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South Pacific - Outcomes Oceania Com Conference

1. SYNOPSIS

The first Oceania Com conference brought together 125 people from ten countries in the South Pacific. The conference was organised by London-based Informa; BuddeComm arranged the conference program and chaired the event. The region is the most remote in the world, with 22 of the island countries only covering 3.5 million people. Economic growth for this region is only possible through participation in the global economy. Infrastructure is a very urgent problem. Telephone call costs are amongst the highest in the world and Internet penetration is amongst the lowest. Changes are however occurring rapidly in some islands, and in fact the region has one of the highest growth rates in mobile in the world.

2. KEY OUTCOMES OF THE CONFERENCE

Based on the response from the delegates this inaugural event was very successful and should be repeated annually. In the meantime a significant group of the participants agreed to form an email-based Special Interest Group aimed at following up a range of the issues discussed at the conference. Key issues include:

- Coordinating the various aid initiatives offered by governments, international organisations, regulators and others.
- Investigating if there is synergy between these projects, and how that could be utilised by the various island countries.
- Continued sharing of business information regarding, new developments, business opportunities, technology results and community activities.
- A call for speeding up the harmonisation process – without this the region will forever lag behind the rest of the world. The pace urgently needs to be picked up in the areas of regulation, standards and deployment of common technologies, interconnect rates and joint infrastructure projects. There are some good examples of these forms of cooperation in the Caribbean.
- More information and advice is needed on the organisation of the regulatory process (in some countries several ministers/departments are involved which makes is very unwieldy).
- Attention also needs to be directed at ways to limit the level of regulation, while still moving forward; in general terms a far more simplistic regulatory system is needed for such small countries.
- Joint efforts to address and combat vandalism and copper theft.

3. GOVERNMENT SUPPORT

Both the Australian and New Zealand governments were well represented and papers were presented from The Hon David Cunliffe, Minister for Communications in New Zealand, The Hon Stephen Conroy, Minister for Broadband, Communications and the Digital Economy in Australia, as well as by The Hon Bob McMullen, Parliamentary Secretary for International Development Assistance.

Furthermore, regulators from both countries presented papers: Dr Ross Patterson, the Commerce Commissioner from New Zealand and Chris Cheah, the Deputy Chairman of ACMA (Australia).

Bob Horton represented one of the international organisations, the Commonwealth Telecommunications Organisations (CTO). He provided advice to delegates regarding presenting international issues to the global community and also outlined the USO plan, initiated by the ITU, which is going to deliver up to \$6 billion in funds for infrastructure projects in the developing world.

The overwhelming message was that they are all keen to assist the South Pacific Region and have in place extensive programs for the region. The discussion looked at ways in which the South Pacific Community could better benefit from these initiatives, particularly exploring opportunities for synergy and better coordination.

4. SOUTH PACIFIC CHALLENGES

Papers were presented by CEOs and COOs from a range of the telcos. The presentations given by the island countries came as a revelation to the Australian and New Zealand delegates, who had largely been unaware of the enormity of the challenges that these countries face. Common issues:

- Remoteness of the islands, and also the islands within the archipelago of the individual countries themselves are all still in need of connectivity.
- Natural disasters with effects well beyond the national resources of most of the countries.
- Low level of population (some below 2,000) but yet the need still exists for modern communications for the individual citizens.
- Hunger for communications.

See also:

- [South Pacific Islands telecommunications market overview](#)

5. PAPUA NEW GUINEA

5.1 MOUNTAINS, JUNGLE AND LANDHOLDERS

Wherever you go in the world countries will always highlight their communication problems (deserts, mountains, water, and so on). However, Peter Loko, CEO of Telekom PNG, justifiably claimed to be looking after what is probably the most difficult country of all.

Most of the country consists of the world's most remote mountainous jungle. Maintaining communications links requires extraordinary effort. What might be a 10-minute repair to a repeater could require a helicopter crew, who might have to wait a week to get a short window of opportunity to get in, do the job and get out. Weather can change by the hour and bad weather can close off areas for days.

On top of that, 97% of the land is in the hands of local landholders, land rights are often obscure and contested between families and tribes, and land can change hands even during the time it takes to negotiate access. There are 800 tribes with different languages and different cultures.

