

ControlZone

Barco's Security & Monitoring newsletter . Issue 6 . December 2007



Watching over Dubai with Barco technology
Barco's control room visualization helps Dubai Police to monitor the city.



Total control for Vattenfall Hamburg
Barco's video wall technology increases operational efficiency.



**All-in-one broadcast
visualization for RTL TVI**





Cover story RTL TVI

In January 2007, French-speaking south of Belgium's top TV channel RTL TVI received a brand new home in Brussels, with new TV and radio studios, editorial and production offices. In designing its new monitoring and studio facilities, RTL Group Belgium chose some of Barco's most advanced visualization solutions.

Read more on page 4

ControlZone

For more info:
kirsten.vanhees@barco.com

Publisher:
Barco n.v., Noordlaan 5, 8520 Kurne, Belgium
tel. +32 (0)56 36 89 80

Editorial staff:
Geert De Vuyst, Kristof Maddelein and Kirsten Vanhees

Art, design and production:
Nathalie Reynaert and Wim Vanpoucke

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Editorial

Interview with **Frank Timmermans**,
VP Traffic, Surveillance & Monitoring

Dear reader,

In previous editorials for *ControlZone*, several writers have outlined Barco's capabilities and the intricacies of the various markets in which its technology is deployed. In the most recent issue, Carl Peeters introduced Barco's new Security & Monitoring division. It seemed a good time to speak to a man involved on a day-to-day basis with this division, and to discuss the first year of operation.

Frank Timmermans is Vice President of Barco's Traffic, Surveillance and Monitoring business unit, and has witnessed huge evolution since he joined the company in 1994. He explains the reasoning behind the inception of the division: "There is a growing convergence in terms of technologies as we move into the digital age, namely on the acceptance of network-centric concepts in our markets. It is also of key importance to achieve a deepened market approach and a harmonized market-specific message. Two divisions approaching the same market now have a more homogenous market and product focus."

Frank is responsible for the civil markets in the Security & Monitoring division. This includes the Traffic & Surveillance, Broadcast & Telecom, and Utilities & Process Control markets. "Despite the diversity of these fields there is a common theme: across markets, all of the applications we are in are related to some kind of control room, where qualified operators are monitoring business-critical and life-critical applications. These applications typically run 24/7, so utmost importance is given to reliable solutions that are operator-friendly through a superior human machine interface."

He is enthusiastic about things to come: "There is definitely a trend to what we call 'IP-ification' – the move toward going IP. This will have a major impact on all of our business in the next three to five years. The growing use of LCDs is also something we will see more of. Barco is a leading innovator in both areas, and very well prepared to accept the challenges of the future."

Continued success hinges on listening and communicating: "The customer-driven approach is a key element. This is true of our division, and Barco as a whole."

In this packed issue of *ControlZone*, previous authors of this page, Guy Van Wijmeersch and Robert Wu, are interviewed on page 27, alongside many other articles that we are sure you will find enlightening. And as Frank states: "customer feedback is critical" – so feel free to let us know what you think.

Enjoy.



All-in-one broadcast visualization for RTL TVI

In January 2007, south of Belgium's top TV channel RTL TVI received a brand new home in Brussels, with new TV and radio studios, editorial and production offices. In designing its new monitoring and studio facilities, RTL Group Belgium chose some of Barco's most advanced visualization solutions.



RTL TVI is the top TV channel in French-speaking south of Belgium, reaching 3.9 million or 90% of all Belgian viewers via cable. RTL TVI is part of the RTL Group, which is the leading European entertainment network, with interests in 38 television channels and 29 radio stations in ten countries and content production throughout the world.

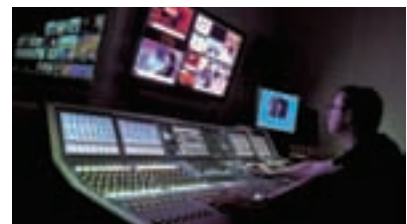
A center of excellence

RTL TVI's new premises is worthy of a leading TV and radio station that intends to work towards the future and meet the technological challenges of tomorrow. No wonder that the company sees its building as a true center of excellence for audio-visual companies. Barco was able to leave a significant mark on the new premises with installations of various visualization solutions in the several production rooms and in the news studio.

Unequaled flexibility

For the two main production rooms, Barco provided video walls with a 4 by 1 cube set-up. Next to the excellent image quality, Barco's rear-projection video walls provide the program directors with a higher degree of flexibility in layout creation and adaptation. They can configure and re-configure the wall according to their requirements, without moving a monitor. They can select from a list of available sources, add a clock, tally indicators, and source identifiers, drag and drop, enlarge and reduce the windows until the layout meets their needs, and publish it on the screen.

For the several production rooms, Barco also provided 42" High-Definition LCD displays. These displays offer the RTL TVI control room operators crisp, clear and color-accurate images on a 1920x1080 pixel resolution.





Advanced networked visualization

RTL TVI also chose to integrate Barco's Networked Broadcast Monitoring System (NBMS). This allows the company high-quality, low-latency distribution of video sources and metadata over the available IP network towards multiple screens. This is possible even in the various control rooms throughout the facility, including three production rooms, the nodal, the EVN satellite room and the filing room.

"The NBMS is highly scalable, with an almost unlimited number of input and output ports," says Thierry Piette, Technical and Broadcast IT Managing Director. "The distributed architecture of the NBMS allows us to save on the total investment needed for monitoring within the facility, because we need significantly less router capacity and monitoring inputs."



With the installation of Barco's broadcast visualization solutions, RTL TVI welcomes the future with open arms. With Barco's Networked Broadcast Monitoring System, RTL TVI is ready to face the steady growth of the number of images to be viewed and monitored simultaneously.

New news studio

The most widely watched evening news program on French-speaking Belgian TV is aired on RTL TVI, and backed by Barco projection technology.

RTL TVI opted for 2 three-chip DLP™, SXGA+ RLM R6+ projectors that combine high brightness (6,000 ANSI lumens) with excellent color accuracy.

Advanced Picture-in-Picture technology enables simultaneous display of up to 4 sources for dynamic and captivating presentations. Apart from being a state-of-the-art projection system, it also offers an extended uptime thanks to its fully sealed, dust-proof optical engine.

TV5 Monde

Serving a worldwide French-speaking community

As the first international French-speaking television station, TV5 Monde aims at offering its viewers a unique view of the world through information and programming. More than 176 million homes in more than 203 countries can receive TV5 Monde by cable or satellite on a 24/7 basis. An audience of 25 million viewers each day makes TV5 Monde one of the three largest global networks of television, along with MTV and CNN.



In prime time on weekdays, TV5 Monde appeals to a local audience who, once made use of its national channels and topics, looks out for evening films, magazines, sports, entertainment, etc. in the second part of the evening. Also international travelers find TV5 Monde in one of the 3.2 million hotel rooms worldwide. On weekends, TV5 Monde reaches an even larger audience, by offering a series of short programs, featuring youth, trends, fashions, sports, gastronomy, history, music, etc.

