propose a solution meeting the requirements. This approach will result in a system that meets all functional requirements at the lowest possible cost through a competitive public tender process.

<u>Alternative 1 – Status Quo – Extension of NLH's existing MRS</u>

The existing MRS was purchased in 1989 and cannot be expanded for a variety of reasons, including:

- All components of the current system are discontinued by the manufacturer;
- Manufacturer support is no longer available to support or to upgrade the software/hardware;
- Spare parts for the switch and site controllers are no longer available;
- The system has experienced an increasing rate of failure in recent years, resulting in reduced availability; and
- Trained resources and training resources, knowledgeable about the system, are no longer available at Aliant, which puts the system at risk. Aliant performs the maintenance on the existing MRS.

The increased failures over the last few years, the unavailability of spare parts and support from the manufacturer, the lack of trained resources, and operational issues with the existing coverage as identified by the user group necessitate the replacement of the existing MRS. Because of the reasons stated above, the alternative of expanding NLH's existing system to allow for implementation of a common system at a future date is not possible or viable.

<u>Alternative 2 – Replace Existing NLH MRS without DTW</u>

Based on the analysis of NLH's identified MRS requirements, it was determined that a total of 39 repeater sites will be required in order to meet the coverage needs of the user group. The existing system has a total of 29 sites. The ten extra sites are required to provide coverage in the following areas, and as identified in NLH User Survey Response – Appendix B:

- Central Newfoundland, to meet the requirements of the Granite Canal Generating Station;
- Bay d'Espoir Highway, to provide infill coverage for the major transmission;
- Southern Labrador, to provide extended coverage along new sections of the Southern Labrador Highway;
- Happy Valley/Goose Bay, to provide local access; and
- Marystown, to provide access to transmission lines on the Burin Peninsula area.

This alternative assumes DTW will not be continuing to participate in the NLH MRS and thus NLH will incur all capital and operating costs.