Most sites don't have electricity and before you can install a repeater you have to first install a generator, a landing spot or an access road – not to mention the enormous cost of all of this for a market with very limited (telecoms revenue) resources.

Theft of copper and solar panels is a widespread problem (not limited to PNG). This sometimes is also connected with disgruntled landowners. Since the mid 2007 the trend of vandalism has also moved towards fibre optic connections in PNG.

5.2 NATION CONNECTED BY 2020

Nevertheless the company aims to deliver communications to all six million people in PNG by 2020.

Telikom PNG has invested heavily in its network, and satellite and wireless access are a critical part of its \$250 million network upgrade. PNG currently has 160 VSATs, with a target of 500. Towers must be used for multiple purposes in the SP islands like PNG, and are being set up to carry WiMAX, radio transmission, as well as voice.

Similar to Fiji (see below) the PNG Government has asked its incumbent to undergo a transformation. This is a massive challenge and will require a very significant cultural change. However the writing is on the wall in PNG. Competition has arrived and the government has also foreshadowed the use of PPPs. Telekom PNG has no choice and to its credit has now geared up to change – they need to change

quickly.

5.3 THE COMPETITION QUARRELS

Digicel launched its PNG network in 2007 and is building a US\$500 million mobile network, becoming the country's largest non-mining investor, despite threats from the government over its operating licence.

Since Digicel's entry into the PNG market, the price of calls has decreased by as much as 60%. People in remote villages are now able to ring for medical help where previously they could not. Fisherman fishing can now order as restaurants can contact them on their boat.

Also Digicel's entry has prompted Telikom to improve its services and prices, and expand its network.

However, in a stand-off with Digicel, the PNG government has given Telekom PNG the exclusive rights to operate the international gateway. For most of the Oceania countries this is one of the most important revenue generators; however it is also the first service that comes under attack, both from technologies such as VoIP via the Internet (Skype) and from competition (mobile).

So it will be interesting to see how long this exclusivity will operate to save the incumbent.

In exchange for this Telekom PNG is providing free Internet services to a number of villages.

See also:

- [Papua New Guinea - Telecoms Market Overview & Statistics](#)

6. FIJI

Fiji was the first country in the Pacific to undergo a major transformation and the competition delivered by Vodafone played a key role in this process. Taito Tabaleka, CEO of Telecom Fiji, presented the case study on how his company coped with this.

In 2004 the company began to experience negative growth, with an even more disastrous result in the following year. Massive reorganisation was the only solution – the alternative would have been a collapse of the company. This led to a drop of 40% in staff and a drive for management change and major restructuring. The company was forced to look at its core business and make decisions on where it should go to solve the problem. Now, three years later, the company is in a much better position than it was previously, however now faces the prospect of a much more competitive market.

In October 2007, Fiji's telecommunications sector finally became deregulated, after several years of legal battles. The 1989 decree had now been repealed and the new Telecommunications Bill now replaces the old one which for the last 18 years locked Fiji into exclusivity.

Digicel Fiji Limited was awarded a licence to provide mobile services in competition with Vodafone Fiji in early 2008, and another mobile operator maybe also be awarded a license. BuddeComm predicts that Digicel's entry into the market is likely to have a similar impact on mobile penetration, as it did in Samoa. It will be very interesting to see how the mobile market evolves in Fiji over the next 2 years.

See also:

- [Fiji - Telecoms Market Overview & Statistics](#)

7. NORFOLK ISLAND AND NIUE

Amazing stories were told by The Hon Neville Christian, Minister for Finance Norfolk Island, and Richard Hipa, Managing Director Telecom Niue. Both countries have populations of less than 2,000.

These and other stories from the region all indicate that also the citizens in these small countries, expect telecoms services that are equal to those available to people in larger companies.

While competition featured strongly on the agenda of the conference these two countries clearly demonstrated that when there is no business model for competition a community approach needs to be deployed. Both countries have done this rather successfully.

Norfolk Island had previously allowed a competitor on a trial basis, however the license was withdrawn. The competitor had moved into VoIP services but used equipment of insufficient standard, so there was concern about the quality of services that could be offered.

Also both islands made the point that it didn't make sense for them to adopt the leading access technologies from an economic point of view, but rather it was better for them to adopt later generation technologies that will be both much cheaper and have any reliability and technical issues already addressed.

