

# Canarie IIP-03 “Undersea Window” Project Milestone 2 Report

## Appendix 1

### Report on Selection of the Camera and Fibre Transmission Hardware

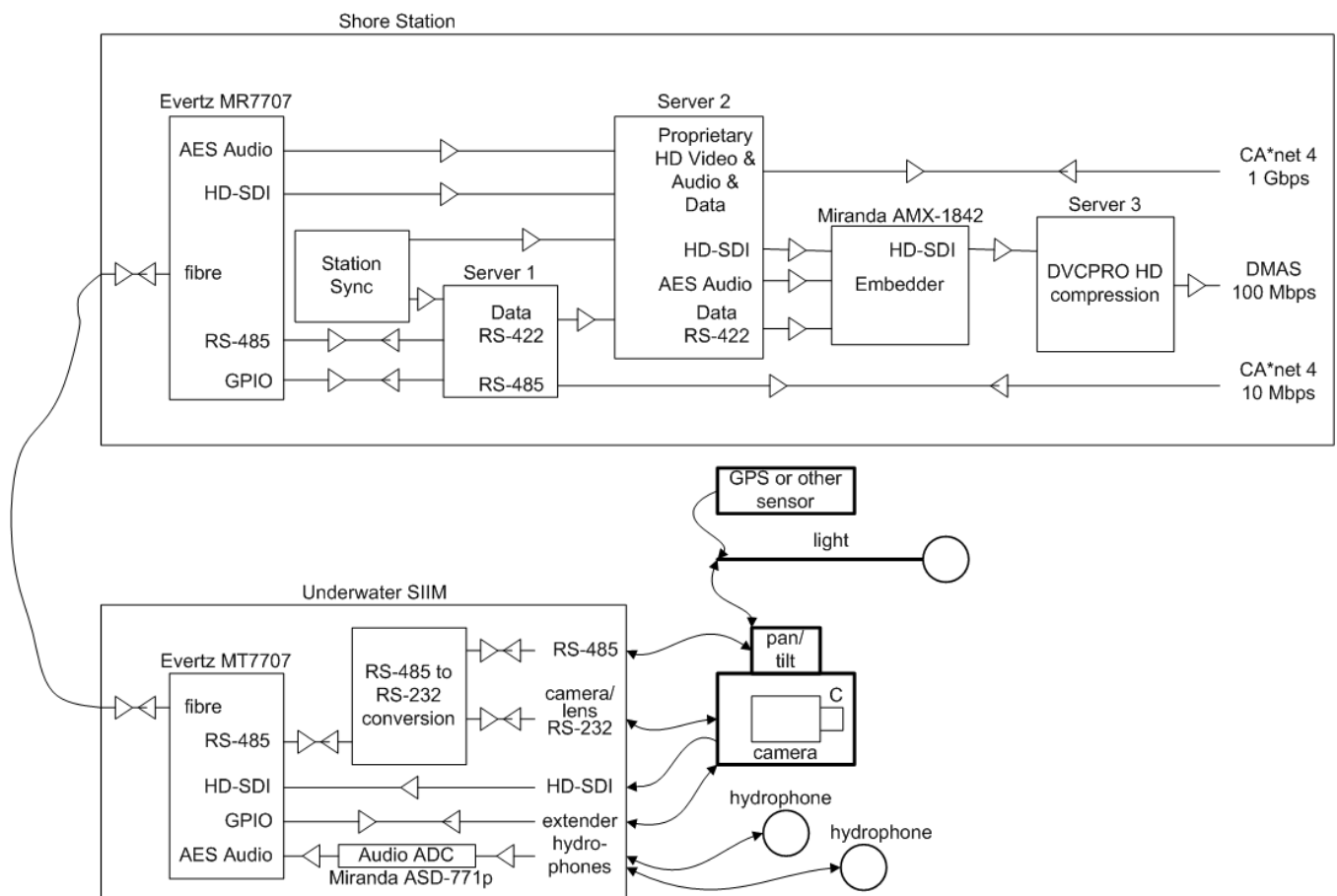
John Roston

#### 1. Selection of the Camera and Lens

The decision was made to order the improved Panasonic HD camera, the model AK-HC1500, since Panasonic promised delivery by July 31, 2006. It was also decided to order the Canon 22X zoom lens, the model HJ22eX7.6 ITS-RE. As explained in the Milestone 1 Report, the 12X zoom lens used in previous undersea HD cameras is not adequate for the work being done by the scientific users of the system. The idea of using a 40X zoom lens was abandoned since the cost was well beyond the project's budget and the potential camera case manufacturers did not think that they could manufacture an optical glass viewing port for such a lens. After extensive discussions with the scientific users and the preparation of drawings showing the fields of view at various zoom settings, it was agreed that a 22X lens would fit the scientific and technical requirements as well as the available budget.

#### 2. Selection of the Fibre Transmission Hardware

A functional diagram was prepared to show how the various proposed components of the system would inter-connect:



This diagram provided the requirements for the fibre transmission hardware. It was decided that the Evertz MT7707 fibre transmitter and MR7707 receiver would meet the requirements. A collaborative relationship was then established with Evertz that we are confident will result in a robust fibre transmission system.