

REANNZ

RESEARCH AND EDUCATION  
ADVANCED NETWORK  
NEW ZEALAND

# IPv6 Case Study

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Chief Information Officer  
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REANNZ

# TSUNAMI: IMPROVING THE ODDS

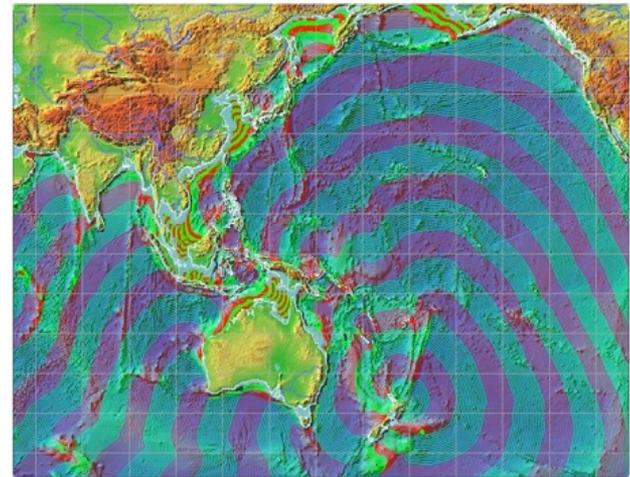
New Zealanders are better protected from catastrophic tsunami thanks to KAREN.

## Early warning saves lives

GNS Science's GeoNet is drastically reducing the likelihood of major devastation and serious economic upheaval from tsunami. Data from global networks is streamed in real-time into GeoNet. This data helps predict the likely magnitude of the tsunami and means NZ emergency services can respond quickly to the threat; protecting property and saving the lives of people living along NZ's coastline.

## KAREN enables an effective warning system

International cooperation is the key to the safety of New Zealanders. During a geological event, real-time seismic and sea level data from collaborators across the Pacific travels at lightning speeds across KAREN to GeoNet. This means our scientists get the birds eye view of the tsunami they need to better predict the scale, location and impact.



TSUNAMI TRAVEL-TIMES FROM AROUND THE PACIFIC RIM TO NEW ZEALAND

Web services deliver these data in standard formats, enabling researchers to use tools of their choice to visualise and study these events.

"This research is extremely valuable and makes a very practical contribution to life in New Zealand; impacting decisions on where to locate new

