

# ABC's Of Broadband & The Internet Explained

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## COURSE DESCRIPTION:

Telecommunications is a fast changing Industry full of jargon; its no wonder that we get confused! If you'd like a solid explanation of todays broadband technologies presented by an expert in simple English that is easy to follow and understand, and tailored to the context of your role, then this is the course for you.

This non-technical foundation program explains current telecommunications systems like copper, fibre, UFB, wireless, 4G, 5G & RBI, Wi-Fi, Ethernet, The Internet and World Wide Web plus the applications they enable such as cloud computing, VR & AR. It will explore the future of telco networks and the applications enabled by high speed connectivity. It will provide you with a greater understanding of the language and acronyms and help you to grasp just what it is these technologies can do for us.

Delivered in a fun, interactive way with hands-on exercises and a quiz or two!

## WHO SHOULD ATTEND:

Novices and newcomers to telco jargon! Management, Administrators, Accounts personnel, Human Resources, Marketing, Salespeople, Legal staff and others wanting a **non-technical** overview of current & future telco technologies and applications.

Anyone wanting to understand todays fixed and mobile broadband offerings and the new applications and ways of working / playing they enable.

## SOME COURSE BENEFITS:

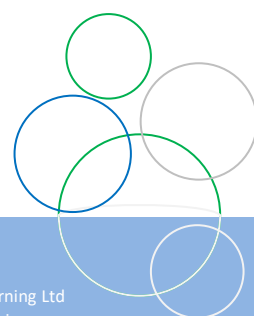
- Understand modern broadband enabled by Fibre & G-PON, Copper & V-DSL, Mobile & 5G
- Understand the language and acronyms surrounding modern telco networks
- Understand how new applications and new ways of working will lead to efficiencies and productivity gains & lifestyle changes

## COURSE OBJECTIVES:

- To understand the drivers for high speed broadband networks
- To clarify the language & technologies surrounding fibre optics networks
- Understand V-DSL, G-PON, Ethernet and 4/5G, the technologies, benefits and limitations
- To understand the future, 5G and IP services and the applications they enable

## DURATION:

5hrs (10am – 3pm)



## CONTENT:

### Non Technical Overview of Current Telco Networks & New Applications

#### 10:00 – 11:20

- Terminology Exercise
- Data and Voice explained
- Why Digital?
- Circuits v Packets (physical v virtual)
- Transmission Mediums - Copper, Fibre, Wireless (new vs. old)
- The aging Local Loop, PSTN, ISDN, x-DSL
- LAN's & WAN's
- A Simple Reference Model

#### 11:40 – 13:00

- Global Broadband Projects Explained
- Fibre Broadband – The UFB
- Fibre Optic Technology
- Fibre Optic Networks and Applications for NZ
- Wireless Broadband – The RBI

Mobile Networks : 1G to 4G+, 5G Overview

#### 13:30 – 14:10

- Local Area Network (LAN) Basics
- Ethernet History & Current Implementations
- Class of Service and Quality of Service (CoS & QoS)
- The Internet & The WWW
- What is IP?
- Voice over IP & SIP – an example of IP Networking

#### 14:10 – 15:00

- New Fast Broadband Applications
  - HD Video (Streaming & Conferencing)
  - Cloud Based Apps
  - VR, AR
- Cost Saving Ideas
  - Remote Working
  - Mobility
- Putting it all together – The Converged Network

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