

EXHIBIT #1

Question 4: Statement Regarding Government Contract

Government Agency

U.S. Department of Transportation, Research and Special Programs Administration, Volpe National Transportation Systems Center, Center for Navigation, DTS-52, Cambridge, MA 02142-1093
(Contract No.: DTRS57-99-P-80260)

Contact

Mr. Maurice J. Moroney, Director DTS-52, (617) 494-2026

Interagency Contract

U.S. Department of Defense agreement PPA-VH-238 with the Volpe Center.

Narrative Statement

The purpose of the “Boston Harbor Vessel Management System” demonstration project is to demonstrate a capability to improve the management of vessels in Boston Harbor and adjacent waterways. The vessel traffic management concept involves accurate and continuous vessel position information transmitted to a central management facility, and situation information transmitted to individual vessels. When the accurate vessel position is determined by using differential Global Positioning System (GPS) receivers, each vessel periodically will transmit that position to the central management facility for display with position information from all other vessels in the system. The periodicity of data transmissions will be at a rate of 50 vessel reports every 10 seconds. Because of the rate of information transmission and the need for continuity of displayed situations, there must be no spatial gaps in communication system coverage. Signal availability must be to ground level throughout. The demonstration project will use prototype and off-the-shelf equipment and operate from one shore facility and from as many as 15 vessels within the waters of Boston Harbor.

With high-quality vessel position information, central managers will more efficiently use harbor facilities and safeguard the transit of vessels with hazardous or sensitive cargos. Vessels with hazardous cargoes will be monitored meticulously as they move. Vessel Pilots and Captains will have immediate and detailed information on nearby vessels regardless of the weather or visibility. Also, vessel Pilots will have very precise speed information of great value when approaching fixed objects such as piers.