

PROJECT CASE STUDY

Category: Higher Education Facility

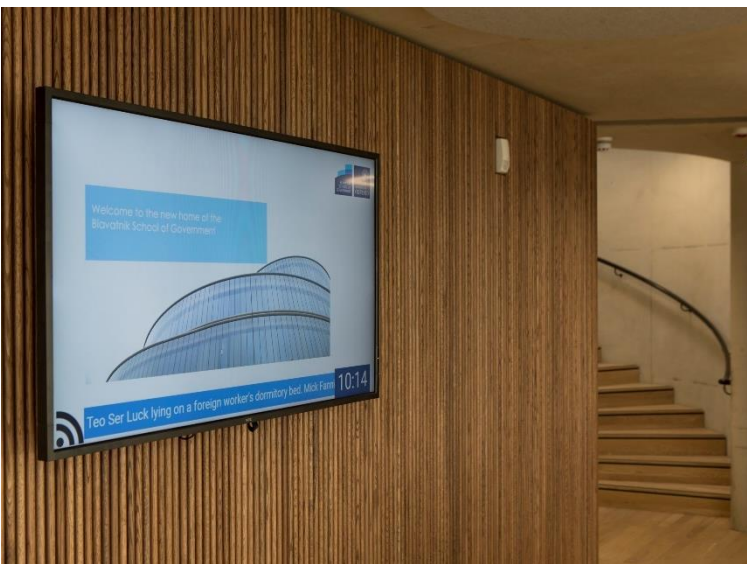
BLAVATNIK SCHOOL OF GOVERNMENT
UNIVERSITY OF OXFORD

Oxfordshire, UK



How can

AV systems complete a building designed for the next generation of public policy makers to learn from each other's experience of making governments work better?



THE BRIEF

BSG adopts a tested approach to classroom learning- delve and explore the divergent experiences of each student from across the world, to learn about policy-making.

The new building was, therefore designed for the purpose: to promote open discussion, interaction and collaboration for students to learn from each other's experiences.

- ✓ AV Infrastructure and facilities, which impress visitors as worthy of an 'Oxford institution'.
- ✓ Spaces clear of cables, hardware and AV racks to blend with the clean aesthetics of the building design.
- ✓ Lecture capture and richer classroom interactions for students, outside of their textbooks.
- ✓ Facilities designed and built for catering to multiple and simultaneous live events across the building.
- ✓ Meet the needs of a multi-lingual audience, both during live events as well as during regular classroom sessions.
- ✓ Self-reliance: greater in-housing of AV operations to reduce costs incurred on hiring external suppliers. Not only did the brief require us to think about AV hardware, but also focus on how they are integrated into a IP network-based infrastructure spanning the entire building, and thus making the in-house AV technicians team self-reliant.
- ✓ The school hosts noted political and public policy figures from around the world, which allows them to create a library of useful educational resources. The brief required us to think about live content production as well broadcast and live streaming capabilities within the building itself.
- ✓ Flexible and scalable: the infrastructure in spaces designed for live events had to be flexible to host a wide-range of event/teaching formats such as mock courts, seminars, lectures, forums

etc. In addition, the systems had to be scalable to varying capacities.



THE SOLUTION

CENTRAL CONTROL ROOM

At the core of all AV infrastructure is the Central Control room, which receives and controls AV feeds from all teaching spaces. These teaching spaces (lecture theatres and seminar rooms) are also equipped with individual language translation and control booths keeping in mind the international demographics of users (students, conference attendees etc.)

Infrastructure was developed to provide the flexibility required by technicians to host multiple live events across the building, as well as during classroom sessions. For this reason, all floor boxes across the building feed into the central control room.

- ✓ Remote monitoring and control of room equipment via control systems
- ✓ Reception of audio and video feed from the main AV spaces.
- ✓ Vision and audio mixing of received feeds.
- ✓ Transmission of audio and video signals to outside broadcast unit connection point.
- ✓ Lecture capture scheduling, monitoring and recording.

