

Concept Note

Title	GSM Village Connection (shared platforms)
Organisation(s):	<ul style="list-style-type: none"> • Nokia Siemens Networks • Challenge Networks • SPC
Theme:	Theme 1: Affordable Access: Domestic Connectivity in the Pacific
Speaking Duration:	15 Minutes
Background and Justification:	<p>GSM is a proven and successful approach to providing voice and text messaging in Pacific Islands and in many instances is the platform of choice by operators and users for all voice connectivity.</p> <p>However coverage is not available in all areas or countries. The high cost of equipment, power and backhaul in rural and remote areas has limited the rollout.</p> <p>New technologies are being introduced to reduce the cost of equipment; however, the rollout of GSM coverage is not proceeding very rapidly, especially in rural and remote areas.</p> <p>This proposal is aimed at reducing the cost of deployment to encourage rapid rollout of appropriate infrastructure.</p>
Objectives:	<p>To increase GSM coverage in Pacific Islands by reducing the cost of equipment by</p> <ul style="list-style-type: none"> • Subsidising the cost of the remote equipment • Reducing the cost of backhaul • Providing core services of switching and billing from shared platforms <p>(Proof of Concept demonstration will be held during the Pacific ICT Ministerial Forum)</p>
Scope:	<p>Based on the successful RICS model where a neutral body hosts expensive common equipment and facilitates the deployment of local equipment, this proposal has three key outcomes</p> <ol style="list-style-type: none"> a) To allow existing GSM operators to expand their network coverage to uneconomical areas by reducing the cost of installation and operation of remote sites b) To allow independent operators to establish a service in areas that are not

	<p>served by existing operators</p> <p>c) To allow small island states to operate a GSM service without having to purchase the expensive core switching and billing platforms.</p> <p>It is proposed that SPC manage a project with funding to establish the core network equipment and to tender its operation and maintenance and then to offer switching and billing services at cost. A defined number of remote location installations will be provided to pilot and trial the approach at subsidised rates.</p> <p>A strong linkage with RICS is suggested to obtain cost reduction of the backhaul.</p> <p>At the end of one year of operation, the project will be reviewed and decisions made whether to continue it or not.</p> <p>Key issues will be the openness of the processes and an agreed definition of sites that will be subsidised as uneconomic.</p> <p>The potential for this solution as a rapidly deployable Disaster Recovery solution should be noted, both for providing rapid local connectivity and also for emergency replacement of core infrastructure. Some funding from Disaster Agencies could be allocated to this project.</p>
Expected Outcome:	GSM service will be available to rural and remote areas that would not otherwise have the service.
Potential Partners:	<ul style="list-style-type: none"> • SPC • ITU • Challenge Networks • Nokia-Siemens Networks • Governments of Pacific Island Countries • Telecom operators • ADB / World Bank / international and regional development agencies
Project Timescale:	<p>Beginning as soon as possible</p> <p>Set up phase 3-6 months</p> <p>Operations to be reviewed after one year</p>
Budget (optional):	<p>Depending on number of remote sites to be subsidised</p> <ul style="list-style-type: none"> • Core network equipment US \$1.5M • Say 100 sites (same as RICS) partially subsidised US \$2M • Admin and misc US \$0.5M