

## **Presentation 7: Voice over Wireless Ad-Hoc Networks**

Mr. Fabricio Lira Figueiredo, CPqD.

An Ad hoc Network system provides quick and easy networking under circumstances that require temporary network services or when cabling is hard to deploy. It can be adopted as a solution for coverage in rural areas, disasters and military applications. Ad hoc Networks can be used to extend the range of wireless service coverage. Transmitting Voice-over-IP (VoIP) traffic over ad hoc networks require mechanisms that guarantee bandwidth, bounded delay and delay jitter. However, providing quality of service in ad hoc networks is an extremely challenging task, due to several factors, such as the unrestricted mobility of nodes, dynamically varying network topology, and time-varying channel capacity. It will be presented a system based on Ad Hoc wireless network that shall provide voice and data transmission services and shall be tuned to the needs and characteristics of Brazilian market and the research on QoS support in ad hoc networks analyzing various aspects, such as: QoS models, resource reservation signaling, and QoS routing.