It was interesting to note that locals in Norfolk Island actually enjoyed a standard of living comparable to larger developed nations like Australia or New Zealand. Call costs are also competitive with these developed nations. Telecommunication access is good with 2Mb/s ADSL and WiFi hotspots available, with more to be added hotels and motels.

Niue introduced broadband services in 2007, and a mobile GSM system network is planned for 2008, along with plans for fibre access. Niue also plans to be the first island country where every island child will have a laptop.

However it also became clear that, while the international community had put a great deal of effort into liberalisation and reform programs for the region, more work needs to be done to also provide a good model for community-based telecoms developments.

See also:

- [*Niue - Telecoms Market Overview & Statistics*](#)
- [*Australia - Mobile Communications - Infrastructure*](#)

8. SAMOA

In that respect Samoa provided some interesting case studies. Mike Johnstone, CEO of SamoaTel, and Christian Fruean, the country manager for Digicel, gave presentations from opposite positions.

The market in Samoa has been liberalised in 2006, and by 2007 there were two additional cellular providers – Digicel Samoa, which launched in 2006 and incumbent fixed-line provider SamoaTel, which launched mobile services in 2007.

Digicel has taken the country by storm and within two years reached a subscriber base of 65,000 mobile subscribers against SamoaTel with around 30,000. It should however be noted that Digicel purchased 90% of the shareholding in the incumbent mobile operator TSCL from Telecom NZ back in 2006, the Government of Samoa retained its 10% stake, so Digicel did have a head start over SamoaTel, as it acquired an initial base of 35,000 customers through the purchase.

Nevertheless this takes nothing away from Digicel, as without their entrance in Samoa, the much higher growth rates, improved performance, coverage and innovative marketing would never have happened. Also this has resulted in a much more sharply focused SamoaTel, which has made new investments in its network and is investigating new opportunities in other areas of broadband.

But, as we all know, with liberalisation comes regulation and conflict. The local legal system can't cope with this, nor is there room for a regulatory body with all the highly specialised skills necessary to implement and monitor the often complex new regulatory regimes.

However, in telecoms the stakes are high and very expensive QCs are flown by the new comers in to

assist. But most governments can't afford to fly in their own senior counsel, and so the outcome is often disappointing, the high-paid QC might win the battle but it often leaves behind a very bitter feeling and in the end governments still can do what they want and thus win the war.

This shows that the extremely complex regulatory systems that exist in the developed world, such as, for instance, the LRIC system to assess costs, are totally inappropriate for these countries, for which a more simplified regulatory environment needs to be established.

See also:

- [Samoa - Telecoms Market Overview & Statistics](#)
- [American Samoa - Telecoms Market Overview & Statistics](#)
- [South Pacific Islands - Analysis of Mobile Competition - 2008](#)

9. VANUATU

Nevertheless it is undeniable that competition is delivering enormous benefits to the local population and, as we have seen in other developing regions, in the South Pacific, also, people are queuing up to sign on for the new services.

In June 2008 Digicel Pacific launched its fourth market in the Pacific region in Vanuatu, following launches in Samoa, Papua New Guinea and Tonga.

In Vanuatu the new mobile service from Digicel attracted in ten days 35,000 customers more than the total existing number of mobile subscribers.

Digicel has made an initial investment of US\$35 million building a network provides coverage to all Ni-Vanuatu communities for the first time. Digicel has opened two flagship stores and has over 1,300 top up locations throughout the country. The mobile operator now employs about 70 Ni-Vanuatu staff and it is estimated that an additional 2,500 jobs have been created through its local dealerships and partners.

The lack of electricity is also a problem in Vanuatu and Digicel delivers (free of charge) a free solar battery loader with every handset it sells. In the remoter parts of Samoa the company has installed containers turned into retail outlets. These outlets also have generators and customers can come and load up the batteries for their mobile phones free of charge.

Obviously the incumbents have done a poor job of providing their customers with the services they want. In the developing world there is now sufficient evidence for the claim that an increase in mobile subscribers leads to a decrease in poverty and has a positive effect on the national GDP. An international figure was presented to show that 10% growth in mobile subscribers leads to an average of 0.6% growth in GDP. This is something these countries can't ignore.

Digicel claimed that its activities in PNG have added 0.7% to that country's GDP.

