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TO	KAREN Members
CC	
FROM	REANNZ Operations
DATE	27 March 2007
SUBJECT	International Outages

We have recently experienced two network outages on the international network; one from a power outage in the Vector POP on the North Shore, and one due to a cable cut in the USA. The following material is provided for your information. We are also awaiting additional information from Vector Communications with regard to how they propose to change their practices to reduce the chances of another generator failure.

**Outage 1: Vector Power Outage Monday 26 February 2007**

The following is an extract from the Vector Communications Incident Report:

*“At 0529 a Car vs. Power Pole incident caused power to the Vector Communications Northcote Telehousing Centre to be lost. The centre’s emergency power systems maintained power supplies until the generator shut down at 0551. Essential supplies to the facility were maintained by the Uninterruptible Power Supply (UPS) system for another hour at which point this system also shut down. The cause of the generator shutdown was a thermostat failure in the generator.*

Our international connectivity was out for 106 minutes (Verizon timeline). This outage also affected national network availability.

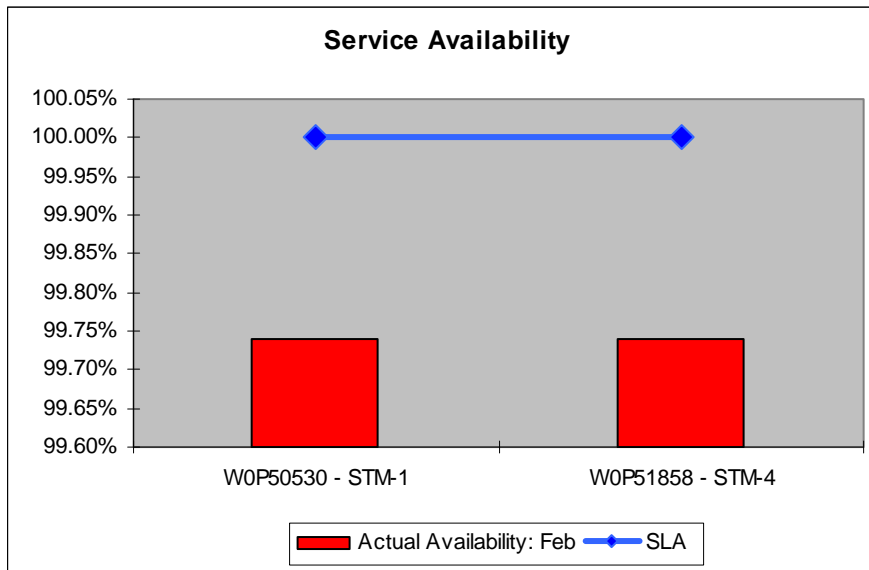
In addition, the following is from the Verizon operational report for February:

25/02/2007 18:22	25/02/2007 20:08	1	W0P50530	Network alarm	Power Outage at Vector PoP - back-up power failure	1 hr 46 mins
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**Network Availability\***

	W0P50530 - STM-1	W0P51858 - STM-4
Actual Availability: Feb	99.74%	99.74%
SLA	100%	100%

\* not inc planned maintenance/commercial power outages



NOTE: Service Availability relates to that of the VzB network and does NOT include scheduled maintenance or power outages.

FEB 2007: Failure of back-up power in NZ reflected in Availability above

## Outage 2: Verizon Business Backhaul Failure Friday 9 March 2007

[From Verizon report] *Verizon Business experienced a major fibre ring cut in California between Richmond and Hayward following work being carried out on a bridge and this caused the primary link to go down. The protection path was then unable to kick-in following the failure of a high speed optical card between the Dominguez and Rialto span of the U.S. backhaul.*

Service was restored onto a temporary bearer. The weather map shows service was lost between 12.11pm and 2.26pm.

A further issue which arose was that we were not notified of this outage, nor was the Sytec help desk.

During a conference call with Verizon Business (VzB), the following actions were agreed:

- Proactive Notification on the part of the VzB Asia Pacific Helpdesk (APCCC) to the KAREN Helpdesk from now on

There have been no previous instances whereby no notification has been provided to the KAREN Helpdesk following a proactive ticket. The matter has been raised with the Call Centre Manager as to why the process failed on this occasion. Special Instructions in the ticket regarding who to notify in the event of a proactive ticket have also been modified to clarify the process

- **Automated notifications**

These have now been set up from VzB ticketing system to Mark, Clayton, David and the Karen HD. As part of the normal process as described above, the APCCC will also contact the KAREN Helpdesk (via mail or phone) in the case of a proactive ticket (i.e. hard outage).

### **Comment**

Several issues remain around Outage 1 at Vector. Clearly, the generator should not have failed. It is our intention to pursue both of these issues with Vector Communications until we are satisfied they have an action plan in place to address these deficiencies. This is expected later this week.

Outage 2 has raised the issue of automated notifications to the Helpdesk and us, and there are questions around the failure of the backup path in the USA. Verizon have started addressing both of these points, and we intend to stay with them until they are resolved to our satisfaction.

International network availability for February remained at 99.74%. Assuming no further outages during March, the international network availability will be 99.66% for this month.