

MORNING WORKSHOPS (9.30am-12.45pm)

WORKSHOP 1A: (9.30am-11am)
LTE 101 — Its strengths, weaknesses, and application
followed by
WORKSHOP 1B
Private networks in the Gold Fields

In recent times there has been growing interest in LTE and its potential impact on traditional telecommunications technology used in both the industrial and public safety sectors. In today's world it is important for those involved in the communications sector to have an understanding of all available technologies as this will enable a better evaluation of opportunities for both clients and suppliers. In this one-hour session, a more detailed discussion around LTE will take place, aimed at giving delegates a good general appreciation of the technology. The presenter, Simon Lardner, is co-founder of a specialist system integrator and has more than 25 years' experience building mobile networks in more than 25 countries.

Presenter: Simon Lardner
Director, Challenge Networks

Gold Fields is a global gold mining company with mine assets around the world and its head office in South Africa. As part of an ongoing drive for improvements in efficiency and safety, Gold Fields deployed the world's first private LTE network for the gold industry. Gold Fields' project leader, Rodney Nebe, will give insights into the process that was taken to implement the solution as a replacement to their legacy SCADA, digital radio infrastructure and general mine communication systems.

Presenter: Rodney Nebe
IT Senior Network Engineer, Gold Field

WORKSHOP 2: (9.30am-11am)
Delivering project and engineering excellence on converged network upgrades

How to incorporate systems engineering with lean project management techniques to provide excellence in execution as demonstrated in the recent analog upgrade to P25 within NSW for the converged services Fire & Rescue and SES.

- Workshop includes:
- System breakdown structures (functional and physical)
 - WBS and scheduling (using lean principles)
 - Verification Cross Reference Matrix (trace your requirements from Cradle to Grave) providing lean engineering
 - Testing and commissioning
 - Cost control
 - Schedule control, and
 - Communications and stakeholder management.

The material is derived from the PMI PMBoK and INCOSE SEBoK as adapted by Andrew Smith (Solutions Engineering Manager, Tait Communications Asia Pacific Region).

Presenter: Matthew Horwood
Director of Services, Asia Pacific, Tait Communications

WORKSHOP 3: (9.30am-12.45pm)
Public safety mobile broadband: global trends — national decisions

Around the world there are numerous examples of public safety mobile broadband (PSMB) now beginning to provide responders with an exciting new capability. While governance, funding and operating models vary, the overall mission remains consistent: ensuring the right information gets to the right people at the right time.

- Our expert speakers come from the following countries:
- Australia
 - United States
 - United Kingdom
 - South Korea
 - Canada
 - Europe

This pre-conference workshop is designed to allow delegates, in a relaxed and time-effective fashion, to learn more about a number of national approaches to PSMB, including from right here in Australia. Panel members and delegates will discuss, in a facilitated session, various options and points of view on approaches to the development of national PSMB strategies. They will also discuss critical issues around information management and security — keys to success no matter what operational models are used.

Moderators: Ian Miller
— Executive Officer, ARCIA and
Inspector (Ret.) Lance Valcour O.O.M
— Life Member, Canadian Association of Chiefs of Police

WORKSHOP 4: (11.15am-12.45pm)
M2M & IoT — the impact on public safety

Machine to Machine (M2M) and Internet of Things (IoT) systems are having dramatic impacts on a wide range of industries around the world. From 'Smart Cities' to intelligent transportation to enhanced public safety, these automated technologies are becoming pervasive in today's society.

