

Policy & Economic Impact of the Misuse of Telephone Numbers

This paper explains what is PRS, which is also known as audiotext, the fraudulent activities now taking place, counter measures and the economic effect on small Pacific Island countries.

Premium Rate Services (PRS) have been in existence for at least ten years. It is not a new phenomena. PRS is used globally and not restricted to any one region. However as I am from the Pacific, I will talk more from the Pacific Islands viewpoint.

The Pacific Islands have a number of constraints on providing telecommunication services. First of all the very low population of our countries and hence very small customer base (the Cook Islands total population 13,500). Because of our isolation and small size, the cost per subscriber line is very high. Also we have a huge coverage area and so the population density is extremely low. This makes for extremely high maintenance costs, and for example, travel between the islands for servicing is very expensive, difficult and infrequent. The US Benchmark order has meant that many telephone operators have been forced to terminate calls below cost. One way of obtaining additional revenue is through PRS.

The Pacific Islands are good target for PRS suppliers because of the higher termination rate used by most Pacific Island countries.

PRS are basically soft porn telephone calls and where-ever porn is involved, you will see a large amount of interest. PRS calls can generate huge traffic volumes and volumes of several million minutes a week are typical. However it also tends to generate significant debt as well. When telephone subscribers, who are users of PRS, get their large telephone bill, they sometimes cannot or refuse pay. Therefore from the early days of PRS, there has been a problem of debt collection. A different problem that has also occurred is that a company may introduce a collection rate lower than the settlement rate and not be concerned because of the low volumes. However when PRS starts, suddenly the volume leaps up and the company has a serious problem on its hands as the volumes can be really high.

The revenues from PRS can be very high and >US\$ 1 million per week is typical. With this kind of revenue, it attracts a lot of interest from different players.

The above explanation talks about legitimate PRS services. Certainly there have been complaints and some telephone operators refuse to handle PRS traffic because of the bad debt problem, but by and large it has survived and continued for ten years.

However then the fraudsters, seeing the large volumes and high revenues, started operating. Because of the high termination rate used by most Pacific Island countries, they are the countries most used by the fraudsters.

The first type of fraud that occurred is commonly known as “Modem Jacking” and has come about because of the advances in technology. Modem Jacking occurs when a secret program is downloaded (usually from a porn site) on a unsuspecting user’s computer. This program secretly dials an overseas destination whenever the computer is connected to the dial up service and the call is held up for as long as the computer is being used. The user is usually unaware that the call has been made until they get their telephone bill. Naturally the subscriber complains and refuses to pay their telephone bill.

Because the overseas telephone numbers keep changing, it is very hard for the telephone operators to block these calls and so the easy way out is to block IDD calls to the whole country.

Recently (this year) a new type of fraud surfaced. This fraud uses the overseas GSM SIM card and international roaming services. The methodology is that a SIM card is taken to a foreign country and a huge number of calls generated. The GSM roaming system will trigger an alert, usually after about 24 hours, but by then the fraudster has gone. The telephone company never gets paid the collection rate. Some companies have lost thousand of dollars and over US\$100,000 in 4 hours in one reported case. Once again the solution used was to bar IDD calls to that country.

The small Pacific Islands are highly reliant on telecommunications for their economic well being. This comes about from their isolation, tourism and perishable exports such as tropical fruit. Tourism is the major industry for most Islands and in this highly competitive industry, reliable telecommunications is essential. If a potential tourist cannot make his booking, then they simply move to another destination. Governments are rightly very concerned if their country code gets blocked. The major difficulty with this course of action is that it targets innocent people who are not able to make telephone calls and which affects the livelihoods of many people. The blocking of calls affects a country’s citizens both socially and economically. Legitimate calls are blocked, however the fraudsters go free to carry on in a different country.

One thing is clear, all the Pacific Island countries are all totally against any type of fraud. But in dealing with some of the international fraud agencies, it has also become clear that some fraudsters are “pirating” some countries numbers and the actual country telecommunications operators are not even aware that their numbers are being used for PRS and fraud. It is clear that the fraudsters are very agile and flexible to be able to change where they are operating very quickly. As soon as one destination is closed down, they move to another country code.

At a recent meeting of Pacific Island telecommunications executives at the Pacific Islands Telecommunications Association (PITA) held 25-29 April 2005,

the problems of IPRS and fraud was brought to the attention of the operators. All operators agreed unanimously that they were opposed to any type of fraud and sought ways in which to counter the fraudulent activities taking place. A ten point plan was agreed upon by members. Also a "Code of Practise" is being drawn up for all members to sign to show their good faith in dealing with these problems.

Legitimate PRS can be a win-win situation where everyone wins. However fraudulent activity is a lose-lose situation for the telecommunications operators. In the country where the fraud is targeted, the telecommunications operator loses both in revenue and good faith with its customers. The losses can be very high, hundreds of thousands of dollars in a day. The Pacific Island country also loses, particularly if an operator bars its country code. The barring of a country code affects both the social life and business environment for that country and can have severe economic impact of a county while the fraudster goes on to continue in another country.

Because of the problems with PRS and particularly the fraud, many countries are closing all PRS services altogether. This will hurt the telecommunications operator financially very hard and will affect their ability to introduce new services and universal service in some countries.