Ensuring that our maritime transportation system, the waterways upon which it navigates, and the ports into which the vessels travel are safe and secure, is a critical domain in which Barco, BMT Renewables Limited (UK) and Fortek Computers Limited (UK) are closely co-operating.

Advanced VTS solutions today are no longer reserved for major ports, waterways and maritime authorities, but are becoming increasingly significant for maritime rescue coordination and incident management. Integrated traffic management systems and solutions offering high-performance, highly reliable maritime services are needed to fulfil the continually increasing security standards.

Barco Traffic Management focuses on integrating traffic management and rescue coordination services supporting a Common-Operational-Picture visualisation for ports, waterways, coastal and maritime security. The nature of maritime crisis management means that different agencies, like the coastguard, search and rescue, anti-terrorist units, emergency response services, security companies, ship owners and harbour organisations, are dispersed in virtual organisations. They need to work together to look at situations, assess the risks, identify potentially critical situations that may develop into crises, develop strategies for avoidance, mitigation or aid, plan for these and then implement. Continual re-planning and updating based on integrated information support is essential as the situation changes. Given this, it is difficult for information and knowledge to be shared to ensure a high degree of group awareness of how the situation is managed in order that timely, accurate and effective decisions are made throughout the process.

**MRCC Ostend**

As a first step towards implementation of a comprehensive solution, Barco was selected in February 2005 by the Shipping Assistance Division of the Ministry of the Flemish Community to build a new Maritime Rescue and Coordination Centre (MRCC) in Ostend together with Fabricom GTI and Teil Telecom.

Barco will deliver an MRCC solution integrating an advanced version of OPScenter VTS with the Incident Management System VISION from Fortek and the Search and Rescue module SARIS from BMT. With the new system, operators will be able to display traffic data from different external sensor sites such as radar and AIS both coming from SRK (Scheldt radar chain). The solution also includes voice communication facilities, combined radar video, track, voice recording and replay and allows for browser-based access to an integrated traffic image. If there is an incident, the MRCC can rely on a lean, reliable and cost-effective solution, which fully supports all port control and maritime rescue activities.

Along with its role as maritime coordination centre, the new MRCC will also be used as an incident management room and press information centre. For this purpose, Barco Control Rooms will install a large-scale high-resolution OverView display, providing 24/7 operational capability with multiple inputs and adjustable screen layout functionalities.

**Next generation MRCC integrated solutions**

In the future, an integrated solution should not just cover the integration at the presentation level but also at the database level. Therefore, there are plans to develop an advanced server architecture (containing the modeling BMT applications SARIS, OSIS and
Barco is a recognised international leader and pioneer in the design, development and manufacturing of real-time graphics display systems and software components for traffic management. Based on many years of experience in traffic management, Barco provides its customers with tailored integrated Vessel Traffic Services solutions, and components for coastal surveillance systems and advanced working positions. Barco’s expertise in providing high-performance display systems is supported by a worldwide network of research, development and support services. A global sales organisation, with regional support people who understand the customers’ language and requirements, complements Barco’s partnership approach.

Rembrandt) and integrate it with the Barco VTS interfaces and other external information sources such as SafeSeaNet. This will allow integration of a large range of data sources, real-time information and models. These simulation and training tools will support the people behind the systems by helping to compliment their experience and knowledge in the best way.

With this synergic integrated concept, combined with Barco’s Personal Workstation Consoles, operators are no longer confined to a limited number of monitors. They can now size and move a virtual monitor anywhere on the screen for maximum viewing and best fit in different situations. This allows for better collaboration between co-workers, individual situational response (in addition to common-operational-picture wall) and reduced disparate displays that integrate all information formats – video, data, RGB.

**Conclusion**

A true surveillance environment such as in a MRCC is designed to provide a real-time collaborative work environment for monitoring, response dispatching/co-ordination, access/flow control, recording and overall systems control for 24/7 operations. Barco’s VTS solution, combined with the solutions from BMT and Fortek, is tailored to optimally facilitate these functionalities and make the surveillance environment more efficient for both small and large or complex traffic management and rescue coordination centres.

Barco’s vision therefore is of a very advanced all-in-one solution, supporting vessel traffic monitoring, incident management and search and rescue, including high quality video walls and large personal displays.

### TABLE 1

<table>
<thead>
<tr>
<th>Functionality</th>
<th>Name</th>
<th>Forecast Timeframe</th>
<th>Example Maritime Use</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vessel Traffic Services</td>
<td>VTS</td>
<td>X X X</td>
<td>Collision Avoidance</td>
</tr>
<tr>
<td>Automatic Identification Systems</td>
<td>AIS</td>
<td>X X X</td>
<td>Ship and cargo identification</td>
</tr>
<tr>
<td>Incident Management</td>
<td>VISION</td>
<td>X X X</td>
<td>Incident response</td>
</tr>
<tr>
<td>Search &amp; Rescue Planning</td>
<td>SARIS</td>
<td>X X X</td>
<td>Search and rescue response</td>
</tr>
<tr>
<td>Oil Spill Information</td>
<td>OSIS</td>
<td>X X X</td>
<td>Oil spill dispersal response</td>
</tr>
<tr>
<td>Traffic Simulation and Forecasting</td>
<td>Rembrandt</td>
<td>X X X X</td>
<td>Long term growth in traffic and collision risk</td>
</tr>
<tr>
<td>Search &amp; Rescue Resource Planning</td>
<td>SRMD</td>
<td>X</td>
<td>Long term need for search and rescue resources</td>
</tr>
</tbody>
</table>

**ABOUT THE COMPANY**

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**ENQUIRIES**

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