New production and main control room

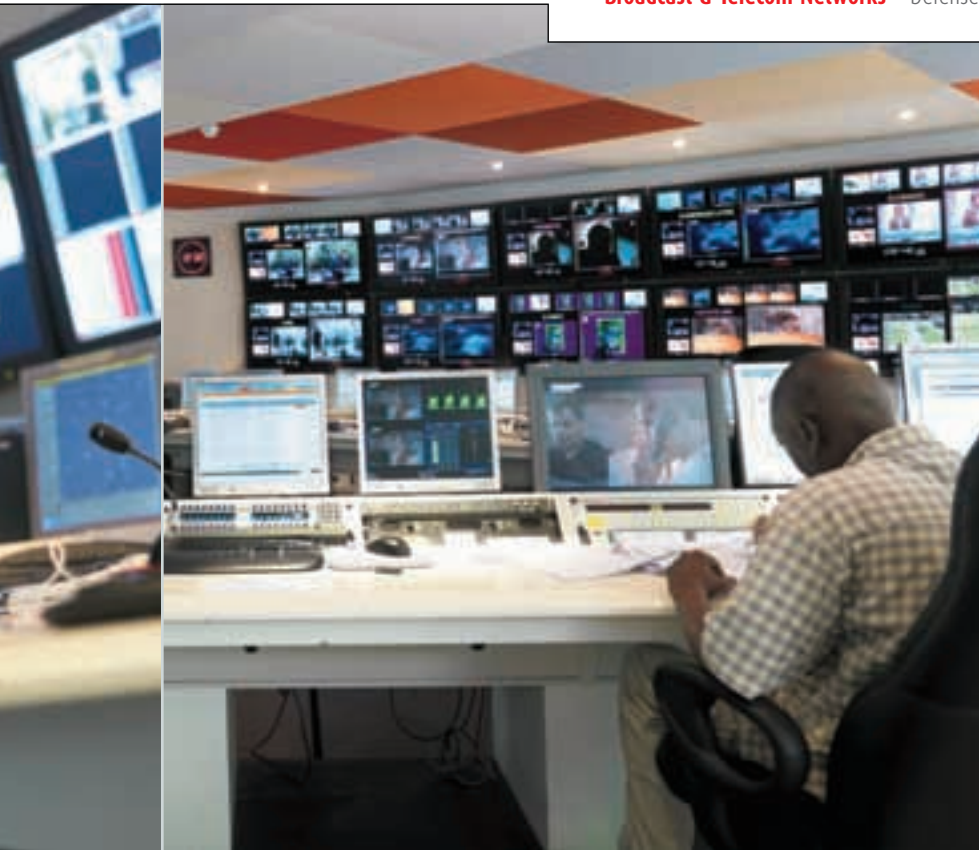
When moving to its new production, post-production and transmission facilities in the 17th district of Paris in 2006, TV5 Monde decided to build a broadcast monitoring room that is capable of monitoring and distributing the various programs to its growing worldwide audience.

For the new program acquisition room, the production and master control room, Barco was able to offer an all-in-one broadcast visualization solution, consisting of high-definition LCD displays, high-end graphical control units and web-based operating software.

For the integration of Barco's solutions into the TV5 control room environment, Barco collaborated with Grass Valley, developer of video and film technologies, products and services. Grass Valley and Barco share a long history of collaboration and Barco showed good responsiveness to the software development requirements of the broadcast integrator.

Also, Barco worked closely together with Technicolor Network Services, a digital media distribution and network management company, which is responsible for the design, build and operation of TV5 Monde's production, post-production and transmission facility and supporting the distribution and monitoring of its complete worldwide network.





Flexible handling of multiple sources

To control the multitude of sources, Barco delivered 33 of its Hydra Compact universal multi-video insertion units, offering unique possibilities to simultaneously control a large number of analog or digital inputs on one single display. Hydra Compact is operated via a standard web browser and features advanced warnings and alarms.

One of the main benefits of Barco's all-in-one solution is the possibility to manage the layouts in an easy way. All layouts can be created, saved, retrieved and adapted via Barco's web-based operating software. The wall of displays can be configured and re-configured according to the operator's requirements without moving one monitor.

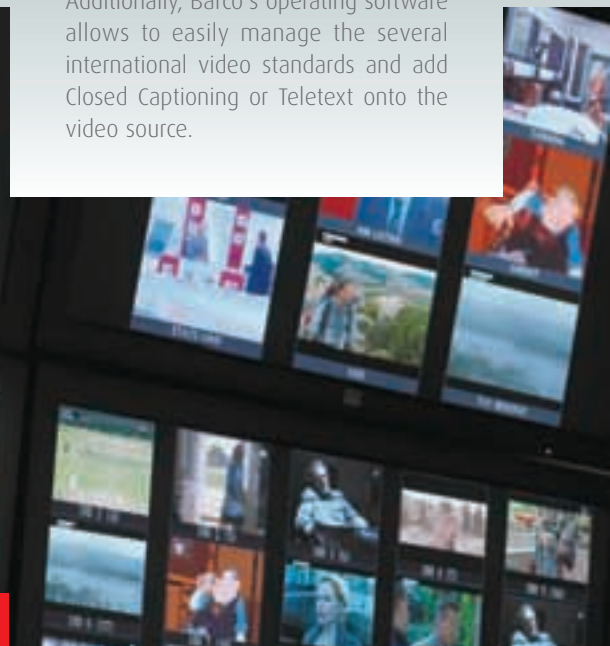
TV5 Monde relies on an SGT automation system to handle its complex multi-channel 24/7 program schedule. Barco's operating software was seamlessly integrated into that system and was also specifically customized to allow operators to add several metadata (source name, duration, start and end times, etc.) to the multiple video sources.

Additionally, Barco's operating software allows to easily manage the several international video standards and add Closed Captioning or Teletext onto the video source.

Outstanding video quality

A total of 35 Barco LCD displays cover the walls of the three control rooms and allow the TV5 operators to efficiently monitor the multitude of video inputs. Calibrated towards a common color temperature, gamma and brightness, the 47" displays provide the operators with outstanding video quality.

Barco's LCD displays perfectly blend into the control room environment. Not only do they take up very little control room space because of their minimal depth, they also produce very little noise (only 21 dB(A)), which is below the audible noise level.



One country - one control center

National Traffic Management and Information Center in Wien-Inzersdorf, Austria

The impressive Barco video wall in the Wien Inzersdorf Traffic Management and Information Center helps to manage Austria's traffic increase and enhance traffic safety and efficiency.



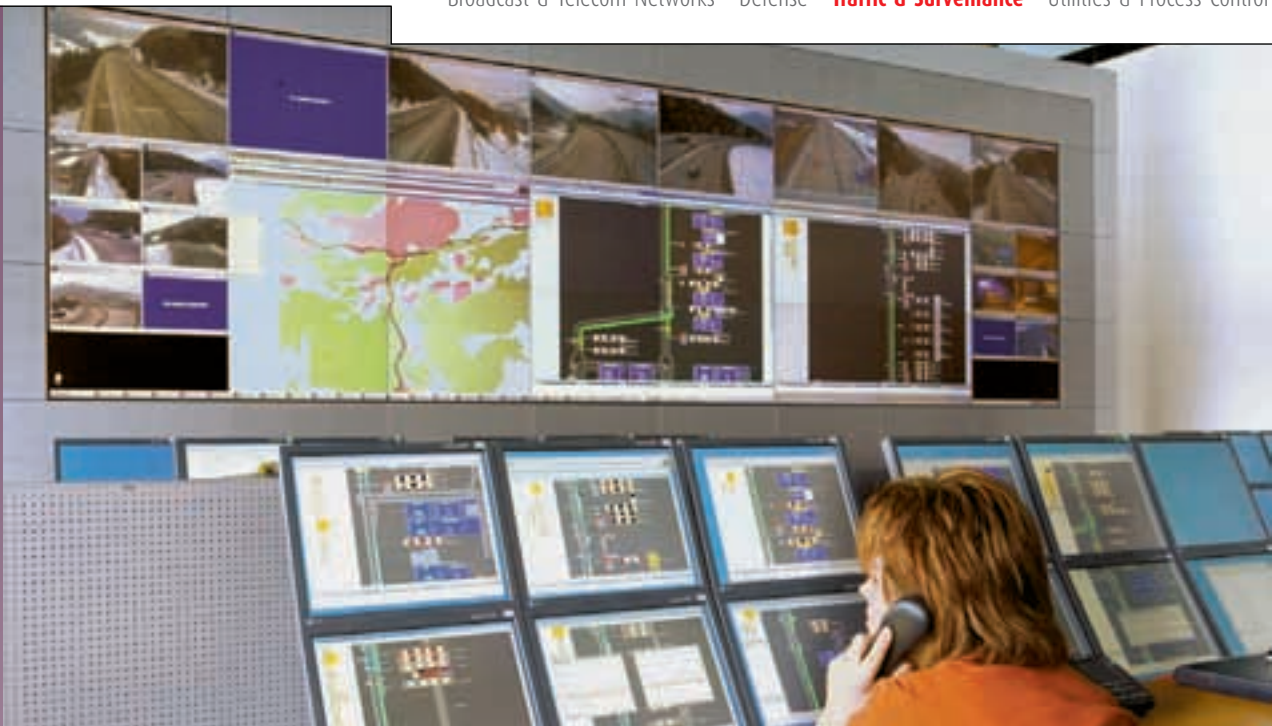
Monitoring Austrian traffic

The Austrian, state-owned company ASFiNAG Verkehrstelematik GmbH plans, finances, builds, maintains and operates Austria's network of motorways and expressways with a total length of some 2,100 km, including roughly 160 km of tunnels and almost 210 km of bridges.

