Atyrau city, Atyrau Region, Kazakhstan

The Atyrau region is located in the western part of the Republic of Kazakhstan, a transcontinental country at the meeting point of Europe and Asia, sharing borders with Russia and China amongst others. Atyrau is one of the economic powerhouses of the Republic of Kazakhstan. Most of the country's oil production is centred here and the regional GDP per capita is almost 3 times greater than the general gross domestic product of the Republic.

BACKGROUND

Administration of the region's seven districts is based in the city of Atyrau, located on the River Ural, 30km from the Caspian Sea. Although it is one of the smallest of Kazakhstan's regions, its outlying districts are a significant distance from Atyrau city, making face-to-face meetings difficult and time-consuming for the regional administrative authority.

PROBLEM & SOLUTION

Kazakhstan is the largest landlocked country in the world, and the ninth largest overall. Consequently, digital communications play a major role in the administration of the country, both centrally and regionally. In 2014, systems integrator Polymedia installed a state-of-the-art control room facility and situation centre for the government of another of Kazakhstan's regional authorities, Kyzylorda. The success of the Kyzylorda project prompted the government of Atyrau to commission a similar installation from Polymedia, once again employing video wall technology from Mitsubishi Electric.

PROJECT LOCATION
Atyrau city, Atyrau Region, Kazakhstan

CUSTOMER
Akim's (Mayor) administration

APPLICATIONS
Display wall in the control room of regional administration

PRODUCTS USED
14 x VS-70HEF78U
PolyWall 5000 Controller

INSTALLATION
Polymedia

FURTHER INFORMATION
Mitsubishi Electric Europe B.V.
Nijverheidsweg 23a,
3641RP Mijdrecht
The Netherlands
Tel: +31 (0)297 282461
Fax: +31 (0)297 283936
E. info@mitsubishielectric.nl

The facility, which consists of a main control room and a smaller analyst's room, is designed to be multi-functional, serving as both a tool for monitoring, analyzing and forecasting social and economic trends in the region, and for long term planning. As in Kyzylorda, the facility can also serve as a situation centre, allowing the regional government to react effectively in times of emergency.

A central feature of the system was the installation of access endpoints for the videoconference system in all seven districts of Atyrau Region, enabling real-time face-to-face meetings to be easily organized. A simultaneous interpretation system was also installed to propel business meetings with foreign partners to a new level. The online broadcasting system was a unique the project; an upgrade of the similar system installed in Kyzylorda. The system enables the on-site team to broadcast video and sound from the scene of the event or any other occurrence to the control room by means of GSM transmission including LTE networks.

INSTALLATION & RESULTS

Centrepiece of the main control room is a 6 x 2m video wall comprised of 8 Mitsubishi Electric VS-70HEF78UA DLP cubes in a 4 x 2 format. The 70" diagonal Full HD cubes deliver 860 cd/m² brightness and up to 100,000 hours of maintenance-free operation*. The front-access design allows the video wall to be installed against the wall, maximising available floorspace.

The analyst's room features an 8 x 2 video wall comprised of Mitsubishi Electric LM55P2 ultra narrow bezel (UNB) LCD displays, delivering the same resolution as the main control room screen (7680 x 2160 pixels). The 55" displays have been designed specifically for small to medium sized rooms that are limited in space but still require a high-quality display solution, robust enough for long-term use.

In addition to the video wall, the control room features three back up ultra-thin Flame displays for viewers and nine motorized interactive Arthur Holm monitors. Audio systems consist of a Bosch conference system with simultaneous interpretation, an interactive stand, Epiphan electronic recording system, four automatic Sony cameras, Biamp and Extron-based amplification and switching via a Crestron Digital Media 32 x 32 platform. Visualization control is provided by a PolyWall 5000 controller. The LifeSize video conference system includes a dedicated server with codec packs installed to ensure compatibility with the videoconferencing systems employed in the other regions of Kazakhstan. Crestron monitoring and integrated control system, LiveU online broadcasting system and UPS completes the system.

*When used in Adv anced Eco Mode

CUSTOMER REACTION

The facility was formally presented to the Akim (Mayor) of Atyrau Region, Izmukhambetov B.S. in a ceremony attended by the deputies of the Akim, managers of the departments and Akim administration. The Akim was particularly impressed with the greatly enhanced ability to communicate with the district offices, noting the significant contribution to the day-to-day government of the region this will bring.

Specifications	
Model	VS-70HEF78UA
Technology	LED video wall cube
Overall Size	10.8 m²
No. of Modules	8
Cooling system	Air cooling system with efficient cooling pipe and aluminum plate (No liquid)
Type	DLP™ technology (0.95" DLP™ 1 chip), DarkChip3™, BrillantColor™
Screen Size	70"
Resolution	Full HD, 1920 x 1080 pixels (per module)
Light Source	Redundant LED (RGB)
Light Source Service Life	≤ 100,000 hrs.
Brightness	860 cd/m2 bright mode 600 cd/m2 normal mode 410 cd/m2 eco mode 130 cd/m2 advanced eco mode
Contrast Ratio	1500: 1
Power Consumption	96 W in advanced eco mode 124 W in eco mode 174 W in normal mode 258 W in bright mode

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