



# COMPETITIVE EDGE OF NREN AND FINANCIAL SUSTAINABILITY

Accelerating knowledge creation and innovation to benefit  
future generations of Australians



Connect. Collaborate. Innovate.



Competitive Edge

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Invest & Innovate

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Financial Sustainability

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The Next Five Years



# COMPETITIVE EDGE

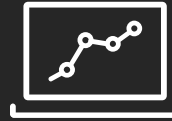


# COMPETITIVE EDGE OF AN NREN – AARNET'S VISION



## Develop Value Added Services

AARNet is creating sector specific over-the-top services that add significant value to the network - i.e. video, cloud services, professional services, etc.



## Invest & Innovate

As a trusted-advisor in the sector AARNet is investing in infrastructure & developing innovative services helping customers to simplify the way they teach, research and learn.



## Global Services

AARNet is leading global collaboration with other NRENs to develop global services supporting data-intensive research.





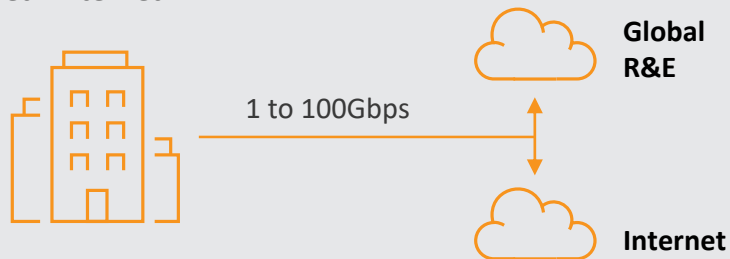
INVEST



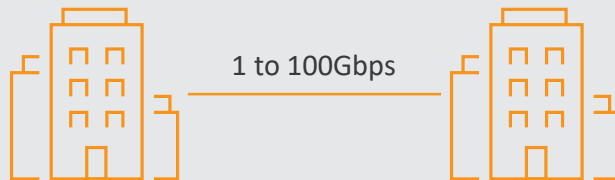
# MOVING DATA FASTER

Three 100gbps services

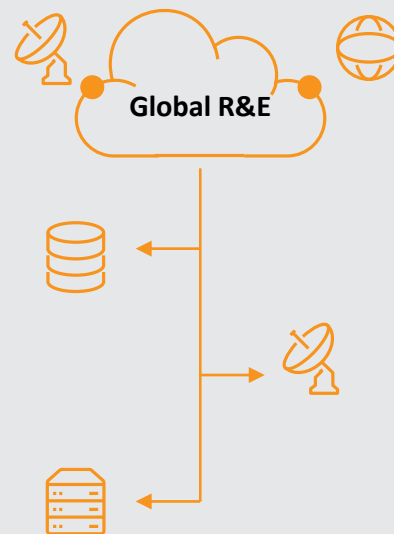
## AARNet4 Internet



## Private circuit



## 100Gbps for data-intensive research



# INDIGO PROJECT

AARNet, Google, Indosat, Singtel, SubPartners and Telstra

Subsea fibre system:  
**9,000 km**

Sydney to Singapore  
via Perth

**First subsea project**  
with an NREN partner

**Open**, Spectrum Sharing  
Solution

Expected lifespan:  
**25+ Years**



# JGA SOUTH PROJECT

RTI, AARNet and Google

Subsea fibre system:  
**9,500 km**

**Sydney – Guam**  
Boosts capacity from  
Australia to Asia

**Second subsea project**  
with an NREN partner

**36TB** Cable system

Expected lifespan:  
**25+ Years**





# CAE-1 SINGAPORE TO LONDON

## NREN Consortium

Nordunet SurfNet GEANT  
Singaren TEIN\*CC AARNet

## Led by AARNet

Contracted to TTI on new  
cable SMWE5

## Shared 100Gbps

Singapore to Marseilles +  
redundant path  
Marseilles to London

## Long term IRU

15-20 years

## Offsetting timezones

Optimum use of financial  
and technical resources

## Continues Indigo

100Gbps Sydney to  
London





INNOVATE



# AARNET'S CLOUD SERVICE PORTFOLIO TODAY:



**Peer**



**Connect**



**Partner**



**Build**



# ZOOM AND CLOUDSTOR 2018



Users (2018)

**106,683**

Tk% growth on 2017

Meetings (2018)

**495,973**

104% growth on 2017

Participants (2018)

**2,036,826**

90% growth on 2017

Minutes (2018)

**91,045,385**

94% growth on 2017

Cloud Recordings (2018)

**403%**

growth on 2017 storage used



Users (2018)

**51,588**

38% growth on 2017

Primary data (2018)

**627 TB**

276% growth on 2017

Group Drives (2018)

**668**

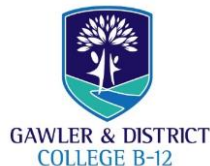
292% growth on 2017

File/Folders Shares (2018)

**158,481**

40 % growth on 2017

# CONNECTED IN 2018



# SECURITY PRODUCTS AND SERVICES



## EWS

Early Warning System to detect issues caused by denial of service.

