

#### **ASX RELEASE**

24 March 2009

#### **PPC-1** Presentation

Please find attached a presentation that will be delivered to an institutional investors conference at ABN AMRO Morgans Limited by **PIPE Networks Limited (ASX:PWK)** CEO and Managing Director, Mr Bevan Slattery, this morning.

This presentation is to provide an update on the status of the PPC-1 undersea cable project and international data trends.

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### AAM Presentation on PPC-1

Presentation by:

Bevan Slattery CEO – PIPE International 24 March 2009





### To rapidly improve Australia's international communications transmission capacity and transform the economics of the local internet and telecommunications markets.



### The Problems

- Major submarine cables servicing Australia are [effectively] owned by the Gang of Four
- Accordingly, due to lack of competition Australia has one of the highest bandwidth costs of any developed country

- In 2007 it was 20 times more expensive to buy capacity from Australia-US than Japan-US
- Australia has only a single submarine cable path between the east cost and Asia
- Australian service providers were beginning to struggle to offer good value services to end users due to high bandwidth costs



### The Opportunity

 Lack of competition and being forced to pay monopoly rents emboldened a group of service and content providers to support any competitive move to break the Gang of Fours strangle hold on capacity

- Telekom PNG had a desire to obtain diverse capacity to Australia from the recently installed APNG-2
- Explosion of broadband penetration and low-definition video (Youtube) was generating an 80%+ compounded annual growth rate in internet traffic in 2006 and 2007. This was expected to continue in 2008.



### The Opportunity [Cont'd]

- PWK considered Southern Cross (SX) was quite aggressively valued by it's shareholders and as such certain pricing levels per unit had to be maintained in order to avoid [downward] asset revaluations.
- SX has a design life to only 2020 (11 years remaining) meaning without 'extending' system life past design life it cannot offer 15 year IRU's to clients

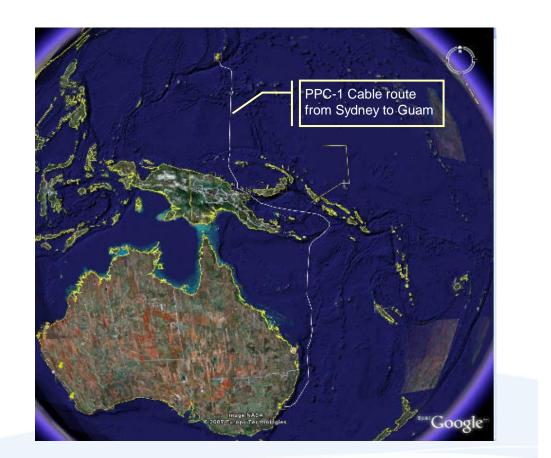
PPC-1

- AJC built at the height of the dot-com boom still had considerable debt and indications were that it was in credit work out with banks reducing capacity to push new [competitive] pricing to the market
- Tata Global Networks (formerly VSNL) were keen on leveraging their existing [underutilised] assets in Guam and connecting Guam

• pipeinternational

### **The Solution - PPC-1**

- Sydney to Guam with connection to Madang PNG
- Trunk length approx 6900kms
- Future drops to NZ, Brisbane and Port Moresby
- Initial design capability of 1.92Tb/s
- Cost of approximately \$200M