The traffic growth of the last decade has led to overload on the road, particularly in the agglomerations. For the Austrian government and ASFiNAG, there's a great challenge to increase road safety and efficiency, decrease travel time and come to smaller accident susceptibility.

In 2004, system integrator Siemens was contracted by the Austrian government to provide a complete solution for the traffic monitoring of the whole of Austria. The resulting Traffic Management and Information Center in Wien Inzersdorf is a central control facility actually covering the entirety of Austria, including several traffic control facilities across the country.

For the visualization part of the central control room in Wien Inzersdorf, Siemens relied on Barco, with whom the company already has a long-term relationship for the development and delivery of traffic monitoring and visualization solutions.



Large amounts of video feeds

The impressive Barco video wall in the Wien Inzersdorf control room covers some 18m² and consists of 24 display cubes of 50" in an eight by three set-up. The video wall presents a mix of digital maps and video information. To control the traffic flow, 800 traffic control facilities and 1,400 video cameras were planned to be installed on the entire high-ranking road system by 2008. All this video information is presented onto the control room video wall to a 12-man crew that is operational on a 24/7 basis.

The video feeds are managed by Barco's high-performance Transform video wall controller. The controller also contains Barco's streaming video cards, which offer unparalleled performance for the simultaneous processing of large amounts of streaming video signals in real time with minimal latency.



The direct control of the combined regional traffic control facilities takes place through so-called subcenters, which are self-sufficient and can take over in case of a communication loss with the national control center. In the traffic control center the data of all measuring devices off the sub centers of Austria, are combined, analyzed and completed with external traffic, environmental and weather information.

The facility reacts fully automatically to predefined traffic conditions and operates indicator programs. Additionally, control room operators can intervene manually and evaluate the traffic situation with the help of video images.

The bigger picture

With the implementation of the ASFiNAG center in Inzersdorf, Austria has taken on an ambitious project to enhance traffic safety by means of the latest technology innovations available. Barco certainly fits into that picture, as it was able to offer system integrator Siemens an all-in-one, totally digital visualization solution.

SIEMENS



Improving operational efficiency for Vattenfall Europe Hamburg

"The Barco experts seamlessly integrated our existing software and various connections into their visualization solution. A complex, challenging job which, obviously, required a lot of know-how and expertise."

Dieter Lühr, Chief Plant Operation Manager



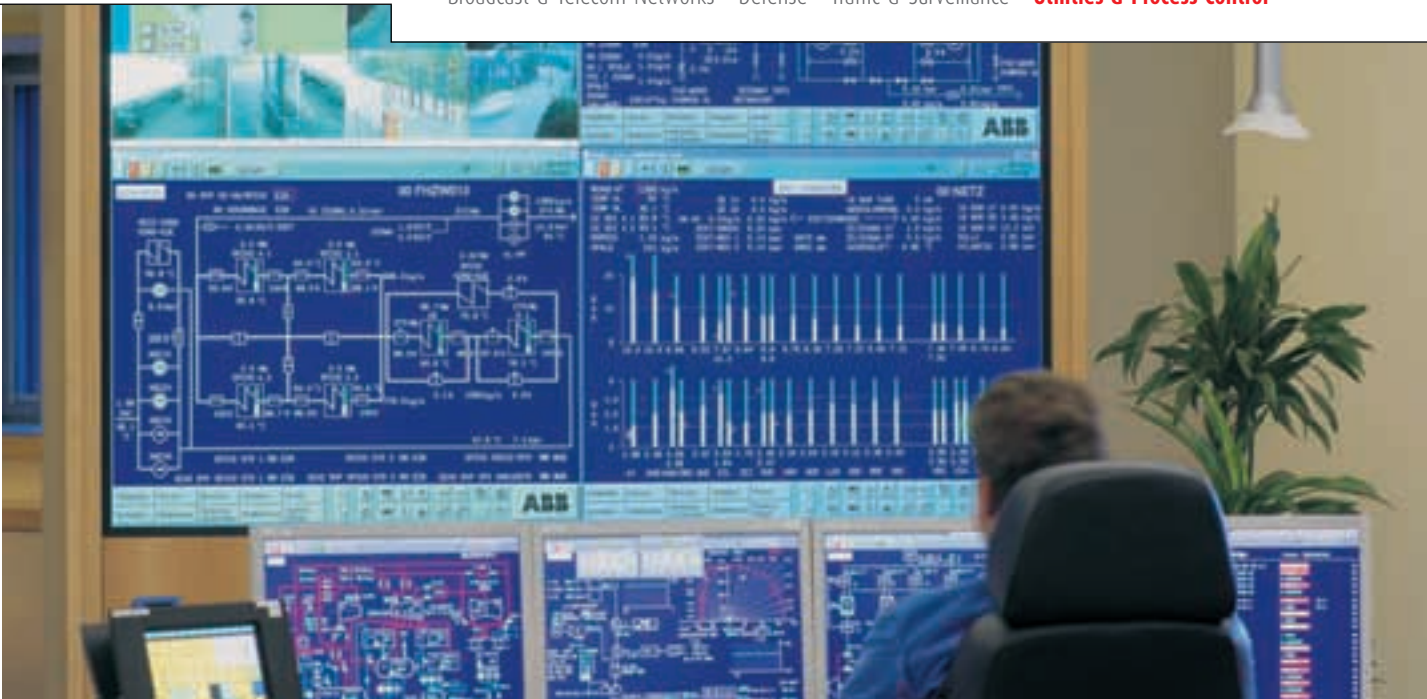
In total control

Generate electricity and heat to meet 15 % and 50 %, respectively, of Hamburg's annual needs. That's the mission of Vattenfall Europe Hamburg. To ensure continuous energy supply in its rapidly expanding market, at a reasonable price, the company makes substantial investments in its plants. When the Vattenfall central control room needed a complete refurbishment, Barco was the obvious partner. Barco provided a visualization solution that allows control room operators to oversee things better and work more efficiently.

Vattenfall's control room: screened and found fit for purpose

Vattenfall Europe Group is Europe's fourth largest generator of electricity and the main generator of heat. The central control room at the Vattenfall power plant in Tiefstack, 6 km east of central Hamburg, plays a key role in ensuring a smooth production and supply process. On a 24/7 basis, a team of three operators monitors the cogeneration power plant, the heat generation plant, the district heating network and the combined cycle plant.





Steady growth feeds need for refurbishment

“Over the past few years, Vattenfall Europe Hamburg has experienced steady growth. The more we grew, the longer the task list of our operators became,” Dieter Lühr, Chief Plant Operation Manager, explains. “When the situation became unworkable, we evaluated the installed equipment and decided on a complete refurbishment of our control room.”

The challenge was twofold. “With the new control room set-up we were determined to improve operational efficiency, as we wanted to stick to a three-strong-team. At the same time, a seamless integration was required with our existing software and connections,” Dieter Lühr adds. “Barco proposed an interesting mix of a high-quality visualization solution at an attractive price. The fact that Barco is a recognized brand in the market obviously influenced our decision to select their proposal.”

Expertise: a distinctive Barco asset

Vattenfall Hamburg decided to install three video walls with four 50” display cubes forming a large screen of 2 m width and 1,6 m height each. The video walls are interconnected, so that the operators can view the four displays as a whole or as divided sections. In addition, Barco’s solution is perfectly integrated into Vattenfall’s existing software and the various connections.

“The integration was a quite complex and challenging job,” said Dieter Lühr, who is full of praise for Barco’s support and approach. “The Barco engineers opted for a step-by-step approach and were always ready to help whenever a problem cropped up. Throughout the implementation phase, our operators did not experience one minute of downtime.”

More time and a clearer overview

The Barco solution has been operational for over a year now. All critical information – on piping systems, alarms, rated power, etc. – is being displayed in outstanding picture quality.