See also:

- [Vanuatu - Telecoms Market Overview & Statistics](#)

10. NEW ZEALAND

In the exchange of information and experiences these two countries presented a range of case studies that highlighted their own national developments.

10.1 FROM LAGGARD TO LEADER

David Smol CEO of the New Zealand's Government Ministry of Economic development and the regulator Dr Ross Patterson, presented the success story of operational separation in New Zealand and

the gigantic changes in the behaviour of the incumbent as a consequence of that. There is certainly an upbeat mood in the country and with a \$1.4 billion fibre investment from Telecom New Zealand, the country's debate is rapidly moving on to FttH. While there is still a lot of work to be done, in policy and vision the country has clearly overtaken Australia. Also there is no clear incentive for Telecom to respond to the needs of its (wholesale) customers. Unlike in Australia, Telecom New Zealand and the industry are prepared to operate within a give and take environment in order to find workable solutions.

Nevertheless, BuddeComm believes that the FttN cabinetisation roll out, still would advantage Telecom and that an infrastructure design with aggregation points higher up in the network would have been of much more benefit both to competition as well as to the end-to-end network solutions that are required by organisations such as health care, education and smart utility meters.

10.2 STARTING WITH LLU

Scott Bartlett, CEO Orcon, and Martin Wylie, CEO CallPlus, the fourth and third largest independent ISPs, in New Zealand respectively, outlined their business cases on the new opportunities that are becoming available in New Zealand, especially around local loop unbundling. Martin also presented a more cautious view on the changes in New Zealand, based on their 10 years of experience with competition he indicated that the battle was far from over and that there was still a very long and very tough way to go for competition in this country.

It was interesting to observe the different approaches to Local Loop Unbundling (LLU) by these two ISPs. ULL has only just recently been made available for ISPs to implement in the market in New Zealand.

Orcon was the first ISP to launch ISP, in March 2008, and is currently unbundling 15 exchanges per quarter. It sees many advantages in taking this path, not only through significantly higher margins, but sees LLU as giving it greater control over the launching of new services, which can be launched more quickly. As well as ADSL2+, Annex M and VDSL2 are also on its rollout agenda.

Median speeds on its unbundled network are currently 10-11Mb/s, compared to 3-4 Mb/s on the wholesale network via Telecom NZ. The hunger for extra bandwidth is getting increasingly stronger in New Zealand, with applications like YouTube now taking up an increasing percentage of the bandwidth on its network.

It pointed out that to survive as a broadband reseller in New Zealand has been almost impossible to due to these wafer thin margin, and it didn't really see any other option but to move down this path.

Orcon also pointed out that New Zealand is in a unique position in that it was very late rolling out LLU services, but relatively early in moving down the path of operational separation and cabinetisation, therefore ISPs like itself have been in a unique position to learn from observing rollouts in other countries.

CallPlus, is taking a much more cautious approach to LLU, and is currently not investing in LLU, as it sees it as a potentially risky proposition. Its strategy is to wait and see how Telecom NZ's cabinetisation plans play out. It was also interesting to hear that from Woosh that they also view that Telecom's cabinetisation plans could significantly undermine ULL rollouts.

WiMAX is still seen as an option for CallPlus. particularly in remote areas not serviced by ULL. CallPlus will wait and see how ULL eventuates.

See also:

- [New Zealand](#)

11. AUSTRALIA

11.1 AUSTRALIA NEEDS TO FOLLOW NEW ZEALAND

Telco's in Australia face similar uncertainty, as pointed out by Paul Broad the CEO of AAPT. Telstra's vision of its own FttN network, would completely bypass the exchange and leaving DSLAM providers stranded. While it seems unlikely, that the government would permit a regulatory regime to eventuate which favours the incumbent to this extent, BuddeComm views that broadband service providers in both Australia and New Zealand have no other option but to live through a period of uncertainty, until the new regulatory access regime under a future FttN/FttH network eventuates.

As mentioned above, AAPT's mother company, Telecom New Zealand is going through enormous changes itself, and in the end all telcos will need to have a much better understanding of the different functions of infrastructure, wholesale and retail.