### Why Guam?

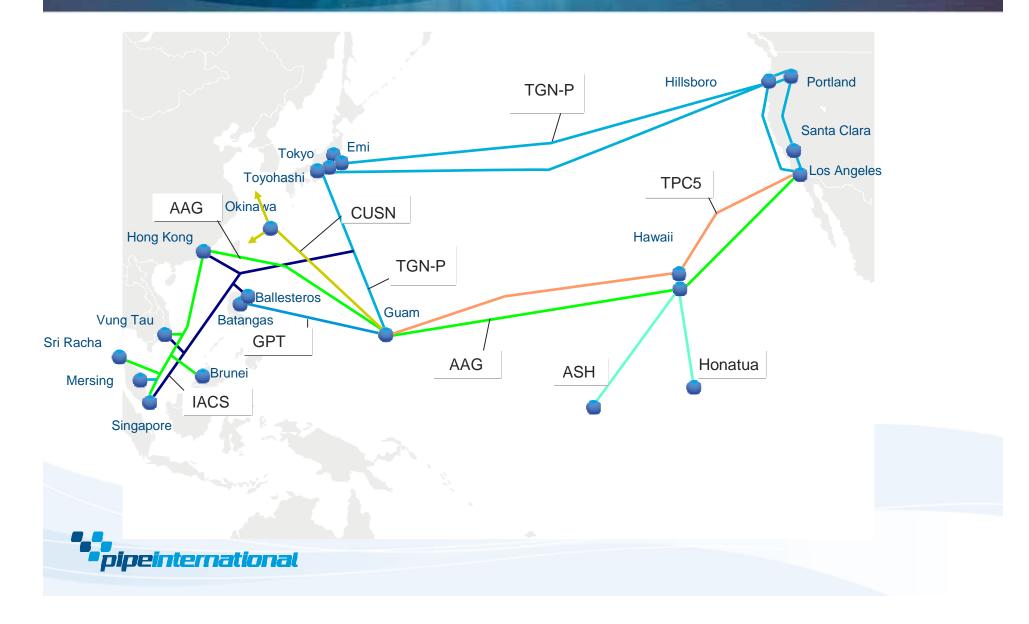
One of two (2) major interconnection points in the Pacific Ocean.

- Numerous existing cables connecting Guam to Philippines, Japan, China and the US
- Numerous new and proposed cables connecting to Guam for onward connectivity (AAG, Unity South)
- Most direct route between Australia and North Asia
- Once interconnected to AAG an Australia-US route comparable to that of SX in terms of performance



### **Guam - The Pacific Gateway**

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### Why PPC-1 and Why Now?



Cisco Systems in their "Approaching the Zettabyte Era" report June, 16, 2008: http://www.cisco.com/en/US/solutions/collateral/ns341/ns525/ns537/ns705/ns827/white\_paper\_c11-481374.pdf

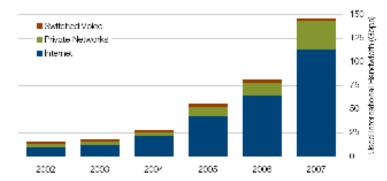
- Global IP traffic will nearly double every two years through 2012
- The Internet in 2012 will be 75 times larger than it was in 2002
- Internet video is now approximately one-quarter of all consumer Internet traffic
- The sum of all forms of video (TV, VoD, Internet, and P2P) will account for close to 90 percent of consumer traffic by 2012

- In 2012, Internet video will be nearly 400 times the U.S. Internet backbone in 2000
- YouTube is just the beginning. Online video will experience three waves of growth.
- Video will shift the topology of IP traffic. Growth in the core is strong, and growth in the metro is even stronger.



Telegeography Report commissioned in 2008 by PIPE International on Australian Capacity requirements and PPC-1 stated:

The increased adoption of broadband has fueled the demand for more Internet backbone capacity. The total amount of traffic generated by end-users increased dramatically as consumers switch from dial-up modems to higher bandwidth technologies such as Digital Subscriber Line (DSL) and cable broadband. In Australia, the number of broadband subscribers have increased 15-fold between 2002 and 2007. PPC-1



#### Figure 3 Historical Used International Bandwidth for Australia, 2002 2007 (Gbps)

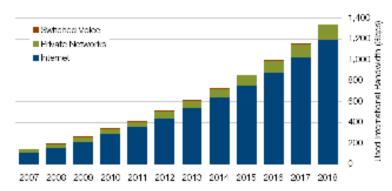
Notes: Used capacity includes circuits deployed by camers and ISPs to carry Internet, switched voice, and private network traffic. Used capacity does not include capacity that is used for restoration and redundancy purposes.



