

# ATUG presentation

## FOTP – The TransACT experience

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# TransACT

- Overview of TransACT Network Infrastructure
- Access Network Capabilities
- FTTP v other access technologies
- FTTP Benefits
- FTTP Issues



# Overview of the TransACT Network

- ❑ Significant investment in the deployment of advanced communications infrastructure throughout the ACT
- ❑ Major purpose built headend facility in Dickson
- ❑ Five hub sites throughout the ACT (Ainslie, Monash, Lyons, Latham and Kingston)
- ❑ Fibre rich network – over 1,000 kms fibre deployed
- ❑ Multiple access technologies used running over fibre, wireless and copper
- ❑ Core Networks including SDH, ATM and IP/Ethernet



# TransACT Access Network Technologies

- ❑ VDSL
- ❑ ADSL2+
- ❑ Wireless
- ❑ Point to Point ethernet
- ❑ FTTP (GPON)



# TransACT's VDSL Network

- ❑ Fibre to the curb architecture
- ❑ Takes optic fibres to within approximately 350 metres of the home, then copper
- ❑ Passes approximately 60,000 homes
- ❑ The network is entirely owned and operated by TransACT

# TransACT's ADSL2+ Network

- ❑ Utilises TransACT's fibre infrastructure up to the Telstra exchange
- ❑ TransACT DSLAMS are housed in Telstra exchanges
- ❑ The Network from the exchange to the customer utilises Telstra existing copper pairs (ULL)
- ❑ Cost effective method of reaching customers

# TransACT's Wireless Network

- ❑ Point to Multipoint fixed wireless access
- ❑ Proprietary Motorola Canopy
- ❑ Utilises class licensed spectrum (5.8GHz)
- ❑ The wireless network is used as an infill technology to service broadband blackspots in the Canberra area

# TransACT's Metro network

- ❑ Layer 2 Ethernet
- ❑ Fibre tails service the last mile
- ❑ Point to point or point to multipoint services
- ❑ Premium product servicing mainly corporate, carrier and Government clients



# TransACT's FTTP Network

- ❑ Premium residential product
- ❑ Greenfields deployment
- ❑ Complete Fibre based system
- ❑ GPON technology (Gigabit Passive Optical Network)
- ❑ Wholly owned TransACT infrastructure



# Data Access Product Comparison

## □ VDSL

- Data rates up to 8Mbps downstream (limited due to TV product).
- Subscription television
- POTS delivered using separate parallel network

## □ ADSL2+

- Data up to 20Mbps downstream (average 8 to 10Mbps) dependant on length and quality of Telstra copper loop
- POTS delivered on same ULL copper using lower spectrum

## □ Wireless

- Data up to 5Mbps downstream
- POTS service Using VoIP

# Data Access Product Comparison

## □ Metro

- Data rates from 2Mbps to 1Gbps symmetrical over fibre
- Services Corporate, Government and carrier customers

## □ GPON network (FTTP/FTTH)

- Premium Residential network running 2.5Gbps down and 1.2 Gbps up per OLT port typically shared by up to 32 customers
- Data Products currently offered include 10Mbps and 30Mbps (readily configurable to 100Mbps and beyond should demand require)
- POTS delivered using VoIP (SIP) backend
- Subscription television using IPTV
- Free to Air TV signals transmitted over separate wavelength on fibre

# FTTP Benefits Recognised in the TransACT Implementation

- ❑ Triple play ready – Voice/Data/Video
- ❑ Greater speed than xDSL to support current and future bandwidth demands
- ❑ Greater reach than xDSL. Practical implementations will support distances of up to 20km between OLT and ONT at full speed.
- ❑ Removes need for active electronics in the field (lower Opex)
- ❑ Supports multiple delivery methods for subscription television (IPTV or RF)
- ❑ Fibre infrastructure future proofs development's communication needs
- ❑ Aids sale of properties in new developments
- ❑ Variety of GPON CPE available opens deployment opportunities in MDU, SME and other Commercial premises



# FTTP Issues

- ❑ Business case doesn't work without developer contribution
- ❑ Customers more price sensitive than bandwidth sensitive
- ❑ Careful planning and education in conjunction with developers, builders and electricians is essential for successful deployment.



# Thankyou!!



One of the hazards experienced in servicing our outdoor VDSL nodes.

**TransACT**  
Everytime.

