

Voice Service Optimization and Troubleshooting AMR failures in a UMTS Radio Network

Andrei BUMBU, Claudiu NAGHI, Emanuel PUSCHIȚĂ

Abstract

Network optimization can initially be seen as a very involving task as a large number of variables are available for tuning impacting different aspects of the network performance. To simplify this process a step by step approach is proposed in this article. This approach divides the optimization in simpler steps, each step focusing on a limited set of parameters. Voice service optimization will focus on improving the call setup (Mobile Originated and Mobile Terminated) and call reliability thus focusing mainly on access and handover parameters. From a different perspective this article is a brief troubleshooting guide for most commonly AMR failures ending with a case study for call drops caused by missing neighbor problem.