Telegeography Report commissioned by PIPE International in 2008 stated:

Broadband users tend to spend more time using the Internet and use bandwidth-intensive applications more frequently than narrowband users. Thus, even as we anticipate the pace of broadband subscriber growth to slow, increased broadband access speeds and the continued growth of video content are expected to fuel demand growth. International bandwidth demand in Australia is expected to grow at a compounded annual rate of 22 percent between 2007 and 2018 (see Figure 4. Forecasted Used International Bandwidth in Australia, 2007-2018). At this pace, the amount of used international bandwidth in Australia will approximately double every three years. PPC-1

#### Figure 4. Forecasted Used International Bandwidth in Australia, 2007 2018

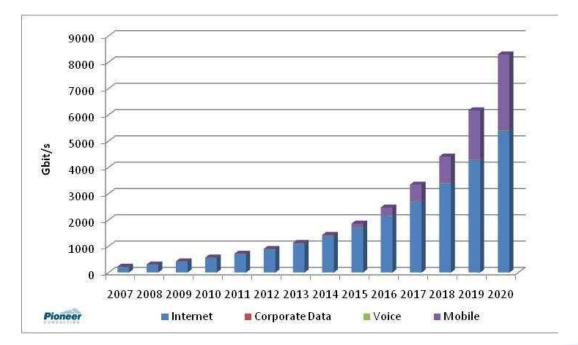


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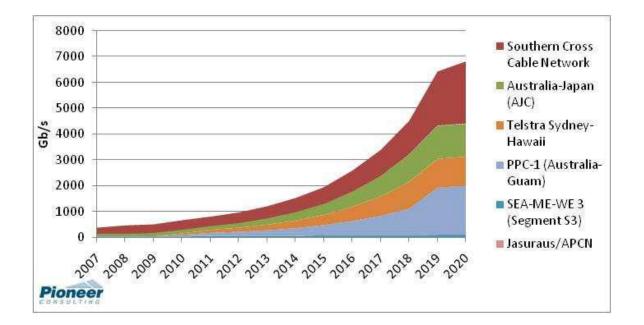
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Pioneer Consulting Australian Bandwidth Market Study for PPC-1 forecasted a 31% CAGR:





Pioneer Consulting Australian Bandwidth Market Study for PPC-1 forecasted PPC-1 to gain 26% market share by 2020





### Why Guam?

One of two (2) major interconnection points in the Pacific Ocean.

- Numerous existing cables connecting Guam to Philippines, Japan, China and the US
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### PPC-1 Configuration Overview

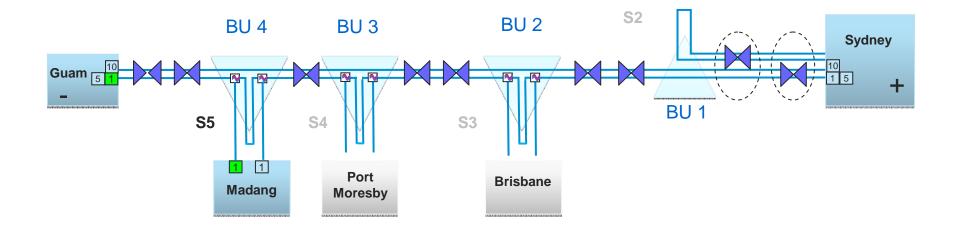
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### **PPC-1** Configuration

NZ =

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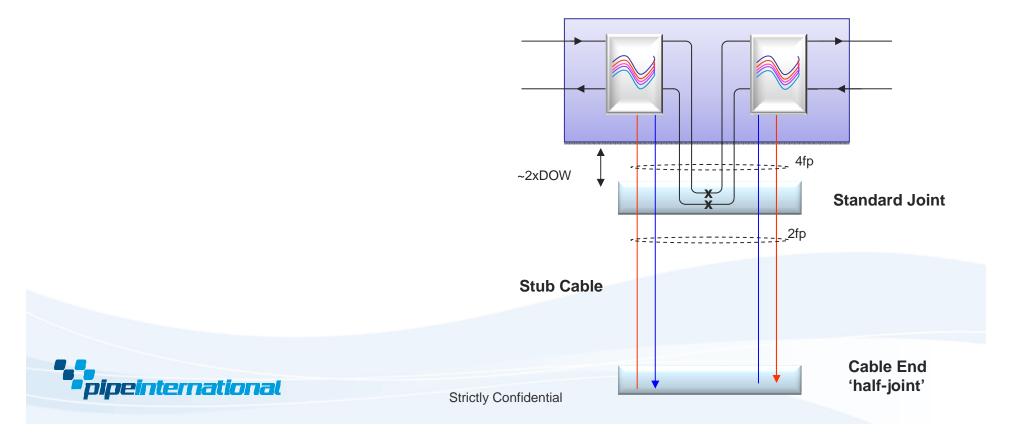




Strictly Confidential

### PPC-1 Configuration – Universal BU's

 Three Universal Optical Add Drop Multiplexing Branching Units to allow future flexibility in landings for Port Moresby and Brisbane. They can be configured LATER to be either full fibre drop or OADM depending on the requirement.