Allows teams to respond more quickly to incidents.



## DDoS

Denial of Service detection and mitigation system based on Flowmon.

Go-live in Q2 2019.



## SOC

AARNet Security Operations Centre  
Helping to safeguard the reputation of the sector.

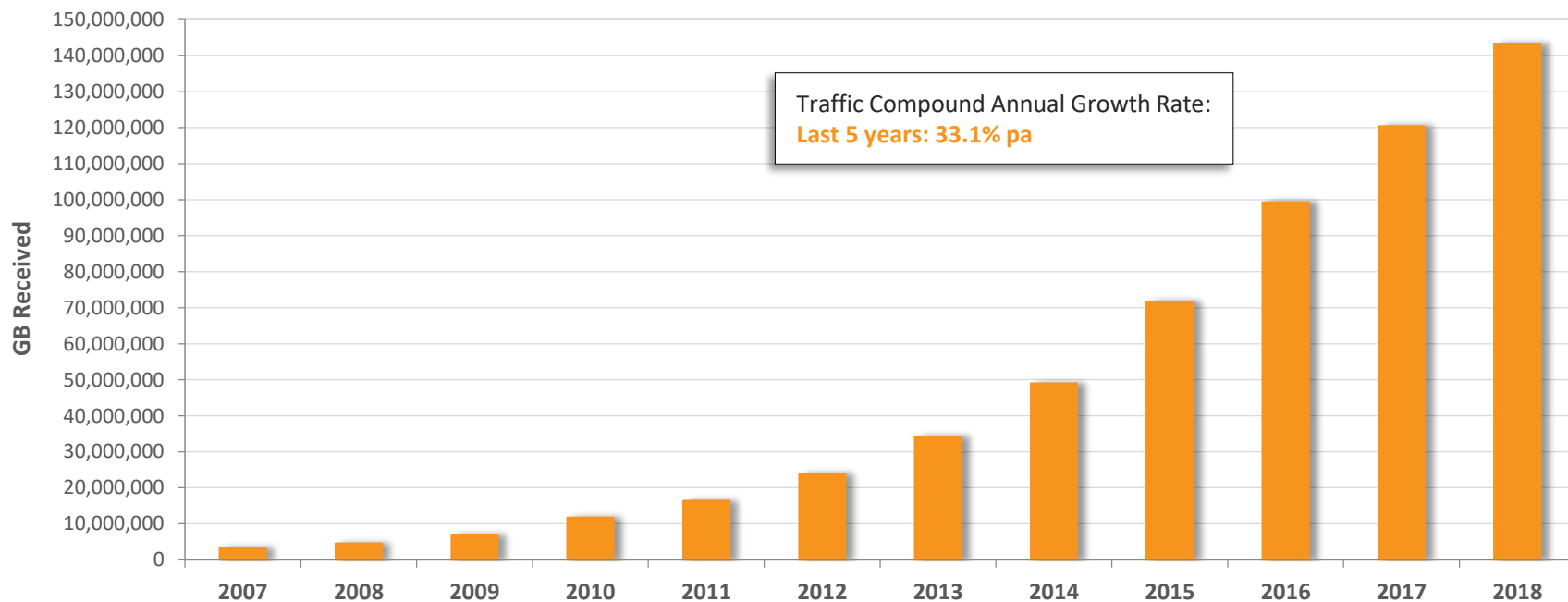




# FINANCIAL SUSTAINABILITY



# MEMBER TRAFFIC



# ADDING MORE VALUE TO CUSTOMER'S SUBSCRIPTIONS



## VALUE ADDED

Increased clarity of the value proposition for customers.

Works against the commoditisation of our network services - Avoids a “race to the bottom” on price.



## NETWORK COUPLED

Value-Added Services which rely on the network and increase utilization.



## MISSION CRITICAL

For both AARNet and Customers

e.g. DDoS Mitigation reduces business risk for both AARNet *AND* Customers.



## MUTUAL BENEFITS

Are benefits evening spread across all members? (e.g. eduroam)

AARNet must continue to listen to its customers.



# THE NEXT FIVE YEARS



# STRATEGIC PLATFORM



# STRATEGIC PRIORITIES - NEXT 5 YEARS



Network  
Infrastructure

JGA  
Indigo  
Triversity



Health & Medical  
Research  
Infrastructure

Scoping & Assessment  
MRI Engagement  
Australian Bioinformatics  
Commons



National  
Collaborative Research  
Storage Platform

ARDC  
CloudStor



Cyber Security  
Capability, Services  
and Infrastructure

Security Services  
Security Operations  
Centre  
DDoS Early Warning  
System  
Content Filtering



Regional Digital  
Infrastructure

Triversity



Customer  
Value

Digital Transformation  
Data Analytics



# QUESTIONS

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THANK YOU

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# ENTERPRISE SERVICES

## Managed Services

Vendor specific option, ITSM and network management platform dependency



Campus Network Management



Customer On Premise "Edge" Management



AARNet hosted "Edge" Management

## Professional Services

Vendor agnostic, independent



Engineer Assist



Network Assist



Security Assist



Tender Assist



Project Assist