accommodation constraints limiting usage so that these can be taken into account at any subsequent revision or upgrade.

5.4 External Lecturers or Seminars

Many external organisations have ready access to videoconferencing facilities. This provides a special opportunity for increasing external participation in teaching and research programmes in that an external expert may present a seminar to one or more colleges simultaneously either from an external videoconferencing centre or when on a visit to any one of the colleges.

5.5 External Collaboration in research

Research project planning and management meetings may make use of the network, linking in with external facilities where appropriate. We are seeking to establish and maintain a list of relevant organisations in the UK with ready access to videoconferencing facilities. Access outside Wales will be via the main British Telecom videoconferencing network.

5.6 Remote Delivery of Specialist Lectures

Similarly, external organisations may be interested in receiving videoconferenced lectures or seminars from the University of Wales. This provides an interesting additional mode of delivery for PICK-UP activities, for example.

6 Charges

In the first year of operation there will be no charges levied on internal users for use of the network for purely university business. There are charges for external users, for use in association with research grants and contracts, etc. In the longer term it is currently the University's intention that a proportion of the costs be recovered from academic usage. It must be stressed that this relates solely to the use of the videoconferencing facilities and involves no assumptions about how departments sharing courses will allocate any academic costs between them.

A separate information sheet provides up to date details of charges for various categories of external usage.