Dieter Lühr adds: “Thanks to the Barco video walls, our operators have a better overview and save time. They can perform many more tasks with just the three of them.”

The amount of displayed information has doubled and the static information displayed on the video wall has been extended. In the past, our operators could only see if a pump was running or not whereas, now, they can also monitor smaller indicators about physical values on one, single screen. In the past they had to switch between their three big operating panels; they now have a view on all three panels, at a single glance.”





Increasing situational awareness in urban environments

At this year's DSEI exhibition in London, Barco demonstrated that its visualization solutions can significantly increase the survivability of military vehicles in today's urban battlefield environment. Increasingly, today's military operations are conducted in closed urban environments rather than on open battlefields, bringing new challenges and threats to mobile units. The effectiveness of ground troops depends heavily upon the available transport, resulting in the use of more agile and versatile, but thin-skinned vehicles.

Although these vehicles are more agile and versatile, they are also considerably more vulnerable. In order to compensate for this lack of survivability, a higher degree of Local Situational Awareness (LSA) is necessary.

Barco is developing innovative visualization systems for LSA by bundling together various technological capabilities, including ruggedization, E/O sensors and interfacing, network interconnectivity and flexible HMI development.

An LSA solution needs to have a flexible HMI to ensure that the operator can easily assimilate large amounts of data. This was demonstrated on the Barco stand at DSEI, where a mock-up of a driver's commander's station included two rugged displays, on one of which image fusion was demonstrated. Also, network interconnectivity ensures that operators can share data within the vehicle or throughout the enterprise.

New project successes

Broadcast

- Al Watan TV, Kuwait
- Astro, Malaysia
- Bradesco, Brazil
- CNBC Arabia, UAE
- Digitürk Istanbul, Turkey
- Dubai International Financial City, UAE
- ESPN, USA
- Eutelsat, France
- Fox News, USA
- Future TV, Lebanon
- HSBC, Brazil
- IRIB NEWS 21, Iran
- MBC, Korea
- MBC, UAE
- Media Overseas, France
- NBC, USA
- New York Stock Exchange, USA
- PMU, France
- Press TV, Iran
- Scientific Atlanta - Verizon, USA
- ShopNBC, USA
- Sky, Italy
- Star Channel, Greece
- Technicolor Chiswick, UK
- Technicolor, Singapore
- TVC - 3rd National TV Channel, Russia
- TWI, UK
- VGTRK - 2nd National TV Channel, Russia
- VRT, Belgium
- VTM, Belgium



Defense

- Al Safran Airbase, UAE
- Battlefield Transformation Centre, Amper, Spain
- Borderguard Headquarters, Poland
- Centre National d'Études Spatiales, Kourou, French Guyana
- DRS, USA
- EM Tronic, Slovenia
- GHQ, UAE
- Le Commandement de la Force d'Action Terrestre (CFAT), France
- MODs, France - Italy
- SAAB MS, Sweden
- Safran Airbase, UAE
- Sistema Integrado de Vigilancia Exterior (SIVE), Spain
- SMA Italia, Smartland, Italy
- United Nations Logistics Base, Italy

Security

- Abu Dhabi Airport Security, UAE
- Arlington County EOC, VA, USA
- Atomic Weapons Establishment, UK
- BAE Systems, UK

- Birmingham Water SOC, AL, USA
- Camden Housing, UK
- COU Almaty, Kazakhstan
- Daimler-Chrysler, German
- Drax Power Station, UK
- Dubai Airport Security, UAE
- Dubai Festival City, UAE
- Fraport, Germany
- Goldman Sachs DIFC, UAE
- IBM, UK
- Istanbul Governorship, Turkey
- JP Morgan, UK
- Kuwait Fund, Kuwait
- MABES TNI, Indonesia
- MOD Woolwich, UK
- MOI, Kuwait
- MPSJ, Malaysia
- NMBS, Belgium
- Police Mechelen, Belgium
- Pronet Citys, Turkey
- Puskadal AU Halim & Makassar, Indonesia
- Rolls Royce, UK
- SiZe Siemens, Germany
- The British Library, UK
- USCG-NAVCEN, USA

Barco brings interactive touch-screen technology to large video wall displays

Barco recently launched its Display Wall Touch System for large video wall displays. The new system integrates DVIT™ (Digital Vision Touch) technology from Canadian company SMART Technologies, which enables users to access and manipulate data across the large screen area of Barco's 50" and 70" video walls.

Barco's interactive Display Wall Touch System with SMART's DVIT technology was developed by SMART's custom solutions group and is ideally suited for collaborative decision-making, brainstorming, mind mapping, briefing and training applications. On the large screen area, users can write and save notes, save screen captures and interact with content on the video wall.

The technology delivers unmatched accuracy and responsiveness and ensures

real-time interaction that can be integrated into Barco's 50" and 70" video walls. The system uses two digital cameras with CMOS image sensors located on the corners of the video wall and sophisticated recognition algorithms to determine the exact position of the user's fingertip to make a clear distinction between single clicking, double clicking and drag and drop functions. At this year's DSEI exhibition in London, Barco already demonstrated the benefits of the new system for Command and

Control environments. For these applications, Barco's Display Wall Touch System can significantly improve collaboration and enhance the speed of command decisions. Barco also demonstrated the system at Inter BEE 2007 in Chiba, Japan, where it was presented as an ideal solution for interactive backdrop applications in news, sports and entertainment studios.

Barco on show

Trade shows and events provide an efficient opportunity for Barco to make face-to-face contact with its customers and prospects. Throughout the year, Barco representatives are showcasing the company's products and solutions across the globe. Here's an overview of the Barco event calendar for the coming months:

Distributech	Tampa, FL, USA	22-25 January 2008	Utilities
Integrated Systems Europe	Amsterdam, The Netherlands	29-31 January 2008	AV industry
Singapore Airshow	Singapore	19-24 February 2008	Air Traffic/Defense
BesExpo	New Delhi, India	23-25 February 2008	Broadcast
ATC Global	Amsterdam, The Netherlands	11-13 March 2008	Air Traffic
Sea Air Space	Washington, USA	18-20 March 2008	Defense
Intertraffic	Amsterdam, The Netherlands	1-4 April 2008	Traffic
NAB	Las Vegas, USA	14-17 April 2008	Broadcast
IFSEC	Birmingham, UK	12-15 May 2008	Security
IHMA Congress	St Petersburg, Russian Federation	12-16 May 2008	Traffic
AUVSI	Washington, USA	10-12 June 2008	Defense
Eurosatory	Paris, France	16-20 June 2008	Defense
InfoComm	Anaheim, CA, USA	18-20 June 2008	AV industry

Watching over Dubai with Barco technology

In 2003, Barco was selected to provide advanced control room visualization for the operations room of the new Dubai Police General Headquarters. As one of the most prestigious police security projects in the Middle East, the new headquarters of the Dubai Police General Command is rated as one of the most advanced buildings in terms of architectural design and application of state-of-the-art technology.



Construction of the police headquarters began in mid 2003 and was completed in May 2006. Various departments began to shift gradually to the new premises in June 2006. On 21 September 2006 H.H. Sheikh Mohammed Bin Rashid Al Maktoum, Vice President, Prime Minister and Ruler of Dubai, inaugurated the command and control center at the new Dubai Police General Headquarters.

A paragon of control room technology

The new command and control room, which has been equipped with Barco video wall technology, is among the world's best fitted rooms, with similar examples in Finland, China, Norway, Germany and Greece (i.c. the operations room of the 2004 Olympic Games in Athens). The room is designed to cope with the expansions in the next 15 years. The operations center has been linked with a network of 1,089 sophisticated surveillance cameras all over the Emirate of Dubai and hooked up with 13 shopping centers and 7 police centers. Airborne cameras also offer live broadcast to the operations room. The main hall can accommodate up to 87 employees.

Advanced 3D capabilities

Thanks to an advanced 3D model of the city of Dubai, the Dubai Police control room operators are able to coordinate operations down to the smallest detail. On Barco's video walls, they are able to visualize the prevailing situation in order to assess threats and vulnerabilities. Generated from aerial and satellite imagery, the 3D model presents detailed data about landmarks, buildings and streets. The model has been enhanced with tools to extract the necessary information from the available data and take live feed from cameras.



