Response to request for Additional Information relating to Parliamentary Inquiry into Wireless Broadband

29 July 2002

WBT Submission	1201 YJ No. 4351

Council's Current Licensed Microwave Network.

The Microwave network is summarised in the attached schematic. The original network was installed in 1992 and has been expanded over time. It is a private (Council only) network carrying a combination of both Voice and Data services.

The Network is all ACA licensed spectrum operating in the 15Ghz, 23Ghz and 38Ghz frequency ranges with traffic capacity ranging from 2Mb to 34Mb.

The network was originally installed as part of a total PABX upgrade and allowed Toll-Bypass for all voice traffic between the connected sites as well as a private Data network. This private microwave network provides services much more cost effectively than the equivalent Carrier Services. The microwave network is centered around Council's Surfers Paradise Administration building and ranges from Coolangatta to Beenleigh and west to Nerang.

Council has a tender currently under evaluation (in the approval stages) to upgrade the Southern Portion of this private microwave network (see attached diagram with the Southern portion outlined). The results of this tender will see the microwave upgraded to greater traffic capacity (155Mb and 34Mb). The anticipated timing of the upgrades is for the Southern Network to be upgrade by the end of December 2002 and the Northern Network shortly after (prior to June 2003).

Unlicensed ISM band.

Council currently has on radio operating in the ISM band at 2.4GHz. This link is between Council at its Internet Service Provider and is Council's primary Corporate internet access.

Attached is an overview of Council's Voice Network and a diagram of the full Data Network as well as the Microwave Network Schematic.



CORTECHS BRANCH

GOLD COAST CITY COUNCIL PO BOX 5042, GOLD COAST MC 9729 DATE AMENDED



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Gold Coast City Council

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APPENDIX A – OVERVIEW OF EXISTING VOICE NETWORK

VOICE INFRASTRUCTURE

A.1. NETWORKED SITES (Council's Private Voice Network)

A.1.1 Ericsson PABX Network Infrastructure

Currently Council has 18 Ericsson MD110 and Consono PABXs (or LIMs - Line Interface Modules). These PABXs are networked together via 2MB microwave links (some limited to 1MB for Voice) as shown in the diagram, with 17 PABXs networked to form one virtual PABX network and the 18th PABX (Arts Centre) operating as a separate PABX with interconnection via tie lines.





In addition to the above, Council's private voice network is further expanded by voice link services connecting multiple locations back to various LIMs. (e.g. Southport Library is connected to Southport Depot via voice link services). The benefits of this private voice network are that calls within it (e.g. extension to extension calls from Carrara Depot to Coolangatta Office) are free of charge.

A.1.2 VOICELINKS from PABX LIMS

Surfers

Burleigh Heads

Narrow Neck Lifeguards	Mia
Bruce Bishop Car Park	Palı
Benowa Treatment Plant	Mu
Transit Centre	Ela
Cascade Gardens	Ree
Surfers Lifeguards	Ree
Cavill Mall	Bur
Runaway Bay Community Hall	Tall
Runaway Bay Library	Hin
Suntown Tip	Hin
-	D

Southport Depot

Southport Community Centre Queen St Cemetery Southport Library Ashmore Bicycle Centre Main Beach Car Park Main Beach Tourist Park Southport Cemetery Broadwater Tourist Park Main Beach Lifeguards Miami Transfer Station Palm Beach Library/Office Mudgeeraba Treatment Plant Elanora Treatment Plant Reedy Creek Tip Reedy Creek Quarry Burleigh Tourist Park Tallebudgera Tourist Park Hinze Dam Ranger Hinze Dam Kiosk Burleigh Lifeguards Currumbin Lifeguards Miami Tourist Park Tugun Depot Tugun Treatment Plant

Coolangatta

Greenmount Lifeguards Kirra Tourist Park

A.2 STAND ALONE SITES (i.e. Not part of Council's Private Network)

A.2.1 Sites with Small <u>Ericsson</u> Phone Systems

Cavill Mall Promotions Office Local Studies Library, Southport Masters Games Office, Southport Robina Library Kirra Tourist Park Broadwater Tourist Park Main Beach Tourist Park BP Advantage BP Advantage BP Select BP Select BP Advantage BP Advantage



Burleigh Tourist Park Miami Tourist Park Palm Beach Office/Library Elanora Library BP Advantage BP Advantage BP Select BP Advantage

A.2.2 Sites with Small <u>Telstra</u> Phone Systems

Burleigh Waters Library Merrimac Treatment Plant Mermaid Waters Library Commander System Commander System

A.2.3 All other remote sites have dedicated Telstra phone services

Extract from Telecommunications Carrier Services Request for Tender Document

APPENDIX B – OVERVIEW OF EXISTING DATA NETWORK

