

## PROJECT OUTLINE OF THE PILOT PROJECT – POMIO DISTRICT

### INTRODUCTION

The proposed pilot project is regarded as a complete package solution to solving one of East New Britain's remaining remote districts', telecommunication woes, which for many years, have prevented the efficient delivery of services to the rural populace. Hence the reason this very district of Pomio has lagged behind the rest of the province in terms of development.

The proposed project will incorporate all mediums of telecommunications including:

1. Fixed Line services for voice and data, within the District HQ/Township of Palmalmal
2. 3G/4G coverage for both mobility and fixed wireless broadband services in three LLGs of rural Pomio District
3. FM Radio broadcasting which has been non-existent resulting in People in the district missing out on important announcements from Government and Emergencies Agencies.
4. Television Broadcasting which also been non-existent in the district
5. And Two-Way Radio communications which is vital for rural communication as well.

### PALMALMAL GATEWAY SITE

The Project shall be implemented in three phases, beginning with the Entrance Link site at Palmalmal, from where it will branch out to other 3G/4G sites within the district via smaller IP radio links. The main Gateway site at Palmalmal will have:

1. A 3 Legged RDS 45m Heavy Duty tower to cater for 3G/4G antennas, IP radio backhaul to other sites, FM Radios, TV and other VHF radio services.
2. An Equipment Hut to house all Electronics and equipment for the different telecommunications services and service providers.
3. A Full Hybrid self-sustaining Power system to power all telecommunications systems
4. A remote Domsat Link to connect Servers/Nodes in Kokopo via Tomavatur mini Hub; this will be the ENTRANCE LINK into Palmalmal District Headquarters.

### IMPLEMENTATION

Phase 1 Scope:

- a) Construction of Full Hybrid Power System including Genset and Solar System
- b) Erect the 45m Heavy Duty RDS tower and Construct Equipment Hut to house all electronics
- c) General site upgrade with gravel laying

Phase 2 Scope:

- a) Install Domsat for ENTRANCE LINK
- b) Impalement Cable Rehabilitation and expansion within the Palmalmal Township
- c) Install BA1000 at Palmalmal site to cater fixed line voice and ADSL broadband internet

Phase 3 Scope:

Install 3G/4G at Palmalmal and three additional sites; Drina, Rano and Central Inland Pomio

## PROPOSED PALMALMAL PROJECT - REPORTING PROCEDURE

KUMUL TELIKOM HOLDINGS through, Telikom and Dataco will implement the project, with Dataco taking care of the main Entrance link into Palmalmal, in Phase 2, while Telikom and its nominated contractors will take care of the rest of the tasks in Phase 1 to 3.

Telikom will manage and oversee the project, and provide weekly updates to all stakeholders and MAIN sponsors of the project, to ensure accountability, transparency and acquittals are maintained during the life time of the project.

Telikom, will work closely with sponsors for the procurement of materials, hiring of labour and mobilisation/Logistics.

All installations will be done according to Telecommunication best practices and standards.

## SUSTAINABILITY OF PROJECT

KUMUL TELIKOM HOLDINGS through, Telikom and Dataco will implement the project, with Dataco taking care of the main Entrance link into Palmalmal, in Phase 2, while Telikom and its nominated contractors will take care of the rest of the tasks in Phase 1 to 3.

After the project, Telikom, Dataco and BMobile will manage and continue to maintain these Telecommunication assets respectively, to continue to serve the intended population. Routine maintenance and refuelling, plus security and site up keeping will be under the responsibility of Telikom and BMobile.

Providing a better Telecommunication to the remote Pomio District has always been a big challenge, due to the rugged terrain which made it difficult to chart out an economical radio path into the area.

With the Entrance link into Palmalmal District HQ in place via DOMSAT, all FM Radios stations, EMTV, 3G/4G and two way radios can now be broadcasted from the Main Heavy Duty 45m tower at the District Township.

From there, FM Radios, EMTV and the 3G/4G coverage can then be easily extended to other areas within the district via small IP Radio backhaul. Drina, Rano and Central Inland Pomio are included in the initial network expansion plan, of this project as shown in the survey report, provided as a supporting attachment to this proposal.

Economic activities in the area is set to take off with this new enhanced telecommunication technology, benefiting large Oil Palm and logging projects, Tourism as well as small SMEs. Schools, Health Centres and Aid-posts are set to benefit from an extended 4G coverage too. Even Law and Order will now be better managed through improved telecommunications.

Police and Health Department could then, leverage the power of LTE 4G network to extend their two way radio communications, through the Radio Over IP protocol (RoIP), without worrying about installing multiple expensive repeaters all the way from HQ Kokopo.

The Health Information System and E-Medicine, could then be easily implemented with extended 4G coverage, where all rural Aid-posts, Health Centres and Hospitals in East New Britain province will be connected via a massive Hub/Spoke network back to a Central Hub/Database Server at Nonga Base Hospital in Rabaul.

For the people of Pomio District, this new Telecommunication development would be THE Life Changing Experience for them:

1. They could then do banking transactions online through SMS and internet.
2. Schools could then have access to E-Library and E-Learning resources.
3. Health Centres and Aid-posts could then have better networking for medical statistics analysis
4. Most Services would then be at their door step. No more Dangerous journeys by boat and expensive flights back to Kokopo to get services
5. With better telecommunications, Palmalmal District HQ and Township would then experience, increased economic growth, with more service providers/investors flooding into the area looking for Economic opportunities.
6. Fisheries, Agriculture and Tourism sectors would also be boosted, through better FM and TV coverage in the area.

Remote Pomio District, would surely be transformed, with this Telecommunication Upgrade project.