World Class  
Network  
Infrastructure

R&E services  
and applications

REANNZ

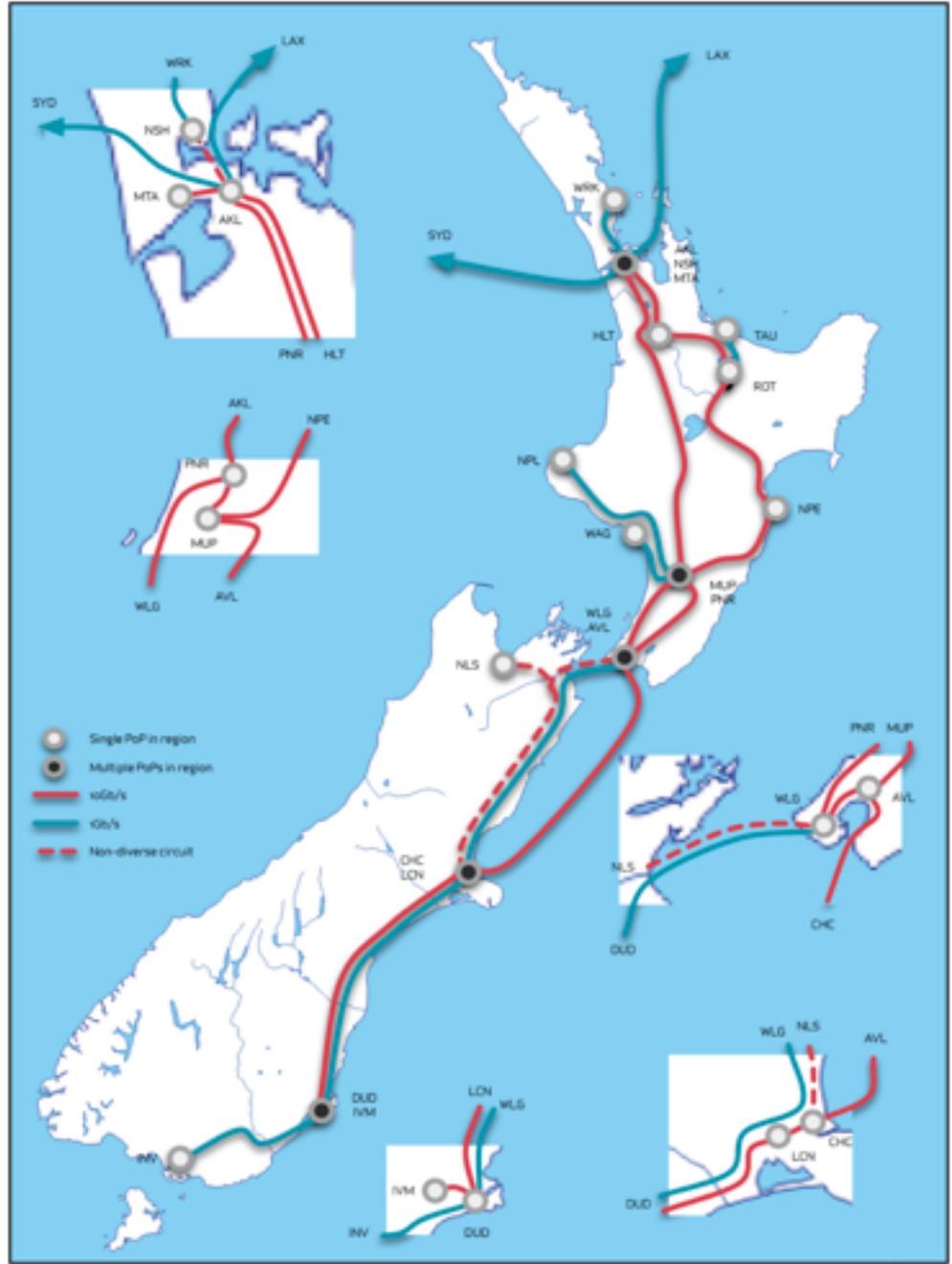
Unparalleled  
User Experience

Thought  
Leadership and  
Innovation



**Key**

- Green square: NREN we connect to
- Orange square: NREN we don't connect to
- Yellow square: NREN planned but not operational
- Grey square: No NREN or not known