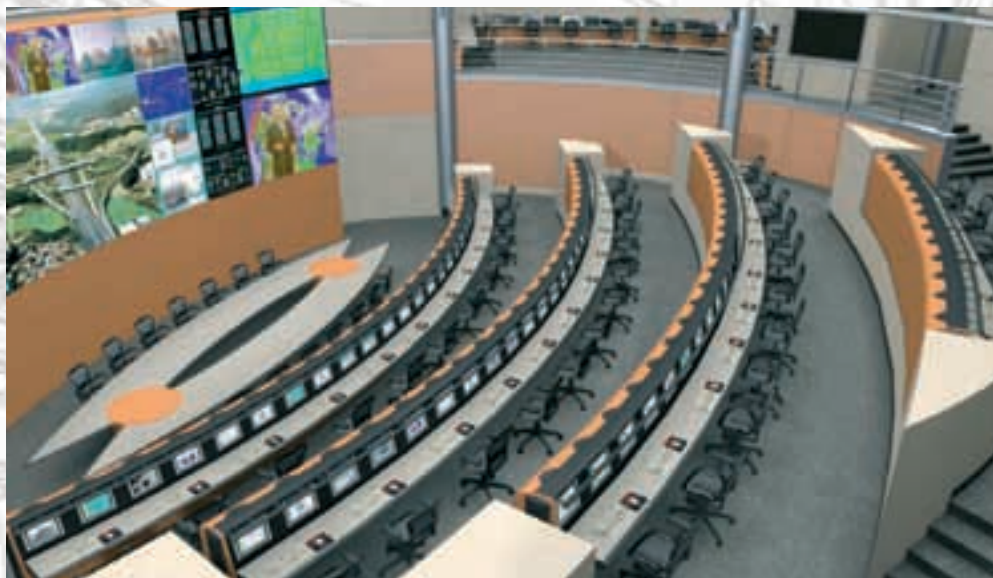


Barco's video wall consists of 10x4 display modules with XGA resolution, which in total span some 4x14 meter. The wall presents traffic information, live video images, photos of wanted criminals, statistics, 3D maps, scroll bar, Automatic Vehicle Location and GPS information.

The construction of the control room was executed by main contractor Siemens Dubai and Barco's United Arab Emirates partner Intertech Vision.

Colonel Eng. Kamel Buti Al Suwaidi, Deputy Director, Gen. Dept. of Operation Dubai police comments: "We wanted to build a sophisticated command and control center that would enable a fast response and best management and control on our resources. It was a challenge for our own team and all our suppliers to make this complex project work. We are convinced this is an important contribution to a secured Dubai."

On the successful completion of the new command and control room, the team at Barco commented: "We have seen the years of experience, the hard work and years of preparation of Dubai Police to realize a breakthrough in security technology. We are proud to be part of a project that has been able to set a new standard in security control room technology in the Middle East and beyond."



Tower Hamlets

Future-proof control room visualization

Up until 2006, the CCTV system for the busy London Borough of Tower Hamlets was part of the control room operations at the neighboring borough of Newham. But when Tower Hamlets decided to put all CCTV surveillance activities under its own control, the city brought a very ambitious project to the table for a control room that will serve its purpose well for years to come. For the control room visualization part, Tower Hamlets relied on Barco's all-in-one solution for managed security monitoring.



Barco delivered six 67", SXGA+ video wall cubes, which are integrated into a three by two set-up, along with six Hydra controllers.

The new control room came into operation in February 2006. Handling well over 200 cameras, the Tower Hamlets control room represents one of the most advanced, forward-looking CCTV operations in the UK. Together with partners Comfort Zone, Synectics, Thinking Space and EMC2, Barco took part in the creation of a system that would give Tower Hamlets maximum capability and efficiency for the longest possible time.

Management and engineering personnel of Tower Hamlets chose to get the best technology available, and at the same time, to keep their daily running cost – the amount of staff hours required to fulfill a demanding role – to a minimum.

Better ergonomics for better collaboration

The Tower Hamlets control room was designed to allow multiple teams – in this case the police and CCTV teams – to efficiently work together. Barco's ergonomic video walls significantly facilitate this collaboration.

"Barco's video wall technology needs to make the operators' jobs as comfortable – and efficient – as possible," says Mark Gelfs, Tower Hamlets' CCTV engineer.



"In previous designs, spot monitors were placed close to the operators. This actually mixes up two functions – operators are using their close up vision when they really should be looking into the middle distance," he adds.

So the Tower Hamlets operation does not have spot monitors on the desks. The video wall screen is placed a few feet away and is configured so that a large display area, which acts as the spot monitor, is surrounded by smaller images from the other cameras. This way, operators are much better able to take in what is happening on the other cameras using their peripheral vision.

The 'spot monitor' in fact, being larger but further away, takes up about the same ratio of vision as it would if it was smaller but sitting right in front of the operator – the difference is that he or she is looking ahead and comfortably

into the middle distance. What's more, as the video walls present larger middle distance pictures, other participants in the control room can also view the same pictures, which makes collaboration much more efficient.

Cost reductions

With Barco's video walls, running costs are also significantly lower. For example, the lamps in a single Barco projector are only 100 Watt; and have already well outlasted their advertised 8,000 hours useful life. Total power consumption per screen is only 210 watt thus saving energy and being greener.

Another useful side-benefit from switching away from a traditional CRT set-up is the reduced need for air conditioning. There's much less power consumption, heat, dust and static.

A future proof system

With the new surveillance system controlling well over 200 cameras, Tower Hamlets decided to put in its own fiberoptic cabling – 11km of it – because of the potential saving on operating costs. Following the capital investment in the fiber, they estimate an annual saving of in excess of £100,000. From a technical perspective, this system is ready for the future, and when the industry migrates to a fully digital infrastructure it will be able to handle it.

Barco and Tower Hamlets were featured in the May 2007 edition of CCTV Image magazine.

Barco's arrival management software selected for eight airports in 2007

With today's steady increase of air traffic, safety and efficiency becomes an ever growing concern of airports and air navigation authorities. More and more airports all over the world are investing in technology that ensures a better traffic flow and reduces delays. Barco's arrival management software for example not only does that, but also significantly reduces workload of air traffic controllers, which is a welcome support at arrival traffic peak points. The Barco arrival management software has really lifted off, with major contract awards during 2007 for installations at eight airports.



The most efficient arrival sequence

Barco's arrival management software significantly reduces controller workload by suggesting to the controller the most efficient sequence of arrivals. The arrival management software is part of the OSYRIS Commercial Off-The-Shelf (COTS) product suite that has a proven operational track record and has been designed based on Air Navigation Service Provider (ANSP) requirements and industry research. Since the development of the first operational system for Zurich Airport,

Switzerland in 2001, Barco's OSYRIS has continuously evolved. This has been made possible thanks to the OSYRIS COTS architecture which allows easy adaptation to local procedures and seamless integration into existing Air Traffic Management (ATM) systems. Since 2001, Barco's arrival management solution is part of EUROCONTROL's ATM simulator system, ESCAPE, which has been used by the European organization to simulate and evaluate new ATM concepts in the framework of the Gate to Gate program. The results of this research program showed that an accurate and reliable Arrival Manager has a positive impact on punctuality and efficiency of air traffic management.





Meeting the high demands of the Singapore airspace

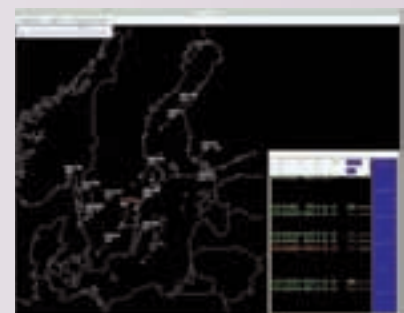
In March 2007, Barco received operational acceptance for the arrival management system at Changi Airport, Singapore. Through the development of the Singapore arrival management system, Barco's OSYRIS product evolved substantially. Some of the core capabilities of the Singapore system include routing advice, runway allocation and holding advice, all of which significantly increase air traffic efficiency and reduce controller workload.