Appropriate business models must be put in place for each of these segments; and a well defined open access network needs to be at the core of this. In the larger countries this will mostly lead to separation models but that might not necessarily be the best option for the smaller countries. Nevertheless the different functions do need to be addressed differently in order to reap the benefits of competition, innovation, as well as social and economic benefits.

11.2 SEPARATION ALSO A WIN FOR TELSTRA

Paul Broad from AAPT also argued that as with the structural changes in the electricity business several years ago, also in the telecoms industry there will be significant shareholder benefits as a result of a separation model. For a long time BuddeComm has advocated the significant shareholder benefits of unshackling Telstra's media companies (BigPond, Sensis, Foxtel) from the infrastructure business.

Maha Krishnapillai from Optus presented a 'tale of two markets'. He showed the difference that competition is making in Australia in relation to mobile (where there is viable competition) and in the fixed network (where there is no competition). He reinforced Paul Broad's view of the critical importance of the right government policies, followed by appropriate regulatory framework.

He also mentioned the enormous growth in wireless broadband over the new mobile networks, which will be further addressed below.

Ryan Banting from M2 Communication presented the case for the resale business model, which has been very successfully implemented by them on both a wholesale and a retail level.

See also:

- [Australia](#)

12. INFRASTRUCTURE

12.1 NEXT GENERATION TELECOMS

Rohit Gandhi and Dhananjay Pavgi from Tech Mahindra (the key sponsor of the event) gave excellent presentations on the transition process towards the new next generation telecoms (NGT) environments that are necessary for the emerging digital economy.

The fact that Fiji is the first island to proceed along this path highlights the new direction being followed by Telecom Fiji following its dramatic reorganisation. The importance of making a start with this process was emphasised as well. Also Telecom New Zealand is using the services of this company. In the new digital world it is impossible to ensure that you have the whole NGT strategy mapped and tested before it is implemented. The reality is that it must be an ongoing process, where mistakes will be made that need to be addressed and solved along the way.

This is a rather different process from the tried and true ‘big iron’ telco processes. The same applies to the development of the new services and applications that operate over this NGT. Sharing knowledge and experience across the Pacific is essential, as the smaller players will be unable to handle this on their own.

See also:

- [Global - Infrastructure - Next Generation Telecoms](#)

12.2 NEXT GENERATION MOBILE

Jean-Pierre Bienaimé from the UMTS Forum provided an excellent presentation on Next Generation Mobile (NGM) – the transition process from 2G to 3G, from there to HSPA, HSUPA and LTE, and from there on to 4G (100Mb/s, IP-based, available between 2015-2020).

Here also the rapid changes are a challenge for the island countries. It is difficult to keep up with the changes and find the money to follow the upgrades. A regional network was one of the solutions that were mentioned. 4G was classified as fully IP-based 100Mb/s services and would become available between 2015 and 2020. The key issue here would be the availability of spectrum.

According to analyses by BuddeComm the lack of sufficient spectrum (=capacity for lots of high speed broadband) and a fully IP-based mobile service (= data efficiency) will make it very difficult to operate quality wireless-based broadband on a mass market level.

Therefore, operators will keep these services rather expensive so they won't attract mass market use as they simply couldn't handle that level of traffic. The enormous success of the wireless broadband offer from Virgin Mobile, nearly led to such problems, and the company had to adjust its offering in order to stop more people from using it.

Based on this analysis we remain skeptical about predictions that wireless broadband could take over from fixed broadband over the next one to two years. These predictions are based on the correct assumption that it will take several years to build the FttN/FttH networks, so that would create that extra business opportunities for wireless broadband to fill that space. There is no doubt that wireless broadband is going to play a much larger role than anybody had expected, but there are some physical constraints (lack of spectrum, lack of IP-based mobile) that are hard to ignore.

Evette Cordy, technology director of the research company TNS, provided detailed information on customer behaviour patterns of mobile users across market and geographic segments. This data clearly indicated that the one-size-fits-all approach no longer works and that significant new revenues can be generated through more sophisticated marketing. The question remains whether the mobile operators the best companies to pursue that opportunity; their track record of the last 10 years doesn't indicate that. Furthermore their predominant focus will be on the network, as shown in the Virgin example above. In the end, according to BuddeComm structural changes will also be needed in the mobile industry in order to engage true content providers and media companies to independently offer their services over open mobile networks.