- ✓ Post production
- ✓ Field equipment storage and testing



VIRTUAL PRODUCTION STUDIOS

Creating an on-demand library of broadcast-quality is expected of a School of Excellence in public policy. Two Virtual Production Studios were also established to capture content including lectures, conferences, speaker series, presentations and presentation audio.

These studios are capable of mashing content for broadcast, similar to newsroom broadcasts, for which BlackMagic ATEM production switchers were installed (making BSG one of the very few education establishments to support the highly-advanced equipment).

OUTDOOR BROADCAST POINTS

OB points are part of the infrastructure, for example, news Outdoor Broadcast points are also included in the infrastructure, for example, news channels broadcast vans can relay live content to their respective stations using the School's own broadcast equipment rather than their own.

Furthermore, content is now available to broadcast or LiveStream; record lectures for students, and record lectures from one theatre for distribution to any part of the building.

NETWORKS

BSG is also one of the first University buildings to use 6G HD/SDI video cameras entirely throughout the building (infrastructure is 8K video capable for the future).

In addition, all audio systems are run entirely on DANTE networks. The brief prescribed not more than five different platforms for content distribution.

The infrastructure we deployed can achieve the specification through four platforms- JPEG 2000, H.264, DANTE, and AVB.

This allows BSG to standardise equipment specifications in future, while making infrastructure more flexible and reducing operating/maintenance costs.

IN A NUTSHELL

- ✓ **Localised language translation** and control booths.
- ✓ **Central Control room**, which receives and controls AV feeds from all key teaching spaces.
- ✓ **Flexible**, and yet easy to use by non-technical staff for a range of uses from debates, panel discussions, to public debates. For everyday use, there is no set up required when configuration of a room needs to be changed, which helps support a whole range of teaching styles.
- ✓ **Divisible classrooms** allow the whole space, including the AV setup, to be configured for:
 - Individual rooms
 - Rooms 1 and 2 combined
 - Rooms 1, 2 and 3 combined

- Rooms 2, 3 and 4 combined
 - Rooms 3 and 4 combined
 - All rooms combined
- ✓ **Virtual production suites** capture content including presentation media, lecture capture, video of presenters and audiences with audio, whilst inserting corporate branding.
 - ✓ **Production suites** combine content for professional broadcast-quality output and outdoor broadcast points allow live content to be relayed to news channels using the School's own broadcast equipment.
 - ✓ One of the first University buildings to use **6G HD-SDI (8K capable)** video entirely throughout the building. In addition, all audio systems run via DANTE networks.
 - ✓ Contribute towards attaining 'BREEAM Excellent' rating for its standards of sustainable building design, construction and operation.



SNELLING BUSINESS SYSTEMS

Our roots go back to 1954; Roy Snelling started his business out of a redundant Victorian laundry in rural Norfolk, selling Television and Radio sets in the earliest days of broadcasting. He witnessed a major transformation as more and more TV and Radio sets found a place in living rooms- a whole new way for people to interact, engage and consume information. The same purpose for which many AV systems and environments are designed and built for today.

More importantly, there was a new medium for engagement and interactions at a 'sensory level'. Over the years, our experience led us to ask ourselves the pertinent question.

"How can we use the potential in AV systems and environments to unlock newer possibilities

for businesses to interact with and engage their audiences, better"?

As we grew and evolved as a business, our internal culture and design/engineering philosophy begins with a simple question "How can..?". As an AV integration specialist, thinking 'How Can..?' has also evolved to build AV systems that can solve problems of strategic importance to your business/institution.

We deliver all aspects of audio visual integration from design, integration, supply, installation and on-going maintenance - all backed by a service ethic, which continues to carry the Snelling signature of quality. Based in London and Norwich, we have maintained our portfolio of major clients and diverse projects across Higher Education, Corporate, Public Sector and niche projects.

Contact Snelling Business Systems to find out how we can address the challenges your organisation faces with building-wide integrated spaces.

Email: sales@snellingbiz.com
Call: +44 01603 711111