The Singapore Flight Information Region is one of the most demanding Air Traffic Control (ATC) environments in terms of traffic load. Based on Barco's OSYRIS product line, Barco provided a customized arrival management system. Its continuous optimization of arrival sequences as well as sector load balancing and on-line adaptation capabili-

ties to the mode of operation support the Air Traffic Controllers at Changi Airport in handling the increasing traffic density.

Efficient arrival management at Oslo's Gardermoen airport

In April 2007, Norway's ANSP Avinor selected Barco's arrival management system for three airports in southeast Norway, including Oslo's Gardermoen airport. The contract includes the integration of Barco's OSYRIS Arrival Manager into the Norwegian ATM system, enabling the efficient management of arrival traffic within the Oslo Area of Responsibility (AoR). Avinor especially valued the excellent portability and open interfaces, which allowed the OSYRIS Arrival Manager to be smoothly integrated into Avinor's present Air Traffic Control system.





“Barco’s OSYRIS Arrival Manager software meets all technical and operational requirements as well as the Safety Management and Quality Assurance objectives.” said Kristian Pjaaten, Project Team Manager at Avinor. Mr. Kristian Pjaaten continued, “Avinor visited an existing Barco customer and judged the OSYRIS Arrival Manager software the most user-friendly and the most mature Arrival Manager on the market.”

Enhancing air traffic efficiency at Hong Kong International Airport

Barco’s arrival management software was also selected by the Hong Kong Civil Aviation Department (CAD). Barco was awarded a contract in June 2007 to provide an Arrival Metering and Sequencing System based on the OSYRIS arrival management software for a 6-month trial period. The CAD not only valued the sophistication of Barco’s arrival management software, Barco was also able to commit on a tight project schedule required by the CAD.



See more. React fast.

Barco's display solutions for utilities centers and process control give your operations staff the ability to see more and make better decisions when things get critical. Because, at Barco we know that only professional visualization can give your company the agility and decisiveness it needs.

Barco's networked visualization solutions dynamically present process overviews, live video, expertise systems, simulations and other critical information on a large overview display capable of handling thousands of pixels of data in real-time, without compromising on image quality.



Discover more at www.barco.com/processcontrol

New project successes

Utilities and Process control

- ABB Mashad, Iran
- AEP, Columbus, USA
- AltayEnergO, Russia
- BREC, Iran
- CHESF, Brazil
- Federal Grid, Russia
- GEW Köln, Germany
- Hemlock Semiconductor, MI, USA
- Honeywell KOC, Kuwait
- InfraserV Gendorf, Germany
- Jarhzou, Algeria
- Kemira Grow How, Belgium
- KNPC, Kuwait
- KOSC, Kuwait
- MSEP Paras & Parli, India
- NRM Frankfurt, Germany
- NTPC Unchahar, India
- ODU-SibirI, Russia
- Pacific Controls, UAE
- PacifiCorp, Seattle WA, USA
- PLN Jakarta - Medan - Ungaran, Indonesia
- PowerStream, Toronto, USA
- Seattle Public Utility, USA

- Siemens İsdemir, Turkey
- Stadtwerke Duisburg, Germany
- Statoil Zeebrugge, Belgium
- TNB NLDC, Malaysia
- Votoranium Celulose e Papel, Brazil
- VDAB Zeebrugge, Belgium
- Vermont Electric, USA
- Vlaamse Milieumaatschappij, Belgium

Traffic

- 3rd Transport Ring Moscow, Russia
- Ajman Police, UAE
- Aselsan South and İstanbul, Turkey
- Avinor, Norway
- Emirates Airline, UAE
- EUROCONTROL, Belgium
- Hamburger Hochbahn, Germany
- Hong Kong CAD, Hong Kong
- Hyderabad Int. Airport, India
- Incois Tsunami Control Room, India
- Infrabel (NMBS), Belgium
- Krasnopresnensky Tunnel, Russia
- Lux Airport, Luxembourg
- Metro Saint-Petersburg, Russia

- MetroRio, Brazil
- New York State DOT, NY, USA
- Qazvin Traffic, Iran
- Road Transport Authority, UAE
- Royal Oman Police, Oman
- SRK Vlissingen, The Netherlands
- St. Petersburg Metro, Russia
- Supervia, Brazil
- Tehran Traffic, Iran
- Thu Thiem Tunnel, Vietnam
- Wijde Blik, The Netherlands

Telecom Networks

- Avea NOC, Turkey
- Exelcomindo, Indonesia
- Genpact NOC, India
- Globe Telecom, Philippines
- Integan, Belgium
- MTN Irancell, Iran
- Oman Telecom, Oman
- Telenet, Belgium
- Telkom, South Africa
- Telstra GOC, USA
- Turkish Telekom NOC, Turkey
- Wateen NOC, Pakistan

The latest graphics and computing performance in a compact rugged package

Barco has enhanced its family of Modular Rugged Display Stations (MRDS) with a second-generation Display Processing Module (DPM-2). The new DPM delivers the latest in graphics and computing performance all integrated into a very compact and fully rugged package.

Barco's MRDS family combines a state-of-the-art DPM with a full range of rugged displays already developed and proven in military applications world-wide. The MRDS has been designed to perform in the most demanding environments, ranging from armored vehicles, shelters and aircrafts to submarines and surface ships.

Barco's second-generation DPM-2 allows to display and process information according to the latest graphics and computing performance standards. The DPM-2 features high-quality, PCI Express graphics and video input capabilities, technology insertion with the latest Intel processors, and high-performance Flash technology. With the new DPM-2 processing module, Barco brings a unique combination of advanced graphics and computing power, high-performance ruggedization and compactness, which is essential for applications where space is critical.



Barco showcases innovation in broadcast visualization at IBC

The annual IBC exhibition showcases all the latest technology and foremost business ideas for the broadcasting and media industry. A select chance for Barco to showcase its latest broadcast visualization technology.



Barco introduced version 2.1 of its Networked Broadcast Monitoring System (NBMS). Version 2.1 brings a new display controller, able to handle up to 64 sources, and a range of new input modules. The additions to Barco's NBMS offer broadcasters more flexibility and scalability for the distribution of sources throughout their facility.

Barco's NBMS is a hard- and software suite that enables operators to monitor the broadcast process more efficiently and visualize real-time video content on multiple rear-screen projection modules or LCD panels. Barco's NBMS has already been deployed by broadcast,

telecom and media companies worldwide, including RTL TVI, Belgium; Eutelsat, France; PMU, France; TF1, France; Media Overseas, France; Technicolor, UK and Singapore; and TWI, UK.

Barco also showcased a new 30" member of its family of high-resolution LCD displays. The LC-3001 display offers crisp, clear and color-accurate images in a WQXGA resolution (2560x1600 pixels) and is ideal for use in broadcast applications, which usually require high pixel density, color fidelity and low latency. The LC-3001's color calibration possibilities allow uncompromised broadcast video quality and the display is designed



without a scaling engine or frame buffers, so the signal is displayed with minimum latency.

Barco also extended its OV-D2 range of rear-projection video wall displays with high-bright versions for studio backdrop applications. The 50" and 70" high-bright editions of Barco's new OV-D2 series feature a 180 Watt lamp system and have been designed to deal with specific light conditions in TV studio environments.

Transforming the battlespace

With the emergence of new types of threats like international terrorism and the rising number of international operations around the world, the missions and role of the military and security forces are continuously evolving. Security management is increasingly a matter of various organizations, both civil and military, collaborating through shared information networks.

In so-called battlelabs spread all over Europe, military and security professionals are evaluating new technologies and capabilities that might support them in facing the world's new threats. They are studying roadmaps and action plans that lead to faster and more efficient collaboration and operations during security missions. For these battlelabs, Barco's network-centric video wall technology is an essential asset in the evaluation and experimentation process.



Enhanced battlelab capabilities

To meet the world's new security challenges, Thales has established its Battlespace Transformation Centres (BTC). These collaborative centres of expertise, operating across all Thales divisions, identify and evaluate transformation options that provide a smooth and affordable transition from legacy to network enabled capabilities. Barco's video wall technology supports Thales in reducing product development cycles and limiting the risk of investment.