See also:

- [2008 Global Mobile - Data and Content Markets](#)
- [2008 Global Mobile Communications - Statistics, Trends & Forecasts](#)

12.3 SATELLITE AT \$100,000 PER MB

The most critical element throughout the Pacific remains backhaul infrastructure. This is currently based on satellite and microwave. Niue provides an interesting case study here. Because of its very small size it had no option but to enter into a long-term contract with Intelsat, which is charging them \$100,000 per Mb – yes, you read that correctly – \$100,000!

See also:

- [Global - Infrastructure - Satellite Networks](#)

12.4 EXCLUSIVE AT OCEANIA COM – LAUNCH OF EAST-WEST PACIFIC CABLE

Ultimately fibre networks are the way forward, and while these are unaffordable for most countries a combined venture by all the governments, telcos and donors could see the deployment of a submarine fibre network.

To the surprise of the delegates Remi Galasso, CEO of SPIN Limited (South Pacific Island Networks), announced exclusively at the conference the launch of a 6,500km, E150 million, east-west submarine cable plan across the South Pacific. This would link the other two new submarine networks, the Sydney-Noumea (completion August 2008) and the Hawaii-Tahiti link (completion April 2010). This all-important east-west connection is planned for completion by 2010.

According to SPIN, the project is financially backed by the French government. Also the governments of New Caledonia, Wallis and Fortuna, America Samoa, Niue and French Polynesia have signed up, and individual telcos will now also be invited to join.

According to BuddeComm, if this is a viable project then it is one of the most important telecom developments ever for the smaller South Pacific island states. It would be a truly unique opportunity to link most (hopefully all) of the island communities to this network.

The conference concluded that, given this ground-breaking project, the possibility of coordinating the various aid initiatives from governments, international organisations, regulators etc should be investigated. Any potential synergy between these aid projects should be explored, and how that could be utilised to make the project happen.

See also:

- [French Polynesia - Telecoms Market Overview & Statistics](#)
- [Global - Infrastructure - Submarine Cable Revival](#)

12.5 WIMAX

The region is fortunate to have two of the world's pioneers in wireless broadband. Both companies shared their experiences and vision. Eric Hamilton is the COO of Unwired in Australia and Kristen Dunne-Powell is his counterpart at Woosh in New Zealand.

Both are concentrating on the data applications that this technology has to offer. Unwired is also looking very seriously at IP telemetry – for example, it is currently testing the technology for smart utility grid applications.

While both companies have acquired some battle scars they are now among the most knowledgeable organisations in the world in relation to WiMAX. Despite their bleeding edge problems they have both decided to take their companies to the next level, developing true WiMAX networks.

It was interesting to observe the view of Jean-Pierre Bienaimé from the UMTS Forum on WiMAX. Despite coming firmly from the 3G mobile camp, it was interesting to see that he does actually believe that WiFi and WiMAX in the future will co-exist along with 3G wireless broadband.

The view that put forward by the UMTS forum is that while 3G mobile will provide more universal and ubiquitous access, WiMAX will have a more targeted role in densely populated residential areas. BuddeComm however, along with players such as Woosh, feel that in our region, WiMAX is likely to have more appeal providing access in rural or remote areas not readily served by fixed line services.

WiMAX is also seen as a key technology for developing markets and will certainly have an important

role to play throughout the South Pacific. Already we see that WiFi has been successfully deployed in islands such as the Cook Islands, Fiji, Guam, Niue, Tonga and Vanuatu.

See also:

- [Global - WiMAX - Overview & Statistics](#)
- [Global - WiMAX - Fixed Wireless Analyses](#)
- [Global - WiMAX - Mobility Analyses](#)
- [New Zealand - Wireless Broadband - Statistics, Overview & Providers](#)

13. SOUTH PACIFIC REPORTS

- [2008 South Pacific Islands - Telecoms, Mobile and Broadband](#)
- [2008 New Zealand - Mobile & Broadband Overview and Analysis](#)
- [2008 New Zealand - Telecoms Overview and Analysis](#)
- [2007 Australia - Telecoms Industry - Statistics and Forecasts](#)
- [2007 Australia - Mobile Communications - Statistics, Trends and Forecasts](#)
- [2008 Australia - Broadband Market - Overview and Statistics](#)
- [2008 Australia - Broadcasting and Pay TV](#)

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