

Bio for Prasan de Silva:

Prasan de Silva graduated with a BE (Hon) Electrical Engineering from Canterbury University in 1994. He later completed a ME (Electrical) also from Canterbury University in 2001. He has been involved in post-graduate research supervision at Canterbury University and Victoria University and has been guest lecturing at Otago, Canterbury and Victoria Universities in New Zealand over the last 10 years. His research interests are in IP based mobility management protocols and the application of SDN in base station cooperation. Prasan has worked for Telecom NZ since 1996 and has worked on Mobile systems covering D-AMPS, cdma2000, UMTS and LTE. He is currently a Consulting Network Architect in the Network Architecture Group at Telecom in Wellington, New Zealand.

The Evolution to LTE-B: Developments in 3GPP Release 12

LTE networks have been operational for a few years now, largely based on 3GPP Release 8. In meeting the requirements for 4G (IMT-Advanced), 3GPP Release 10 and 11 set a foundation of enablers to satisfy the capacities necessary to meet the markets growing demand for data traffic. Such capacity gains are due in large part to spatial domain techniques and advanced base station cooperation for interference coordination. In moving beyond 4G, the work items for 3GPP Release 12 provide further enhancements in spectral efficiency through cooperative techniques as well as addressing better support for streaming services (the predicted dominant traffic type), M2M (dominant control traffic type), tight integration of WLAN (offload to a ubiquitous resource), and direct Device-to-Device communication (a new paradigm for offload). In this presentation, the key enablers of 3GPP Release 12 are explained. We present how these enablers may play a part in a operators architecture evolution from LTE Release 8.