New technology challenges

The BTC offers the possibility to exercise the process of Concept Development & Experimentation (CD&E). This is an iterative process, increasing in complexity and fidelity as it progresses from the initial concept through to the final fielded capability. At each stage, concept development studies provide quantified evidence of the benefits of solutions to support both customers' and industry's investment decisions.

A successful application of the CD&E process drastically reduces Thales' product development cycles, and limits the risk of investments in less needed or invalidated solutions. Typical development cycles in the military and security domains amount to two to three years.



Common-Operational-Picture visualization

CD&E sessions take place in the Transformation & Integration Centre (TIC). The Thales Colombes, France site for example, features a dual-room environment linked through a network-centric architecture. The operational room hosts the operators and engineers who execute CD&E simulation sessions. The central room allows the visualization of the common operating environment of the simulation session, and the visualization of real-time simulation statistics using a combination of individual desktop PCs and Barco's rear-projection technology.

Barco's solutions offer Thales a network-centric visualization platform that integrates information from various different sensors and sources.

The integration platform is used by operators and engineers from the government and industries to architect new network enabled capabilities, trading off capabilities and cost, and identifying possible capability gaps.

Shared situational awareness

The use of Barco's video wall results in clear operational benefits, made possible through two distinct capabilities. First, the video wall allows the simultaneous

viewing of selected data, previously combined in custom-designed layouts, and easy and fast switching between these layouts. Second, it allows the flexibility to bring a variety of sources, secured and non-secured, from the collaborative network of facilities in various locations worldwide within a single Common-Operational-Picture.

Barco's visualization technology is in operation at Thales BTC France, the Netherlands, Norway, Belgium, Spain and Switzerland. Furthermore, Barco is fully committed to extend its technology partnership with Thales BTC by integrating its network-centric visualization technology.

“The use of Barco's video wall results in clear operational benefits, made possible through simultaneous viewing of selected data and easy and fast switching between various layouts.”

It's thin, it's light

(and that's not just the price)



Barco's thin and lightweight displays

Welcome to a new era, where affordable rugged display technology no longer means compromising on quality and performance. Meet Barco's TL display family.

Never before has a display been offered with this level of performance and at such competitive prices. But that's not all. Discover how the exceptional dimensions of Barco's TL displays will exceed your mission requirements.

- **Thin** – A small footprint allowing easy integration where space is critical
- **Light** – Exceptionally light, offering major savings where weight matters
- **Versatile** – Limitless possibilities for integration in terms of size, ruggedness and mountability
- **Best price/performance value** – A competitive display solution in line with your program requirements

Projections of the future

The latest developments in video wall displays provide a bright example of products that are capable of managing and maintaining their performance throughout their lifetime.



In June 2007, a new range of video wall displays was showcased at the InfoComm event in California. Barco's OV-D2, with its newly developed Sense⁶ system, was launched at an interesting time. Video wall technology has been a fairly established field for some years and it is rare for major new advances to occur. Customers of these products have spent years 'making do' with what the market could offer, accepting inherent shortcomings in products simply because there was no alternative. Many a control room operator has complained about their inadequate equipment when, after a long shift, their eyes are strained and tired and yet another lamp has blown...

Today, the sector is more exciting and customers have choices: the advent of options such as LCD and plasma has opened up the market. Competition like this is healthy for a company like Barco, which prides itself on being innovative and continuously pushing its products forward. Customers vote with their wallets, so if solutions can be tailored to meet their desires, the company will easily be able to retain its market-leading position.

Beyond the call of duty

Customer feedback had been a massive driver in the introduction of the OV-D2 range with Sense⁶. One man who offers the industry an understanding ear is Guy Van Wijmeersch, Senior Market Development Manager for the Utilities and Process Control markets.



Guy Van Wijmeersch

Part of Mr Van Wijmeersch's role involves getting out in the field, liaising with customers and translating their needs to Barco's product development team. His job also encompasses two-way communication sharing: when product development come up with new ideas, Mr Van Wijmeersch talks to his market and gets their feedback on whether these developments (in both hardware and software) are desirable.

Mr Van Wijmeersch believes this communication strategy is crucial: "Feedback is very valuable in the sense that, to be successful, our mission is to develop what the professional customer needs. When there is a common need defined in a certain market, we adjust our products or develop new products for that need."

Part of the successful gameplan so far involves going beyond the usual call of duty: "Over the past three years, we have looked beyond the displays – beyond just selling visualization tools. We are looking again towards the applications – how customers are integrating the large displays and how they are using them."



Designed for exchangeability

Mr Van Wijmeersch deals with clients in various utility and process control markets, including power grids and power plants and oil and gas markets. He believes these various sectors have something in common with the surveillance industries that Barco is also heavily involved in: "These are critical infrastructures that need to be kept running. There is a clear need for integration in terms of improved security, camera integration and so on."

Also important is the need for both Barco and the customer to work together on a long-term vision: "After the initial installation, a power plant doesn't disappear after a couple of years: we have to design several years ahead as well as helping with initial requirements. Customers are asking us to support them with the latest technology for the next 15 years – this is a long time."

This is perhaps one of the reasons that a significant proportion of customers continue to rely on Barco for their future needs once they've bought a system. Such an ongoing relationship is something that Barco's design team encourages. According to Mr Van Wijmeersch,

"We design for exchangeability: our designs include features that we can change out, making what we call a 'technology refresh' easier."

This exchangeability has been useful with the rollout of the OV-D2 range and is just one of a number of lessons learned from tough past experience. "Cube technology – with multiple projectors tacked to one large canvas – has been around for a long time," outlines Mr Van Wijmeersch. "But it was very difficult: it looks great when you build the wall, but after a few months the degradation of the lamps leads to color change. Operators were used to this



color mismatch over time, but when managers and other visitors viewed the wall, they were shocked at how badly it had degraded. This was inherent to the technology itself and was why we came up with the Sense⁶ solution on the OV-D2."

Intelligent maintenance

This new range was designed to be installed and then be almost self-maintainable – with a level of intelligence (from the patented sensor technology) that allows the customer to retain the same high standard over time that they experienced at the start. The importance of this one quality cannot be underestimated. An example provided by Mr Van Wijmeersch demonstrates how valuable this need was: "One customer had previously bought a competitor's solution and the quality of colors became so poor that he ended up misinterpreting some of the data and almost shutting down the power plant." Imagine the uproar if the same problem occurred in a Homeland Security application at just the wrong time. To put it bluntly, a failure in the video wall can be dangerous to operations and the cost could potentially be so much more than financial.

Maintaining good colors and geometry was a key focus in the development of the OV-D2. "The principle is that when installing and aligning the different cubes, you set the required brightness and color and the internal computer sustains that level of output over time. If something drops out of that specified range, a message is sent – for instance, if a lamp needs to be replaced. It sounds very simple but there is a lot of intelligence and integration behind it."

From a non-technical point of view, the new range has other benefits that are easily understood; it saves the users time and money – something appreciated by all markets. "We have proved the new technology is sustainable over time, whereas initially we were looking at products that were good for the installation. Previously we were solving this through maintenance contracts, bringing service people in, say, every six months to calibrate the wall.

But a lot of the control rooms are quite remote, or not easy to access, so the more intelligence you have in the system, the easier it is to maintain. This boils down to less cost for Barco as well as the customers."

Mr Van Wijmeersch says that Barco is constantly looking toward the future in terms of new technologies, but for the moment "rear projection technology is still the proven and best". An interesting aspect to add to the previously mentioned benefits is scalability: "It's easily scalable – you can make your canvas bigger almost seamlessly, whereas LCD will always have a frame around it. In certain markets where the data is showing things like maps or power lines, seams created by the big frames around the LCD screens often distort the whole picture, which is quite annoying for operators."

Usually when something sounds so impressive, you then discover it comes with a hefty price tag, but Mr Van Wijmeersch is quick to refute this: "It sounds like it is more expensive, but it isn't. We are cost sensitive – the utilities market counts every penny and we can't afford to outprice ourselves. You need to explain the different advantages – the scalability, the maintainability, long-term benefits, and lower maintenance costs. We do have a very competitive product."

