The AV Vision
Enabling Critical Conversations

PROJECT SUMMARY

1 million	**4,500**	**250,000m²**
metres of cabling	people	building

ARUP
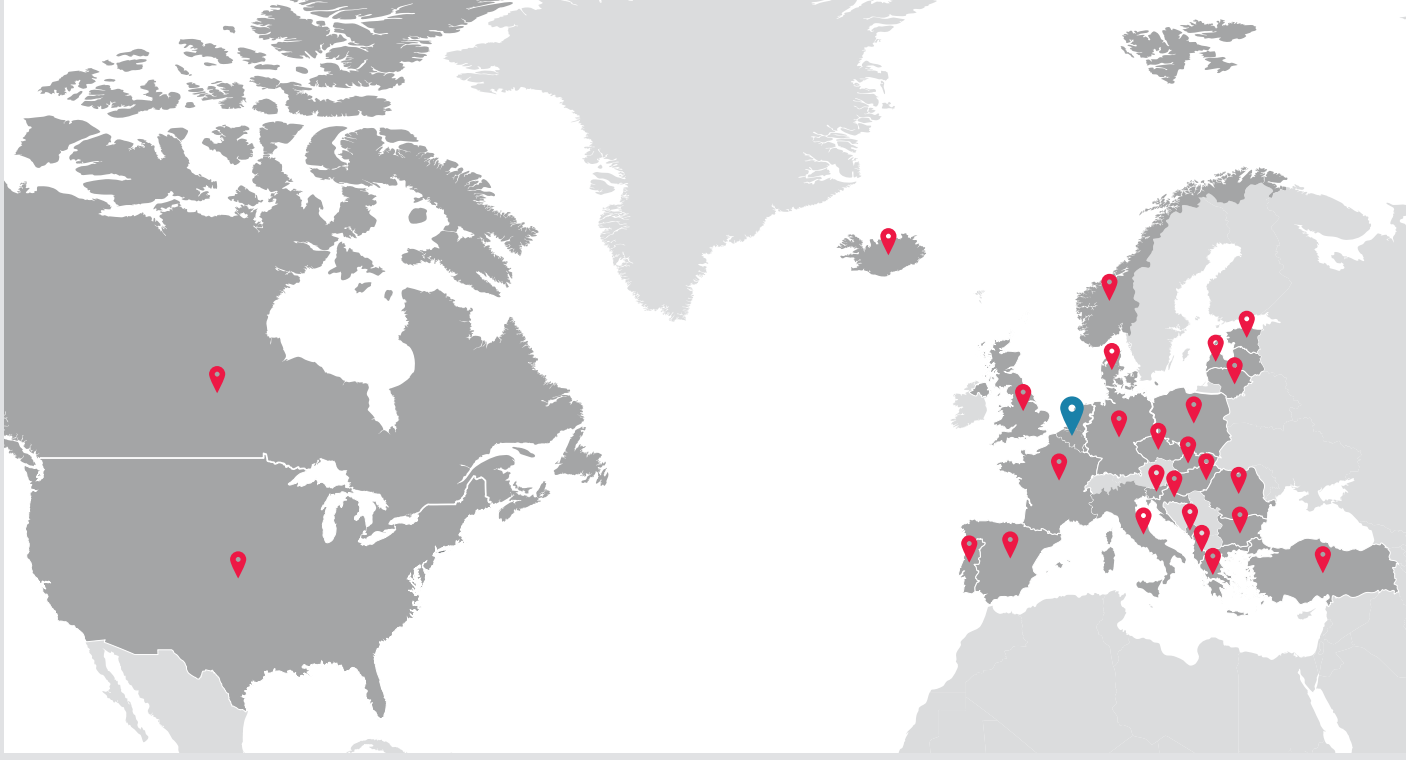
NATO MEMBERS

Belgium, Canada, Denmark, France, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, the United Kingdom and the United States (1949), Greece and Turkey (1952), Germany (1955), Spain (1982), the Czech Republic, Hungary and Poland (1999), Bulgaria, Estonia, Latvia, Lithuania, Romania, Slovakia and Slovenia (2004), Albania and Croatia (2009), and Montenegro (2017).

29 members nations

AV SYSTEM

Unprecedented integration: the backbone of critical conversations

Automated AV solution integrates all videoconferencing, iBMS and security and systems for efficient operations.

Conference information, delegate names and agendas automatically update to enable seamless communication across multiple systems.

Delegate ID logins inform the congress and AV system with participant data.

Advanced algorithms within the AV systems monitor room use and powers down all equipment when not required to create energy savings.

VIDEO STREAMING SOLUTION

Optimised user experience

An Arup-designed Internet Protocol video streaming solution which pulls from the AV system, presents video and graphics to users along with embedded metadata – together with up to 32 interpreted languages available via a drop-down menu – enabling them to play alongside each other. Thereby minimising wasted data storage as traditional systems would require separate files for each language. A web-based dashboard enables information to be accessed easily across multiple devices and provided a video-on-demand solution for NATO, including news and media.

32 languages

AUTOMATED CAMERA SYSTEM

Near eye-contact interactions

Bespoke pod design – containing cameras and LCD panels – located in the centre of circular conference rooms, each is positioned to cover 5 participants. The intuitive design ensures a front view of the person talking and promises a near eye-contact view between local and remote participants. A sophisticated control system captures the 'best shot' of each speaking participant, ensuring broadcasters, interpretation staff, archive recordings and minute takers all receive a perfect head and shoulders shot of each person speaking.

200 participants
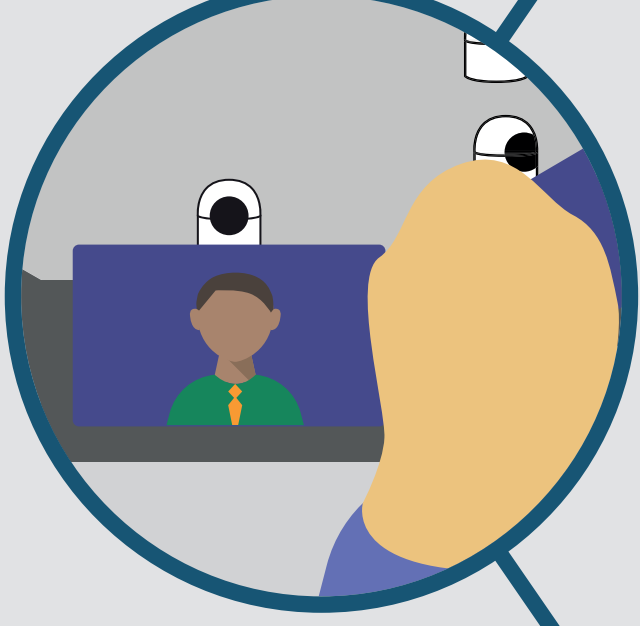
ROOM BOOKING SYSTEM

Creating efficiency with a single source of truth

The centrally managed room booking system provides a single source of truth for all meetings and events, it even automatically reserves interpretation booths for the required number of languages. To ensure room readiness, all heating and lighting requirements are fed into the integrated Building Management System (iBMS) and the AV system monitors the usage of the room and those which are not being used, or have no bookings for 30 mins, will automatically power-down to save energy.

30% more efficient

FAILOVER SYSTEM

Designing for resilience

Given the nature of the venue and the significance of the personnel, system resilience was a key design consideration. A failover control system was built in, with two operating processors; if one processor stops responding for 30 seconds, a handover sequence commences and the other takes control, while the first reboots ensuring maximum uptime of the AV system.

30 sec handover

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