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empowering the telecoms world

In Partnership with:



**Australasian Critical
Communications Forum (ACCF)**
Critical Communications for professional users

Live Online Training

Mission Critical Broadband

Understanding where we've come from, and where we're headed
– A Primer

2 x 2.5 Hour Sessions:

- *Cohort 1: 10 & 12 May*
- *Cohort 2: 24 & 26 May*
- *Cohort 3: 14 & 16 June*
- *Cohort 4: 28 & 30 June*

Start Time: 8.30am Jakarta/11.30am AEST/13.30pm Wellington

ACCF, TCCA & ARCIA Members save 5% (VIP Code: ACCF5)

www.wraycastle.com

www.criticalcommsforum.com.au

Programme Summary

The hottest topics in the Land Mobile Radio (LMR) market today is the use of LTE/4G/5G as the LMR market is heading for a major change in the delivery of information to and from their mobile portable and in-vehicle devices in the field. As the world embraces 4G/LTE and 5G mobile broadband technologies a shift in culture from voice-centric to information-centric operations - the options and therefore complexity expands exponentially.

The Australasian Critical Communications Forum (ACCF), chapter of TCCA offers a 2-day live online training course in partnership with the Wray Castle, the leading supplier of training to the global communications industry.

This course provides fundamental supplier independent knowledge about LMR the evolving and Broadband technologies and its specific features in Mission Critical Communications.

Course Modules

Module 1: Overview of Commercial & Mission Critical Networks (2.5 Hours)

- Mission Critical Networks and Commercial Mobile Broadband Networks
- Mobile Broadband Network Technologies
- LMR Mission Critical Network Technologies

Module 2: Critical Broadband & Interworking (2.5 Hours)

- Spectrum
- Security
- Mission Critical Mobile Broadband

Who would benefit?

Those working with Private and Professional Mobile Communications wishing to become familiar with Broadband LTE 4G, 5G technologies and the services it can provide along with an appreciation of how Broadband networks can interwork with existing LMR technologies, such as TETRA, P25, DMR and Analogue systems.

Pre-requisites

A basic understanding of LMR and Broadband technologies would be advantageous but familiarity with the requirements of private communications networks is more important.

Price & Admin

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- Cohort 4: 28 & 30 June

Price:

- GBP 400
- Includes soft copy course material
- ACCF, TCCA and ARCIA Members save 5% (VIP Code: ACCF5)

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Module 1

Overview Of Commercial and Mission Critical Networks

Duration - 2.5 hours

The aim of this module is to introduce the broad functional similarities of Commercial and MCC networks whilst explaining the distinct differences in the requirements of the respective user populations. This will allow attendees to appreciate the challenges faced by operators, users, regulators, standards bodies and equipment vendors in determining the technology best suited to meet a range of varying requirements.

Mission Critical Networks and Commercial Mobile Broadband Networks

- The Evolution of Telecoms Technologies.
- Defining telecommunication services - bearer, tele and supplementary.
- Introduction to Telecommunications Regulation and Standards Bodies.
- Services and requirements of commercial mobile broadband and LMR networks.

Mobile Broadband Network Technologies

- The evolution of mobile technologies and associated services and data rates.
- 4G LTE network architecture, configurations, interworking and service options.
- The drivers, use cases and opportunities for 5G. 5G network architecture, configurations, interworking and service options.
- 4G/5G Private Networks.

LMR Mission Critical Network Technologies

- An overview of LMR markets and existing LMR technologies.
- The LMR eco-system.
- Overview of P25, TETRA, and DMR network architectures, services and limitations.

Module 2

Mission Critical Broadband and Interworking

Duration - 2.5 Hours

The aim of this module is to explain the changes made to the LTE standards to allow the realization of a Mission Critical Mobile Broadband technology, and explains the deployment options available to users. The importance of spectrum availability and system security are also stressed. The module concludes with an analysis of how traditional LMR systems can interwork with Mobile Broadband systems.

Spectrum

- Identifying the range of radio services requiring access to finite spectrum resources.
- The role of the ITU-R and the World Radio Conference.
- The roles of regional and national spectrum management authorities. Existing approaches to public safety spectrum in the ITU-R radio regions.
- Identifying spectrum allocated to commercial mobile broadband systems.

Security

- Security threats.
- Security functions - Ciphering and integrity protection.

Mission Critical Mobile Broadband

- LTE for public safety. Spectrum and Network Deployment options.
- Network resilience.
- Group communications, Push to Talk, Prioritization, Proximity Services.
- LTE to TETRA/P25 interworking - 3GPP Interworking Function
- Radio over IP (RoIP).

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About Wray Castle

We empower the global telecoms world by developing the specialist knowledge, skills and competencies organisations need to build, maintain, optimise and operate the cutting-edge communications networks of today and tomorrow that support national critical infrastructure.

Trusted by the global telecoms industry since 1958, we've helped upskill over 300,000 industry professionals from over 85 countries worldwide. Our learners come from many major mobile and fixed operators, vendors, regulators, consultants, rail operators, energy suppliers and government organisations.

We support learners at all stages of their career from new to experienced engineers. Our courses cover all the major global communications technologies including:

- 5G Technology
- Essential Technologies
- LTE/4G
- UMTS & HSPA
- GSM & GPRS
- IMS & SIP
- Radio Engineering
- Professional Mobile Radio
- ORAN
- IP Engineering
- Network Virtualisation
- Telecoms Business

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ACCF and TCCA

The Australasian Critical Communications Forum (ACCF), a NFP chapter of TCCA, that advocates on behalf of mission and business critical stakeholders in the Australasian region in respect to the development and establishment of global non-proprietary mission and business critical LMR and LTE Broadband standards to ensure that stakeholder and professional user requirements are adequately addressed.

www.criticalcommsforum.com.au

The Critical Communications Association (TCCA) leads the global development and promotion of standardised critical communications solution for professional users providing a forum for governments, regulators, manufacturers, vendors, integrators, operators and end users - for any and every stakeholder in the critical communications sector - to discuss, deliver and evolve the market for benefit of all.

TCCA is a 3GPP Market Representation Partner, supports ETSI PlugTests activities and is a member of the Mission Critical Open Platform (MCOP) project.

<https://tcca.info/>