The new range is currently being installed in the utilities market for customers who require large walls and Van Wijmeersch is especially proud of one particular contract: "AEP (one of the largest utility groups) bought around 42 cubes and swapped from a competitor's product when the company saw the OV-D2 in action."



Mathieu Massart

The technology behind the scenes

Another man who is very pleased with the new series is Mathieu Massart, Product Management Director at Barco's Large Screen Solutions product and technology unit. He describes how bigger screens are used for a variety of applications, ranging from the seamless video wall we can see on BBC World, to the corporate surveillance carried out at sites such as Canary Wharf in London, taking in oil and gas utilities and the traffic market along the way. Sizes within the OV-D2 range go from 50 to 120".

Similarly to Mr Van Wijmeersch, Mr Massart is keen to point out the advantages of Barco's latest solutions: "Large screens provide a quick, clear overview of complex data, which improves situational awareness, allowing critical decisions to be made quicker.

For instance, in the defense sector, you have to make the right decisions very quickly. You just don't have time to be scrolling through a smaller display; you have to see it on a big display – something could be happening in the left, top corner that will affect the bottom right-hand corner." Large screens also make interaction easier; a lot of data from several places (for example, from different videos or different PCs) can be combined to interact together. In addition to the consistent color and brightness over time, the OV-D2 range offers greater built-in redundancy than in the past. A dual-lamp system, for example, means another lamp takes over if one lamp fails. As well as obvious reasons for wanting to keep things looking good at all times, Massart describes a more amusing motivation: "Some video walls are sold almost as a PR tool. If a Head of State is being showed around a visually impressive control room and there is one black cube, then you have a big problem."

Mr Massart is confident that Barco is heading in the right direction by investing heavily in its rear-projection technology. As well as the difficulties of tiling alternative solutions, such as LCD or plasma, he focuses on an innovative aspect of Barco's technology – the Digital Micromirror Device (DMD). "This is a little micro device that is really stable, so it can easily run 24-hours a day for 10 years. If you try that with one plasma screen and there is static content on it, in a couple of days it will burn in irreversibly. And for commercial LCDs, if you leave it for, say, a couple of weeks, it becomes nearly irreversible and you have to put other content in to reverse it. With our technology, you have none of that."The DLP™ chip provides another advantage – it is much faster: "Think of a soccer game; on a commercial LCD, if the soccer ball moves on the screen it will have a comet appearance behind it. DLP™ is about a thousand times faster.





Investment bank, Surveillance



Channel 4, Broadcast



ENBW ZNL Esslingen, Utilities & Process control

Active sensor technology makes the difference

For a new technology to make a big impact on the market it has to be competitive in terms of price, and Massart acknowledges that Barco is perceived as high-end. What does it take to convince customers to choose Barco? "We provide people with options. For instance, the Sense⁶ is an option: if you don't choose it,

you get a lower price – comparable to our competitors.

But you will also get performance similar to our competitors. If you want to have a uniform wall at all times and you don't want to have a service guy working on it every week, then you pay for the Sense⁶ option." Sense⁶ measures the output of the wall to keep all cubes looking equally good in terms of color, contrast and brightness, and is easier on the human eye than previous solutions. One particular example highlights these benefits perfectly: "We have a media client that uses a Barco product that does not have Sense⁶

built in. Every week, one man has to spend 10 hours on color calibration, because it has to look good on TV."

Another big client is Reliance in India, which purchased eight walls immediately, each of them comprised from 24 rear-projection cubes. This big investment so soon after launch helps demonstrate just how much the market was crying out for something new: "There was fierce competition between two companies for this contract, but Reliance went with us because they had our previous wall, which they liked, even though a few issues were raised that were completely resolved with the OV-D2 series."

Flexibility through technology

As Mr Massart gets to work on further improving the technology – especially on the Sense⁶ side of things – another man is thinking globally on what happens next. As Director of Market Strategy, Robert Wu has the responsibility of pushing Barco forward, deciding how best to approach the market. "OV-D2 represents the flagship product of our display options, but we are a visualization solutions company, so our portfolio will expand to include LCD flat panel technologies as well for those applications that do not require the size or zero-gap seams between displays," Mr Wu says. "We are the recognized leader in the world for visualization, but we're going to take it to the next stage of evolution, by which I mean we are going to provide users with an easier way of using our displays than we may have done in the past."





Madrid Barajas Airport, Traffic



BBC news, Backdrop



Decision room, Command & Control

A lot of this progress is associated with intelligence – making products capable of auto-adjusting for easier use and maintenance, which in itself leads to another benefit for potential clients: “As a result of the technological advancements that we have made, we can change the cost profile of what you can experience with your solution.” In addition to the new features mentioned above, the next generation of controllers (when used with Barco displays) offers the user what Mr Wu describes as “a unique capability of driving the interface between them in a different manner”. This means a significant reduction in the amount of electronics needed in the controller, so consequently less cost as well.

The flexibility of these new solutions is showcased in another feature of the range – cropping. “OV-D2 has the ability to take in high-resolution signals, crop parts of the signal and discard others,

then display the parts that are of interest.” In layman’s terms, what this means is that customers can use one high-resolution output graphical card, instead of a large number of low resolution cards, to drive multiple OV-D2 displays in order to save cost as well as space on the controller.

This feature is designed for customers who don’t have high-resolution needs, such as situations where operators are positioned a fair distance away from the wall. There is a great deal of enthusiasm within Barco about the cropping feature: “Nobody else can do that – we’re the only ones. But it has to be in tandem with a Barco controller.”

Again, it comes down to giving the customer a choice. The cropping software feature is not a buy-on; it is incorporated into the whole range and can be turned on or off, depending entirely on the customer’s wishes (and their cost profile). Mr Wu explains that it is a truly flexible solution: “The idea here is to be able to have it so flexible that, if the customer has the money to spend on it up front, then they can get the up front benefit. However, if they don’t have the money, then we can still tailor a solution, from the more expensive (the high-end) to the lower-end, but they turn things on as they go along.”

Mr Wu’s current strategy focuses on why Barco is the market leader in visualization: “Our patented sensor technology allows us to be able to sense the conditions of the walls and we tie this across not just one cube but across all of the cubes – to get a uniform wall. That’s unique – our competitors can’t do this. As we’ve designed it as one integrated solution, the user can manage it as an integrated display.”

So where will Barco go from here? Mr Wu’s plans seem to indicate that there will be more news to come soon: “We’re going after networked solutions. A wall is made of units that have to work together, which is what we’ve recognized with the development of the OV-D2. We are going to extend this concept further. Today, most large corporations or organizations have many disparate functions that need to communicate large amounts of information with each other to make important decisions, especially in crisis situations. One ideal way to communicate the complete situational awareness quickly and accurately between them is to share with each other what is currently being seen in their control rooms – i.e. the contents of their main control room display wall. In essence, each display wall will need to communicate and share its contents with other display walls and vice-versa. This can already be done in limited ways today but our networked solutions will make this much simpler and with better performance.”

“OV-D2 is the beginning of how you can manage this. From one central position, you can manage multiple walls – for instance, setting lighting levels or switching things on and off. That’s just one step. The next is to decide that you want the contents of one wall to be shown on another wall. Regardless of whether the other wall is in the same room or halfway across the country, we are able to do that.”

If this is just the beginning of things to come, then Barco’s future looks extremely bright – as do, of course, its video walls.

DLP™ technology by Texas Instruments offers crystal clear images with superior quality. DLP is a trademark of Texas Instruments.



Robert Wu



A sense of perfection

Barco's next-generation DLP video wall series

With its next-generation DLP™ video wall series, Barco has delivered the promise of perfect image performance. Barco's OV-D2 video walls offer a new visual experience for operators in a wide range of control room and studio environments.

The new OV-D2 video wall series comes with Sense⁶, a unique sensor technology that provides brightness and color stability over time and across the entire display. The result of this technology is stunning. No distracting luminance or color differences. No frequent maintenance or manual adjustments. No impact on the wall content whatsoever.

Barco's OV-D2 video walls with Sense⁶ give operators a sense of perfection with an image accuracy and uniformity that is second to none.