This workshop will cover:

- Using data to make cities safer
- Connected Infrastructure
- IoT Protocols — connectivity for Radio Communications
- Smart Transport Systems
- Industrial IoT — focus on industrial applications

Presenter: Jon Goudge
M2M / IoT Business Unit Manager, RFI Technology Solutions

WORKSHOP 5: (11.15am-12.45pm)
Building a radio network from the ground up — an independent view on planning components required to deliver a private land mobile network

This workshop is aimed at local government, small NGOs, businesses and independent groups that are looking to build and deliver a small, two-way, land mobile radio (LMR) network. This independent workshop will offer an insight into the requirements at an operational and technology level and is not manufacturer or vendor specific. It will use Surf Life Saving New Zealand's experience as a case study and examine the following areas:

- Business and operational requirements identification
- Two-way radio technology: analog, NXDN, DMR, Tetra, P-25
- Terminals and accessories and their uses
- Site identification and associated costs
- Frequency applications, costs and implications
- Site linking technology including pros and cons
- Radio management systems, Radio over IP and connectivity links
- Selecting a suitable manufacturer, dealer or vendor
- User acceptance testing, commissioning reports, preventive and reactive maintenance

Presenter: Chris Stevens
SLSA Lifesaving Communications Advisor, Surf Life Saving Australia

AFTERNOON WORKSHOPS (1.30PM-4.45PM)

WORKSHOP 6
Improving situational awareness in emergencies using social media

A social media data mining workshop focusing on social media emergency management (SMEM) response.

The workshop is split into two modules with the first module delivering knowledge and the second testing this knowledge through a practical exercise.

- Participants will:
- Undertake a guided walkthrough of various options for reviewing social media in different forums
 - Learn from global emergency response case studies
 - Experience hands-on activities during a simulated incident including:
 - how to effectively extract, collate and verify social media information
 - incorporate actionable intelligence into a social media listening report
 - verbally present this listening report for review and group debrief

Participants will receive constructive feedback in the following areas:

- Identifying and understanding trending hashtags/keywords/influencers/sentiment
- Creation of geolocation search parameters using multiple techniques
- Their ability to apply verification techniques to validate the credibility of social media content
- Creation of a social media listening report
- Delivery of an after action debrief to exercise participants and instructor

Note: Participants will provide their own laptops/computers and/or MacBooks for training purposes. Tablets and mobile devices are not fit for purpose for this training. Limited places available.

Presenter: Caroline Milligan
Associate Director, Crest Advisory

WORKSHOP 7
Back to the future — digital land mobile radio and business critical broadband

Leading local and international industry expert insights into the wireless digital radio landscape

Chaired By: Kevin Graham
Director, ATCCF/Managing Director, Global Digital Solutions

Progress of TCCA, Working Groups for mission-critical standards (including public safety, transport and control centres), 3GPP Broadband, MCPTT functionality interoperability plug testing and future view 4G/5G evolution
Presenter: Tony Gray — *new appointed CEO, TCCA* and **Peter Clemons** — *Founder & CEO, Quixoticity*

Convergence of command, control solutions and International Critical Control Rooms Alliance (ICCRA)
Presenter: Geoff Spring — *Senior Industry Advisor, Centre for Disaster Management and Public Safety, The University of Melbourne*

International case study 1: Digital LMR and complimentary LTE project — public safety & security industry
Presenter: Matteo Mascherpa — *Area Manager, GEG Telecommunications Italy*

Australian case studies 2: Digital LMR deployments, complimentary wireless/satellite and LTE/broadband insights — resources sector (oil/gas/mining) with integrated rail/transport & ports solutions — Roy Hill Project & other Western Australian projects
Presenter: Steve Burrige — *Leonardo and Director, ATTCF* and **Mark Thompson** — *Principal Consultant, Walker Newman & Associates*

Overview of the digital LMR and professional/private LTE insights, adoption and migration considerations — leading consultant's perspective
Presenter: Murray Wales — *Principal Operational Technology Consultant, DXC Technology*

Critical communications products/applications — current and future outlook

Presenters: Tapio Makinen — *Marketing Director, Airbus*, **Peter Hudson** — *Head of Global TETRA product line, Sepura plc*, **Ranjan Bhagat** — *VP & GM, Zetron Australasia*

Panel session/questions & answers
Moderators: Peter Clemons — *CEO, Quixoticity*, **Kevin Graham** — *Director, ATCCF* and *presenters panel*

Hosted by: Australasian Forum for TETRA & Critical Communications Association (ATCCF)