## **Public Finance Act 1989**



IPv6 :: 2005

Request for Proposal

IPv6 :: 2006

Go Live

IPv6 :: 2006

Go Live

Firewalls

IPv6 :: 2006

Go Live

Firewalls

Management Traffic

IPv6 :: 2007

Internal Use

IPv6 :: 2007

Internal Use

Network Vendors

IPv6 :: 2007

Internal Use

Network Vendors

Scaremongers

IPv6 :: 2010

Video Conference

IPv6 :: 2010

Video Conference

No v4 thanks

# IPv6 :: Today

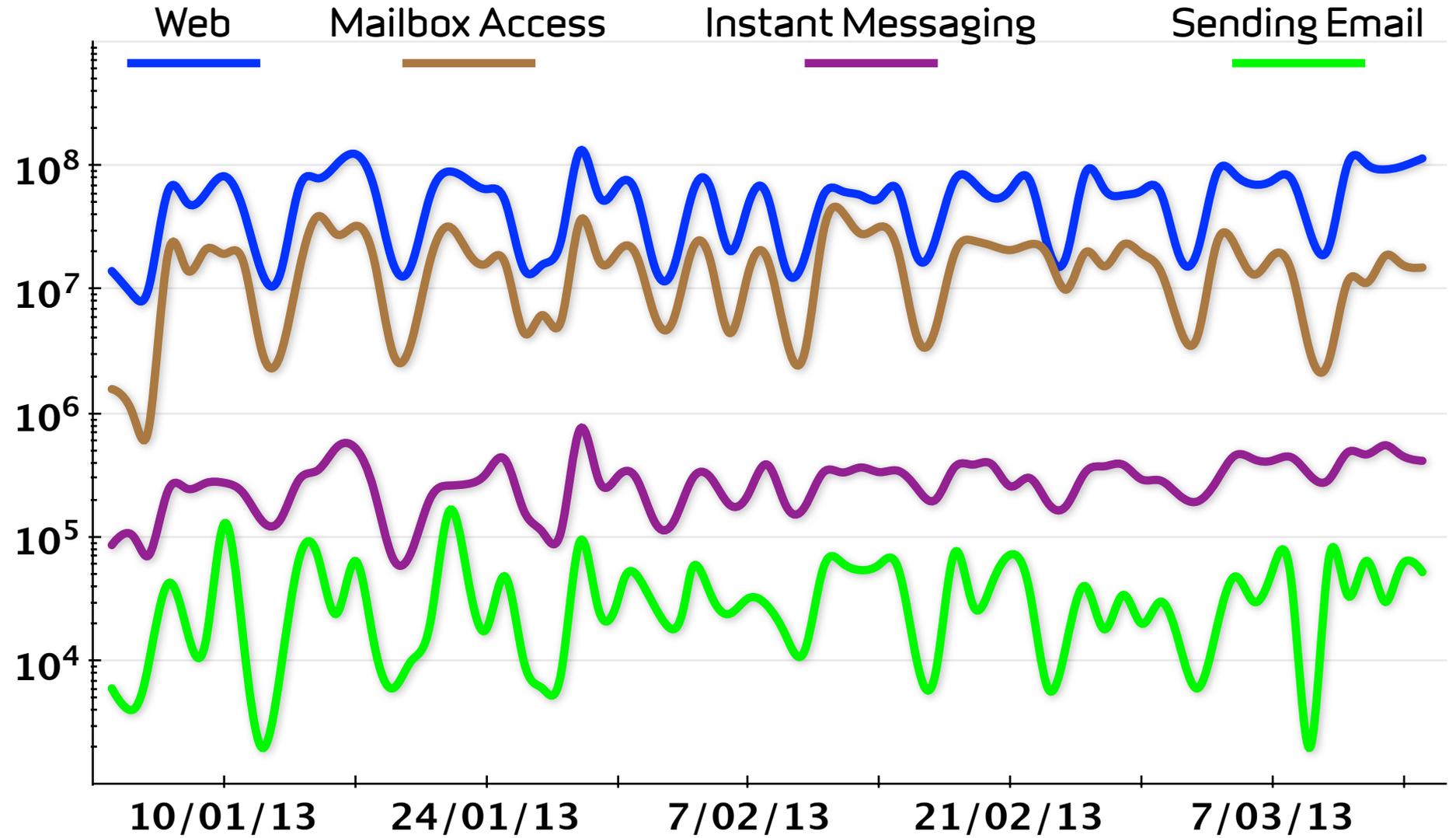
## IDS

IPv6 :: Today

IDS

Feature Parity

# IPv6 Packets (log scale)



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# REANNZ

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**/Optimise**  
your network connection

**/Get involved**  
in the use and evolution of the network

## REANNZ at a Glance



### REANNZ - Network Reach

[More](#)

## The Network Now

**There are currently no known Network issues.**

Further information on maintenance and planned outages can be found in the REANNZ Events calendar.

For Network help or issues, call: 0508 466 466 or email: [help@service.reannz.co.nz](mailto:help@service.reannz.co.nz)

IPv6 :: Future

Here to help

# IPv6 :: Future

Here to help  
End-to-End

# IPv6 :: Future

Here to help

End-to-End

End-run

# IPv6 :: Future

Here to help

End-to-End

End-run

Be prepared

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<http://www.reannz.co.nz/>