

ABSTRACT

Feasibility Study of the Use of Spread Spectrum Technologies in the Caribbean for Data Networking

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This Project examines the issues involved in implementing private wireless links for data networking, specifically those concerning spread spectrum technology. This is a low-cost option, providing bandwidth comparable to leased lines, which maximises the use of the radio frequency spectrum. Geographical Information Systems (GIS) software was used to develop an application for the automation of Path Profile analysis, an essential component of wireless network design.

Spread spectrum has, so far, not been allowed in some developing countries, including Trinidad and Tobago. This study has also investigated the regulatory issues involved in the granting of licences for use of this technology, with special reference to the Caribbean. Interference factors in setting up an overlay network to co-exist with other narrowband wireless systems have been explored.

The use of spread spectrum technology has been shown to be a viable option, especially in the case of providing networking infrastructure for interconnection of schools. This is an especially important result in the light of the increasing need for schools to keep pace with the growing area of information technology within the field of education.

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