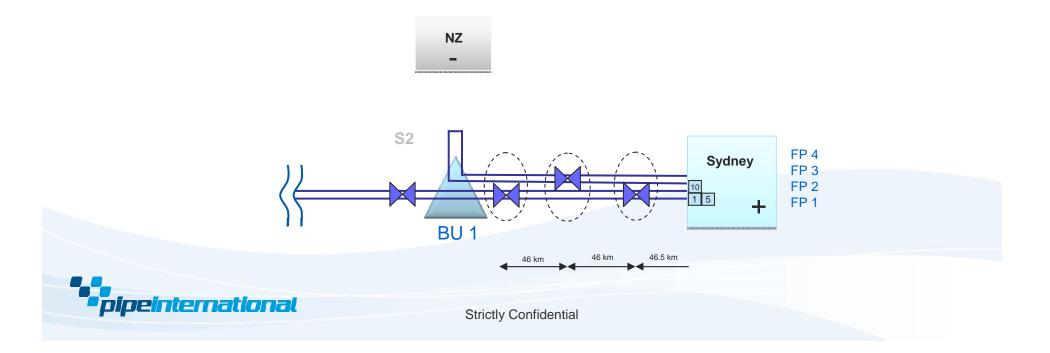


### PPC-1 Configuration – SEG 1.1

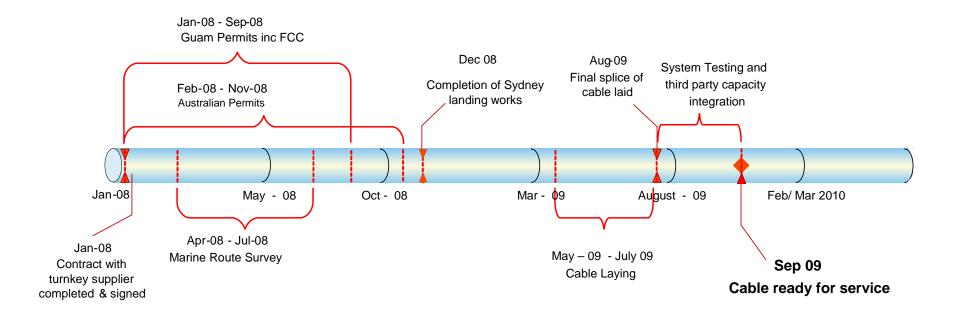
- Base system is 2FP.
- In segment 1.1 all repeaters are 2FP with 2 pass through fibres.
- As shown, there is a repeater provisioned for the future S2 segment.

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Eases sparing (no need to 4FP repeaters or spares).



### **PPC-1** Timeline





## PPC-1 Progress (as of 18<sup>th</sup> March 2009)

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Cable Station – Sydney	
HDD Sydney	
Terrestrial Fibre	
Cable Station Guam	
Permitting Australia	
Permitting Guam	
Permitting – Survey operations	
Survey Operations	
Submarine Cable and Repeater manufacturing	
Submarine Cable laying	



### **PPC-1** Progress

### Check out:

### www.pipeinternational.com



Cable loading onto the "Durable" Posted by kroberts in Cable Rollout



The "Durable" is one of we cable ships in the PAC if project and will commence laying at Collaroy in Sydney and Frish with a final sprice payment on the Madang in Paces New Collines. The ascendicable and its the "Coolates" and will bey from Guarmand stream and one at Madang.

The "Constructions of a consistent action 4707 4000 on of social time callies, 52 receives and four constituing on by possible scares. Space is official so the cable is cacked as officiently as possible for tensbort. This video shows the cable being upded on the vesser. More choice are available in the galaxy under Japan.



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# Thank you This concludes our presentation

